

tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: W18EZ-D AP 2K DIE TUA-M Z, Model: Longley-Rice  
Start: 2021.07.12 10:39:04

Study created: 2021.07.12 10:39:03

Study build station data: LMS TV 2021-07-12

Proposal: W18EZ-D D18 LD APP DELPHI, IN  
File number: W18EZ-D AP 2K DIE TUA-M Z  
Facility ID: 186632  
Station data: User record  
Record ID: 72  
Country: U.S.

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

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  | WLCF-LD | D17  | LD  | LIC    | DECATUR, IL          | BLANK0000121247    | 191.2 km |
| No  | WEIJ-LD | D17  | LD  | CP     | FORT WAYNE, IN       | BLANK0000054397    | 146.7    |
| No  | WYIN    | D17  | DT  | LIC    | GARY, IN             | BLEDT20040206AAA   | 78.2     |
| No  | WISH-TV | D17  | LD  | LIC    | INDIANAPOLIS, IN     | BLCDT20110207ACU   | 112.7    |
| No  | WALV-CD | D17  | DC  | LIC    | INDIANAPOLIS, IN     | BLANK0000090311    | 110.1    |
| Yes | WPBI-LD | D17  | LD  | LIC    | LAFAYETTE, IN        | BLANK0000088160    | 40.4     |
| No  | WOTV    | D17  | DT  | LIC    | BATTLE CREEK, MI     | BLANK0000141782    | 232.4    |
| No  | WCET    | D17  | DT  | LIC    | CINCINNATI, OH       | BLANK0000087307    | 271.3    |
| No  | WOIW-LD | D17  | LD  | LIC    | Lima, OH             | BLANK0000068365    | 227.0    |
| No  | KRIN    | D18  | LD  | APP    | WATERLOO, IA         | BDRTEDT20120604AFO | 366.7    |
| No  | WBXC-CD | D18  | DC  | LIC    | CHAMPAIGN/URBANA, IL | BLANK0000112220    | 136.3    |
| No  | WMEU-CD | D18  | DC  | LIC    | CHICAGO, IL          | BLANK0000086889    | 139.0    |
| No  | WSEC    | D18  | DT  | LIC    | JACKSONVILLE, IL     | BLANK0000150703    | 298.3    |
| No  | WAOE    | D18  | LD  | LIC    | OSWEGO, IL           | BLANK0000125101    | 226.0    |
| No  | WMKB-LP | D18z | LD  | CP     | Rochelle, IL         | BLANK0000054707    | 237.2    |
| No  | WZDS-LD | D18  | LD  | CP     | EVANSVILLE, IN       | BLANK0000074344    | 317.6    |
| No  | WFWA    | D18  | DT  | LIC    | FORT WAYNE, IN       | BLANK0000063130    | 146.7    |
| No  | WAWV-TV | D18  | DT  | LIC    | TERRE HAUTE, IN      | BLANK0000087258    | 174.7    |
| No  | WKYU-TV | D18  | DT  | LIC    | BOWLING GREEN, KY    | BLEDT20040803AAG   | 413.2    |
| No  | WMYO-CD | D18  | DC  | LIC    | LOUISVILLE, KY       | BLANK0000087049    | 281.1    |
| No  | WUHO-LD | D18+ | LD  | LIC    | KALAMAZOO, MI        | BLANK0000151683    | 201.8    |
| No  | W18ER-D | D18  | LD  | LIC    | MUSKEGON, MI         | BLANK0000068548    | 289.6    |
| No  | WEYI-TV | D18  | DT  | LIC    | SAGINAW, MI          | BLANK0000075003    | 377.2    |
| No  | WSTR-TV | D18  | DT  | LIC    | CINCINNATI, OH       | BLANK0000115955    | 265.6    |
| No  | WCBZ-CD | D18  | DC  | LIC    | Columbus, OH         | BLANK0000069165    | 337.5    |
| No  | W18ES-D | D18  | LD  | LIC    | MANSFIELD, OH        | BLANK0000087113    | 370.0    |
| No  | WDTJ-LD | D18  | LD  | LIC    | TOLEDO, OH           | BLDTL20121219ABP   | 295.5    |
| No  | WLUK-TV | D18  | DT  | CP     | GREEN BAY, WI        | BLANK0000150484    | 415.1    |
| No  | WMSN-TV | D18  | DT  | LIC    | MADISON, WI          | BLANK0000113879    | 336.3    |
| No  | WLPX-TV | D18  | DT  | LIC    | CHARLESTON, WV       | BLANK0000118002    | 472.0    |
| No  | WGN-TV  | D19  | DT  | LIC    | CHICAGO, IL          | BMLCDT20080201APP  | 139.0    |
| No  | WGN-TV  | D19  | DT  | CP     | CHICAGO, IL          | BLANK0000127570    | 139.0    |
| No  | W19DT-D | D19  | LD  | CP     | FORT WAYNE, IN       | BNPDTL20091228AAW  | 155.2    |
| No  | WIPB    | D19  | DT  | LIC    | MUNCIE, IN           | BLANK0000087336    | 146.3    |
| No  | WXMI    | D19  | DT  | LIC    | GRAND RAPIDS, MI     | BLANK0000143294    | 241.1    |

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D18  
Mask: Stringent  
Latitude: 40 45 53.40 N (NAD83)

Longitude: 86 52 46.40 W  
Height AMSL: 220.4 m  
HAAT: 0.0 m  
Peak ERP: 2.00 kW  
Antenna: DIE-TUA-M 150 degs T 0.0 deg  
Elev Pattn: Generic

49.1 dBu contour:

| Azimuth | ERP      | HAAT   | Distance |
|---------|----------|--------|----------|
| 0.0 deg | 0.000 kW | 14.3 m | 2.3 km   |
| 45.0    | 0.000    | 14.7   | 2.3      |
| 90.0    | 0.020    | 12.3   | 7.1      |
| 135.0   | 1.60     | 13.8   | 21.0     |
| 180.0   | 0.925    | 8.9    | 18.4     |
| 225.0   | 0.008    | 4.2    | 5.8      |
| 270.0   | 0.000    | 6.8    | 2.3      |
| 315.0   | 0.000    | 12.3   | 2.3      |

Database HAAT does not agree with computed HAAT  
Database HAAT: 0 m Computed HAAT: 11 m

Distance to Canadian border: 340.7 km

Distance to Mexican border: 1792.6 km

Conditions at FCC monitoring station: Allegan MI  
Bearing: 20.2 degrees Distance: 218.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 273.5 degrees Distance: 1550.2 km

No land mobile station failures found

Proposal is not within the Offshore Radio Service protected area

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 BLANK0000088160 LIC scenario 1

| Desired:     | Call       | Chan            | Svc     | Status            | City, State      | File Number            | Distance       |
|--------------|------------|-----------------|---------|-------------------|------------------|------------------------|----------------|
|              | WPBI-LD    | D17             | LD      | LIC               | LAFAYETTE, IN    | BLANK0000088160        |                |
| Undesireds:  | W18EZ-D    | D18             | LD      | APP               | DELPHI, IN       | W18EZ-D AP 2K DIE TUA- | 40.4 km        |
|              | WYIN       | D17             | DT      | LIC               | GARY, IN         | BLEDT20040206AAA       | 115.0          |
|              | WISH-TV    | D17             | LD      | LIC               | INDIANAPOLIS, IN | BLCDT20110207ACU       | 79.0           |
|              | WALV-CD    | D17             | DC      | LIC               | INDIANAPOLIS, IN | BLANK0000090311        | 77.4           |
| Service area |            | Terrain-limited |         | IX-free, before   |                  | IX-free, after         | Percent New IX |
| 3449.4       | 217,067    | 3443.4          | 216,912 | 3304.1            | 215,287          | 3302.2 215,282         | 0.06 0.00      |
| Undesired    |            | Total IX        |         | Unique IX, before |                  | Unique IX, after       |                |
| W18EZ-D      | D18 LD APP | 13.9            | 628     |                   |                  | 2.0 5                  |                |
| WYIN         | D17 DT LIC | 122.3           | 1,419   | 119.3             | 1,382            | 108.4 787              |                |
| WISH-TV      | D17 LD LIC | 2.0             | 2       | 0.0               | 0                | 0.0 0                  |                |
| WALV-CD      | D17 DC LIC | 20.0            | 243     | 15.0              | 204              | 15.0 204               |                |

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Interference to proposal scenario 1  
9.04% interference received

| Desired: | Call    | Chan | Svc | Status | City, State | File Number            | Distance |
|----------|---------|------|-----|--------|-------------|------------------------|----------|
|          | W18EZ-D | D18  | LD  | APP    | DELPHI, IN  | W18EZ-D AP 2K DIE TUA- |          |

|             |         |     |    |     |                |                 |         |
|-------------|---------|-----|----|-----|----------------|-----------------|---------|
| Undesireds: | WPBI-LD | D17 | LD | LIC | LAFAYETTE, IN  | BLANK0000088160 | 40.4 km |
|             | WFWA    | D18 | DT | LIC | FORT WAYNE, IN | BLANK0000063130 | 146.7   |

|              |        |                 |        |         |            |
|--------------|--------|-----------------|--------|---------|------------|
| Service area |        | Terrain-limited |        | IX-free | Percent IX |
| 352.2        | 12,991 | 352.2           | 12,991 | 324.3   | 11,816     |
|              |        |                 |        |         | 7.92 9.04  |

|                    |      |          |      |           |                 |
|--------------------|------|----------|------|-----------|-----------------|
| Undesired          |      | Total IX |      | Unique IX | Prcnt Unique IX |
| WPBI-LD D17 LD LIC | 25.9 | 1,168    | 22.9 | 904       | 6.50 6.96       |
| WFWA D18 DT LIC    | 5.0  | 271      | 2.0  | 7         | 0.56 0.05       |