tvstudy v2.2.5 (4uoc83)
Database: localhost,  Study: WWKQ-LD ANT CHG,  Model: Longley-Rice
Start: 2022.03.31 13:22:59

Study created: 2022.03.31 13:22:59

Study build station data: LMS TV 2022-03-11

    Proposal: WWKQ-LD D34- LD APP QUEBRADILLAS, PR
 File number: WWKQ-LD ANT CHG
 Facility ID: 60369
Station data: User record
   Record ID: 818
     Country: U.S.

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 | W28EQ-D | N32+ | TX | LIC | UTUADO, PR | BLTT19890703IC | 30.5 km |
| No | W44DH-D | D33 | LD | CP | CAGUAS, PR | BLANK0000053906 | 98.4 |
| No | WRUA | D33 | DT | LIC | FAJARDO, PR | BLCDT20090610ABH | 120.9 |
| Yes | WJWN-TV | D33 | DT | LIC | SAN SEBASTIAN, PR | BLANK0000123459 | 37.3 |
| No | W33ED-D | D33 | LD | LIC | VIEQUES, PR | BLANK0000156039 | 134.4 |
| Yes | W34FK-D | D34 | LD | LIC | ANASCO, PR | BLANK0000148547 | 37.3 |
| Yes | WIDP | D34 | DT | LIC | GUAYAMA, PR | BLANK0000078426 | 115.5 |
| No | WCCV-TV | D35 | DT | LIC | ARECIBO, PR | BLANK0000076642 | 32.5 |
| No | WIPM-TV | D35 | DT | LIC | MAYAGUEZ, PR | BLEDT20060627ACQ | 37.3 |
| No | W36EP-D | D35 | LD | CP | YAUCO, PR | BLANK0000170098 | 48.4 |

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D34-
       Mask: Full Service
   Latitude:  18 28 45.70 N (NAD83)
  Longitude:  66 55 34.60 W
Height AMSL: 160.0 m
       HAAT: 0.0 m
   Peak ERP: 2.50 kW
    Antenna: ATC BCC04C5-V2-34 0.0 deg
Elev Pattrn: Generic
  Elec Tilt: 1.00

50.7 dBu contour:

| Azimuth | ERP | HAAT | Distance |
|---|---|---|---|
| 0.0 deg | 0.117 kW | 160.0 m | 23.0 km |
| 45.0 | 0.247 | 160.0 | 26.7 |
| 90.0 | 0.081 | 130.1 | 18.9 |
| 135.0 | 0.271 | -47.8 | 12.3 |
| 180.0 | 0.835 | -66.7 | 16.2 |
| 225.0 | 2.37 | -43.7 | 21.2 |
| 270.0 | 1.54 | 59.8 | 26.2 |
| 315.0 | 0.405 | 160.0 | 29.2 |

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m   Computed HAAT: 64 m

Distance to Canadian border: 2922.9 km

Distance to Mexican border: 3188.8 km

Conditions at FCC monitoring station: Santa Isabel PR
Bearing: 132.1 degrees   Distance: 78.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 311.6 degrees  Distance: 4372.3 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%

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Interference to BLANK0000123459 LIC scenario 1

| | Call | Chan | Svc | Status | City, State | File Number | Distance |
|---|---|---|---|---|---|---|---|
| Desired: | WJWN-TV | D33 | DT | LIC | SAN SEBASTIAN, PR | BLANK0000123459 | |
| Undesireds: | WWKQ-LD | D34- | LD | APP | QUEBRADILLAS, PR | WWKQ-LD ANT CHG | 37.3 km |
| | WIPM-TV | D32 | DT | CP | MAYAGUEZ, PR | BLANK0000024551 | 0.1 |
| | WIDP | D34 | DT | LIC | GUAYAMA, PR | BLANK0000078426 | 120.2 |

| Service area | | Terrain-limited | | IX-free, before | | IX-free, after | | Percent New IX | |
|---|---|---|---|---|---|---|---|---|---|
| 35960.8 | 2,061,236 | 35408.0 | 1,768,679 | 35377.5 | 1,753,760 | 35376.5 | 1,753,760 | 0.00 | 0.00 |

| Undesired | Total IX | | Unique IX, before | | Unique IX, after | |
|---|---|---|---|---|---|---|
| WWKQ-LD D34- LD APP | 1.0 | 0 | | | 1.0 | 0 |
| WIPM-TV D32 DT CP | 22.7 | 1,040 | 22.7 | 1,040 | 22.7 | 1,040 |
| WIDP D34 DT LIC | 7.9 | 13,879 | 7.9 | 13,879 | 7.9 | 13,879 |

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Interference to BLANK0000148547 LIC scenario 1

| | Call | Chan | Svc | Status | City, State | File Number | Distance |
|---|---|---|---|---|---|---|---|
| Desired: | W34FK-D | D34 | LD | LIC | ANASCO, PR | BLANK0000148547 | |
| Undesireds: | WWKQ-LD | D34- | LD | APP | QUEBRADILLAS, PR | WWKQ-LD ANT CHG | 37.3 km |
| | WJWN-TV | D33 | DT | LIC | SAN SEBASTIAN, PR | BLANK0000123459 | 0.1 |
| | WIDP | D34 | DT | LIC | GUAYAMA, PR | BLANK0000078426 | 120.3 |
| | WCCV-TV | D35 | DT | LIC | ARECIBO, PR | BLANK0000076642 | 25.5 |
| | W36EP-D | D35 | LD | CP | YAUCO, PR | BLANK0000170098 | 26.0 |

| Service area | | Terrain-limited | | IX-free, before | | IX-free, after | | Percent New IX | |
|---|---|---|---|---|---|---|---|---|---|
| 4574.2 | 443,406 | 4411.6 | 406,145 | 3416.3 | 200,688 | 3415.3 | 200,675 | 0.03 | 0.01 |

| Undesired | Total IX | | Unique IX, before | | Unique IX, after | |
|---|---|---|---|---|---|---|
| WWKQ-LD D34- LD APP | 39.4 | 3,314 | | | 1.0 | 13 |
| WJWN-TV D33 DT LIC | 991.4 | 204,908 | 948.0 | 198,408 | 913.5 | 195,835 |
| WIDP D34 DT LIC | 1.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| WCCV-TV D35 DT LIC | 35.5 | 5,075 | 1.0 | 417 | 1.0 | 417 |
| W36EP-D D35 LD CP | 10.8 | 1,974 | 3.0 | 132 | 3.0 | 132 |

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Interference to BLANK0000078426 LIC scenario 1

| | Call | Chan | Svc | Status | City, State | File Number | Distance |
|---|---|---|---|---|---|---|---|
| Desired: | WIDP | D34 | DT | LIC | GUAYAMA, PR | BLANK0000078426 | |
| Undesireds: | WWKQ-LD | D34- | LD | APP | QUEBRADILLAS, PR | WWKQ-LD ANT CHG | 115.5 km |
| | WJWN-TV | D33 | DT | LIC | SAN SEBASTIAN, PR | BLANK0000123459 | 120.2 |
| | WCCV-TV | D35 | DT | LIC | ARECIBO, PR | BLANK0000076642 | 95.9 |

| Service area | | Terrain-limited | | IX-free, before | | IX-free, after | | Percent New IX | |
|---|---|---|---|---|---|---|---|---|---|
| 24010.6 | 2,560,163 | 21763.5 | 2,301,905 | 21559.2 | 2,291,812 | 21537.5 | 2,285,590 | 0.10 | 0.27 |

| Undesired | Total IX | | Unique IX, before | | Unique IX, after | |
|---|---|---|---|---|---|---|
| WWKQ-LD D34- LD APP | 29.5 | 9,957 | | | 21.7 | 6,222 |
| WJWN-TV D33 DT LIC | 183.7 | 0 | 183.7 | 0 | 183.7 | 0 |
| WCCV-TV D35 DT LIC | 20.7 | 10,093 | 20.7 | 10,093 | 12.8 | 6,358 |

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Interference to proposal scenario 1
2.40% interference received

| | Call | Chan | Svc | Status | City, State | File Number | Distance |
|---|---|---|---|---|---|---|---|
| Desired: | WWKQ-LD | D34- | LD | APP | QUEBRADILLAS, PR | WWKQ-LD ANT CHG | |
| Undesireds: | WJWN-TV | D33 | DT | LIC | SAN SEBASTIAN, PR | BLANK0000123459 | 37.3 km |
| | W34FK-D | D34 | LD | LIC | ANASCO, PR | BLANK0000148547 | 37.3 |
| | WIDP | D34 | DT | LIC | GUAYAMA, PR | BLANK0000078426 | 115.5 |
| | WCCV-TV | D35 | DT | LIC | ARECIBO, PR | BLANK0000076642 | 32.5 |

| Service area | | Terrain-limited | | IX-free | | Percent IX | |
|---|---|---|---|---|---|---|---|
| 1601.0 | 229,288 | 1521.3 | 203,649 | 1361.0 | 198,760 | 10.53 | 2.40 |

| Undesired | Total IX | | Unique IX | | Prcnt Unique IX | |
|---|---|---|---|---|---|---|
| WJWN-TV D33 DT LIC | 103.2 | 3,104 | 41.3 | 315 | 2.71 | 0.15 |
| W34FK-D D34 LD LIC | 61.0 | 2,789 | 1.0 | 0 | 0.06 | 0.00 |
| WIDP D34 DT LIC | 58.0 | 1,785 | 56.0 | 1,785 | 3.68 | 0.88 |
| WCCV-TV D35 DT LIC | 2.0 | 577 | 0.0 | 0 | 0.00 | 0.00 |