

Technical Exhibit

Minor Modification of Licensed Facility

This application complies with all engineering standards and assignment requirements specified in the applicable FCC rules and regulations. A new site is specified as is indicated below:

| | Minor modification of licensed facility |
|--------------------------------------|--|
| Channel / Class | 236 D |
| Geographical Coordinates (NAD 83) | 38 21 23.0 85 50 52.0 |
| ASRN | 1031016 |
| Site elevation | 297.4 m |
| Tower AGL | 300.0 m |
| Antenna COR AGL | 167.6 m |
| Antenna COR AMSL | 465.0 m |
| HAAT | 273.2 m |
| ERP | 0.235 kW (H&V, non-DA) |
| Antenna | Nicom BKG77/1 |
| Terrain database | FCC 30 second |

Technical Exhibit

Tabulation of HAAT / ERP / distance to 60 & 70 dBu contours

CH 236 38 21 23.0 / 85 50 52.0 0.235 kW ERP (H&V, non-da) 465 m COR AMSL 273.2 m HAAT

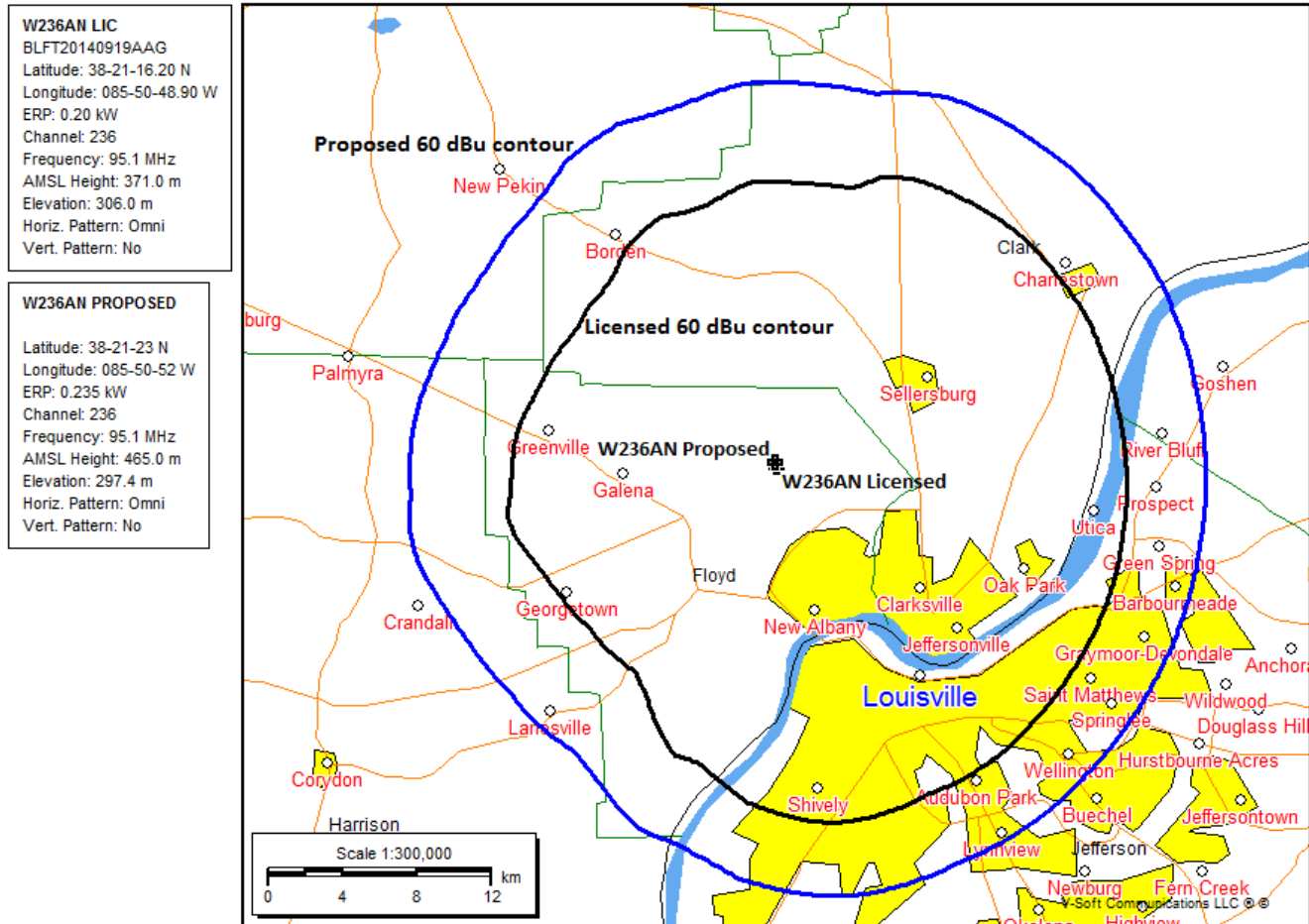
| Azi. | AV EL | HAAT | ERP kW | dBk | Field | 60-F5 |
|------|-------|-------|--------|-------|-------|-------|
| 000 | 213.0 | 252.0 | 0.2350 | -6.29 | 1.000 | 20.44 |
| 010 | 212.4 | 252.6 | 0.2350 | -6.29 | 1.000 | 20.46 |
| 020 | 194.8 | 270.2 | 0.2350 | -6.29 | 1.000 | 21.14 |
| 030 | 175.4 | 289.6 | 0.2350 | -6.29 | 1.000 | 21.85 |
| 040 | 167.0 | 298.0 | 0.2350 | -6.29 | 1.000 | 22.16 |
| 050 | 158.9 | 306.1 | 0.2350 | -6.29 | 1.000 | 22.45 |
| 060 | 154.3 | 310.7 | 0.2350 | -6.29 | 1.000 | 22.61 |
| 070 | 151.5 | 313.5 | 0.2350 | -6.29 | 1.000 | 22.71 |
| 080 | 149.2 | 315.8 | 0.2350 | -6.29 | 1.000 | 22.79 |
| 090 | 145.4 | 319.6 | 0.2350 | -6.29 | 1.000 | 22.92 |
| 100 | 142.3 | 322.7 | 0.2350 | -6.29 | 1.000 | 23.03 |
| 110 | 137.3 | 327.7 | 0.2350 | -6.29 | 1.000 | 23.20 |
| 120 | 133.9 | 331.1 | 0.2350 | -6.29 | 1.000 | 23.31 |
| 130 | 130.3 | 334.7 | 0.2350 | -6.29 | 1.000 | 23.43 |
| 140 | 126.3 | 338.7 | 0.2350 | -6.29 | 1.000 | 23.56 |
| 150 | 127.2 | 337.8 | 0.2350 | -6.29 | 1.000 | 23.53 |
| 160 | 128.3 | 336.7 | 0.2350 | -6.29 | 1.000 | 23.50 |
| 170 | 130.1 | 334.9 | 0.2350 | -6.29 | 1.000 | 23.44 |
| 180 | 151.2 | 313.8 | 0.2350 | -6.29 | 1.000 | 22.72 |
| 190 | 185.7 | 279.3 | 0.2350 | -6.29 | 1.000 | 21.47 |
| 200 | 201.9 | 263.1 | 0.2350 | -6.29 | 1.000 | 20.87 |
| 210 | 239.3 | 225.7 | 0.2350 | -6.29 | 1.000 | 19.36 |
| 220 | 250.7 | 214.3 | 0.2350 | -6.29 | 1.000 | 18.87 |
| 230 | 253.6 | 211.4 | 0.2350 | -6.29 | 1.000 | 18.75 |
| 240 | 247.3 | 217.7 | 0.2350 | -6.29 | 1.000 | 19.02 |
| 250 | 235.2 | 229.8 | 0.2350 | -6.29 | 1.000 | 19.54 |
| 260 | 226.0 | 239.0 | 0.2350 | -6.29 | 1.000 | 19.92 |
| 270 | 233.7 | 231.3 | 0.2350 | -6.29 | 1.000 | 19.60 |
| 280 | 239.1 | 225.9 | 0.2350 | -6.29 | 1.000 | 19.37 |
| 290 | 249.5 | 215.5 | 0.2350 | -6.29 | 1.000 | 18.92 |
| 300 | 254.0 | 211.0 | 0.2350 | -6.29 | 1.000 | 18.73 |
| 310 | 251.3 | 213.7 | 0.2350 | -6.29 | 1.000 | 18.84 |
| 320 | 245.3 | 219.7 | 0.2350 | -6.29 | 1.000 | 19.11 |
| 330 | 227.0 | 238.0 | 0.2350 | -6.29 | 1.000 | 19.88 |
| 340 | 228.0 | 237.0 | 0.2350 | -6.29 | 1.000 | 19.84 |
| 350 | 220.9 | 244.1 | 0.2350 | -6.29 | 1.000 | 20.13 |

 FCC 30 second Terrain Data
 (yellow highlighted values establish average HAAT)

Technical Exhibit

Licensed and proposed 60 dBu contour coverage map

The proposed 60 dBu contour will continue to overlap the licensed 60 dBu contour.



Technical Exhibit

Allocation Study

CH 236 38 21 23.0 / 85 50 52.0 0.235 kW ERP (H&V, non-da) 465 m COR AMSL 273.2 m HAAT

| CH CITY | CALL | TYPE STATE | AZI. <-- | DIST FILE # | LAT. LNG. | Pwr(kW) HAAT(M) | INT(km) COR(M) | PRO(km) LICENSEE | *IN* (Overlap in km) | *OUT* |
|------------|------|---------------|-------------|----------------|--------------|--------------------|-------------------|---------------------|-------------------------|-------|
|------------|------|---------------|-------------|----------------|--------------|--------------------|-------------------|---------------------|-------------------------|-------|

Reference station:

| | | | | | | | | | | |
|---------------|--------|-----|-------|-----------------|------------|-------|-----|------------------------------|--------------|--|
| 236D | W236AN | LIC | 160.3 | 0.22 | 38 21 16.2 | 0.200 | | --- | Reference--- | |
| Floyd's Knobs | IN | IN | 340.3 | BLFT20140919AAG | 85 50 48.9 | 180 | 371 | Educational Media Foundation | | |

Co-channel, 1st, 2nd, & 3rd channel relationships:

| | | | | | | | | | | |
|----------------|---------|-----|-------|------------------|------------|---------|-------|------------------------------------|-------|-------|
| 233C1 | WMXL | LIC | 101.5 | 125.32 | 38 07 24.3 | 85.000 | 8.2 | 63.5 | 94.1 | 60.7 |
| Lexington | KY | IN | 282.4 | BLH20061113ADA | 84 26 36.8 | 194 | 485 | Citicasters Licenses, Inc. | | |
| 234A | WFIA-FM | LIC | 211.7 | 9.46 | 38 17 02.2 | 3.300 | 2.0 | 19.8 | -11.6 | -11.4 |
| New Albany | IN | IN | 31.6 | BLH20010430AAH | 85 54 16.8 | 120 | 316 | Salem Communications Holding | | |
| 235D | W235AK | LIC | 104.8 | 123.19 | 38 03 56.3 | 0.250 | 24.5 | 16.4 | 75.6 | 71.9 |
| Lexington | KY | IN | 285.6 | BLFT20110815ABB | 84 29 12.8 | 143 | 427 | Immaculate Heart Media, Inc. | | |
| 235B | WREW | LIC | 50.3 | 148.30 | 39 12 01.2 | 10.500 | 73.8 | 63.1 | 52.0 | 38.3 |
| Fairfield | OH | IN | 231.2 | BLH19921014KE | 84 31 21.7 | 322 | 542 | Cincinnati FCC License Sub, LLC | | |
| 235D | W235CZ | CP | 112.5 | 43.12 | 38 12 24.3 | 0.150 | 10.8 | 7.4 | 9.2 | 0.6 |
| Mt. Washington | KY | IN | 292.8 | BNPFT20171221AFD | 85 23 30.7 | | 249 | Lcr Partners, Ltd | | |
| 235B | WYNG | LIC | 272.2 | 169.20 | 38 23 57.2 | 50.000 | 76.6 | 63.7 | 73.0 | 64.5 |
| Mount Carmel | IL | IN | 91.0 | BMLED20160302ADC | 87 47 18.1 | 128 | 258 | Educational Media Foundation | | |
| 236A | WVNI | LIC | 334.9 | 107.55 | 39 13 52.1 | 3.800 | 83.3 | 27.9 | 4.3 | 17.9 |
| Nashville | IN | IN | 154.6 | BLH19970904KB | 86 22 39.9 | 105 | 329 | Brown County Broadcasters, Inc. | | |
| 236C0 | WGGC | LIC | 190.7 | 163.37 | 36 54 43.2 | 100.000 | 171.4 | 72.0 | -30.3 | 25.0 |
| Bowling Green | KY | IN | 10.5 | BLH20050201AYH | 86 11 21.0 | 301 | 487 | Heritage Communications, Inc. | | |
| 237L1 | WFBR-LP | LIC | 142.0 | 43.19 | 38 02 59.2 | 0.100 | | | 11.2 | 1.6 |
| Mt Washington | KY | IN | 322.2 | BLL20140319AEZ | 85 32 38.8 | 28 | 211 | First Baptist Church Mt Washington | | |
| 237A | WUME-FM | LIC | 290.4 | 58.54 | 38 32 17.2 | 3.000 | 28.2 | 18.3 | 11.9 | 11.1 |
| Paoli | IN | IN | 110.0 | BLH20181001AHL | 86 28 44.0 | 86 | 292 | Diamond Shores Broadcasting, LLC | | |
| 237L1 | WLHN-LP | LIC | 215.6 | 50.62 | 37 59 08.9 | 0.047 | | | 22.2 | 15.4 |
| Brandenburg | KY | IN | 35.4 | BLL20160324ABV | 86 11 03.7 | 42 | 235 | Meade County Catholic Radio, Inc. | | |
| 237A | WIKI | LIC | 54.9 | 60.16 | 38 39 58.2 | 1.800 | 35.7 | 23.6 | 2.0 | 2.8 |
| Carrollton | KY | IN | 235.3 | BLH19930212KD | 85 16 50.8 | 129 | 337 | Wagon Wheel Broadcasting, LLC | | |
| 237A | WVRB | LIC | 110.7 | 122.10 | 37 57 37.3 | 4.100 | 29.3 | 19.1 | 70.1 | 64.2 |
| Wilmore | KY | IN | 291.5 | BLH20010501ACB | 84 32 41.8 | 121 | 408 | Vernon R. Baldwin, Inc. | | |
| 239B | WQMF | LIC | 197.4 | 25.46 | 38 08 16.3 | 28.500 | 5.8 | 64.5 | -1.8 | -41.0 |
| Jeffersonville | IN | IN | 17.4 | BLH19990211KA | 85 56 05.9 | 196 | 387 | Cc Licenses, LLC | | |

I.F.:

| | | | | | | | | | | |
|----------------|---------|-----|-------|----------------|------------|-------|-----|--------------------|------|-------|
| 289A | WHBE-FM | LIC | 90.2 | 57.86 | 38 21 09.2 | 3.000 | 0.0 | 0.0 | 9.5R | 48.4M |
| Eminence | KY | IN | 270.6 | BLH19880803LB | 85 11 08.8 | 100 | 352 | Ub Louisville, LLC | | |
| 290A | WAYK | LIC | 195.9 | 21.09 | 38 10 25.0 | 1.250 | 0.0 | 0.0 | 9.5R | 11.6M |
| Valley Station | KY | IN | 15.8 | BLH20110420ABC | 85 54 50.0 | 155 | 341 | Way Media, Inc. | | |

FCC 30 second terrain database

Technical Exhibit

Allocation Study

W235CZ (CP)BNPFT20171221AFD
 CH 235D
 0.150 kW ERP
 249 m COR AMSL
 38 12 24.3 / 85 23 30.7

W236AN (PROPOSED)
 CH 236D
 0.235 kW ERP
 465 m COR AMSL
 38 21 23.0 / 85 50 52.0

Protected 60 dBu

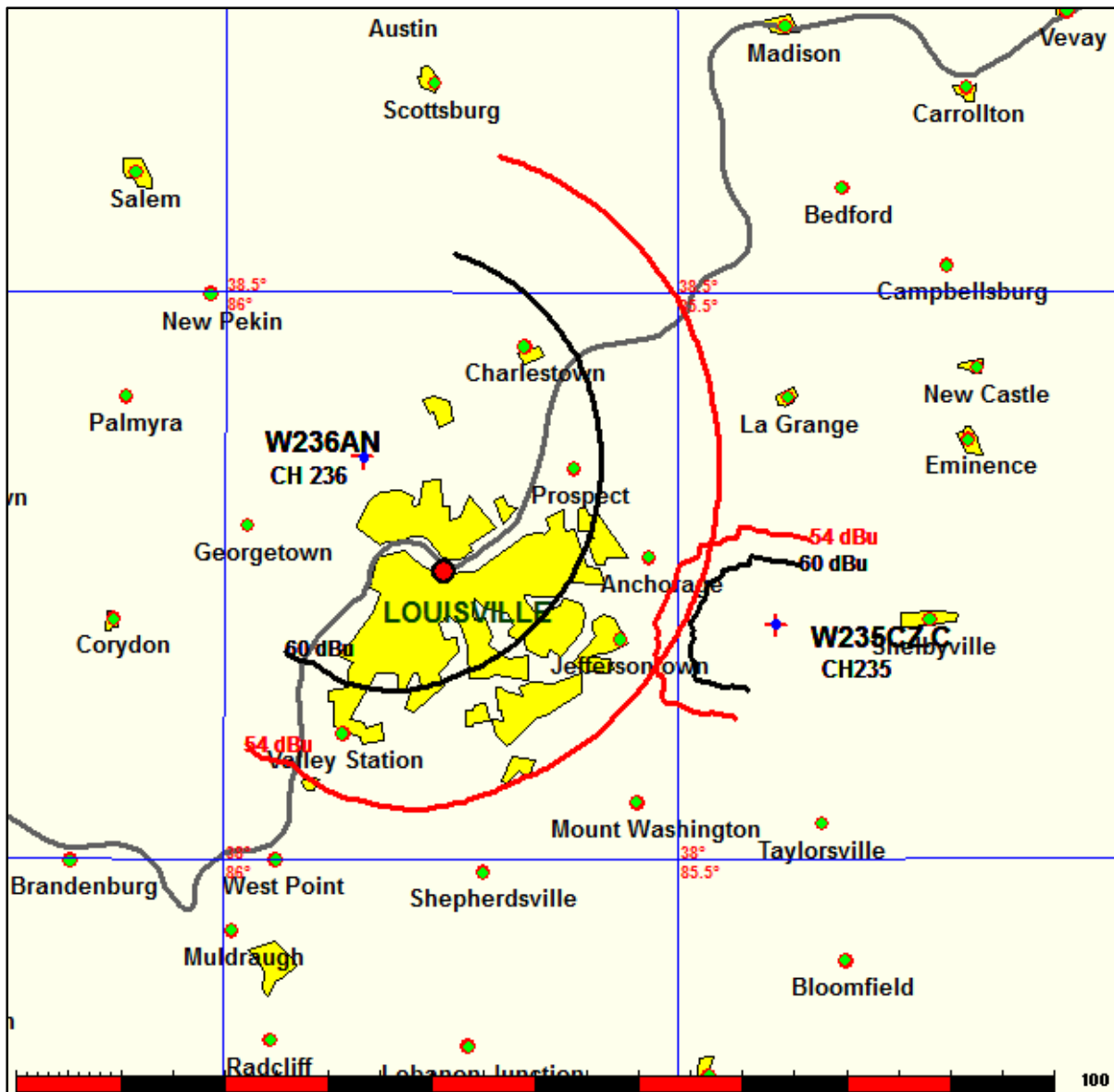
Interfering 54 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|
| 268.0 | 000.1500 | 0050.2 | 008.1 | 118.0 | 000.2350 | 0331.0 | 036.0 | 53.54 |
| 269.0 | 000.1500 | 0050.8 | 008.1 | 117.8 | 000.2350 | 0331.0 | 035.8 | 53.60 |
| 270.0 | 000.1500 | 0051.4 | 008.2 | 117.7 | 000.2350 | 0330.9 | 035.7 | 53.65 |
| 271.0 | 000.1500 | 0052.0 | 008.3 | 117.5 | 000.2350 | 0330.9 | 035.6 | 53.71 |
| 272.0 | 000.1500 | 0051.6 | 008.2 | 117.3 | 000.2350 | 0330.8 | 035.6 | 53.72 |
| 273.0 | 000.1500 | 0050.8 | 008.1 | 117.0 | 000.2350 | 0330.7 | 035.6 | 53.71 |
| 274.0 | 000.1500 | 0049.9 | 008.1 | 116.7 | 000.2350 | 0330.6 | 035.6 | 53.69 |
| 275.0 | 000.1500 | 0048.9 | 008.0 | 116.5 | 000.2350 | 0330.4 | 035.6 | 53.67 |
| 276.0 | 000.1500 | 0048.0 | 007.9 | 116.2 | 000.2350 | 0330.3 | 035.7 | 53.66 |
| 277.0 | 000.1500 | 0047.0 | 007.8 | 116.0 | 000.2350 | 0330.1 | 035.7 | 53.63 |
| 278.0 | 000.1500 | 0046.7 | 007.8 | 115.7 | 000.2350 | 0330.0 | 035.7 | 53.63 |
| 279.0 | 000.1500 | 0046.6 | 007.7 | 115.5 | 000.2350 | 0329.9 | 035.7 | 53.65 |
| 280.0 | 000.1500 | 0046.1 | 007.7 | 115.3 | 000.2350 | 0329.8 | 035.7 | 53.64 |
| 281.0 | 000.1500 | 0045.7 | 007.7 | 115.1 | 000.2350 | 0329.7 | 035.7 | 53.64 |
| 282.0 | 000.1500 | 0045.4 | 007.6 | 114.9 | 000.2350 | 0329.6 | 035.7 | 53.63 |
| 283.0 | 000.1500 | 0045.1 | 007.6 | 114.6 | 000.2350 | 0329.5 | 035.7 | 53.63 |
| 284.0 | 000.1500 | 0045.1 | 007.6 | 114.4 | 000.2350 | 0329.4 | 035.6 | 53.64 |
| 285.0 | 000.1500 | 0044.9 | 007.6 | 114.2 | 000.2350 | 0329.4 | 035.6 | 53.64 |
| 286.0 | 000.1500 | 0044.6 | 007.6 | 114.0 | 000.2350 | 0329.3 | 035.6 | 53.64 |
| 287.0 | 000.1500 | 0044.1 | 007.5 | 113.8 | 000.2350 | 0329.3 | 035.7 | 53.62 |
| 288.0 | 000.1500 | 0043.4 | 007.4 | 113.6 | 000.2350 | 0329.2 | 035.7 | 53.60 |
| 289.0 | 000.1500 | 0042.8 | 007.4 | 113.3 | 000.2350 | 0329.1 | 035.8 | 53.58 |
| 290.0 | 000.1500 | 0042.2 | 007.3 | 113.1 | 000.2350 | 0329.1 | 035.8 | 53.55 |
| 291.0 | 000.1500 | 0041.9 | 007.3 | 112.9 | 000.2350 | 0329.0 | 035.8 | 53.54 |
| 292.0 | 000.1500 | 0042.2 | 007.3 | 112.7 | 000.2350 | 0328.9 | 035.8 | 53.56 |
| 293.0 | 000.1500 | 0042.7 | 007.4 | 112.5 | 000.2350 | 0328.9 | 035.7 | 53.57 |
| 294.0 | 000.1500 | 0043.1 | 007.4 | 112.3 | 000.2350 | 0328.8 | 035.7 | 53.59 |
| 295.0 | 000.1500 | 0043.5 | 007.5 | 112.1 | 000.2350 | 0328.7 | 035.7 | 53.60 |
| 296.0 | 000.1500 | 0043.7 | 007.5 | 111.9 | 000.2350 | 0328.6 | 035.7 | 53.60 |
| 297.0 | 000.1500 | 0044.1 | 007.5 | 111.7 | 000.2350 | 0328.5 | 035.6 | 53.61 |
| 298.0 | 000.1500 | 0044.5 | 007.5 | 111.5 | 000.2350 | 0328.3 | 035.6 | 53.62 |
| 299.0 | 000.1500 | 0044.9 | 007.6 | 111.2 | 000.2350 | 0328.2 | 035.6 | 53.63 |
| 300.0 | 000.1500 | 0045.4 | 007.6 | 111.0 | 000.2350 | 0328.1 | 035.6 | 53.64 |
| 301.0 | 000.1500 | 0045.8 | 007.7 | 110.8 | 000.2350 | 0328.0 | 035.5 | 53.64 |
| 302.0 | 000.1500 | 0045.9 | 007.7 | 110.6 | 000.2350 | 0327.9 | 035.6 | 53.63 |
| 303.0 | 000.1500 | 0045.5 | 007.6 | 110.4 | 000.2350 | 0327.8 | 035.6 | 53.60 |
| 304.0 | 000.1500 | 0044.7 | 007.6 | 110.2 | 000.2350 | 0327.7 | 035.7 | 53.55 |

Technical Exhibit

Allocation Study

Below is a map showing the lack of prohibited overlap of the 54 dBu interference contour of W236AN as proposed to the protected 60 dBu contour of W235CZ (CP).



Technical Exhibit

Allocation Study

W282BI as proposed is located within the protected contour of the following second adjacent stations:

WFIA-FM (LIC), CH 234A, New Albany, IN

WFIA-FM signal strength at the W236AN site 72.8 dBu
W236AN interference contour 112.8 dBu
Distance to W236AN interference contour 246.5 meters

WQMF (LIC), CH 239B, Jeffersonville, IN

WQMF signal strength at the W236AN site 74.5 dBu
W236AN interference contour 114.5 dBu
Distance to W236AN interference contour 202.7 meters

For purposes of this study, the interference contour to WFIA-FM is being used as the worst case situation. The below chart demonstrates that utilizing the listed antenna the interference contour will not reach the ground, therefore, a waiver of Section 74.1204(d) is respectfully requested based on the showing of no population within the area of predicted interference.

| ERP (kw): 0.235 | | | | |
|---|----------------------------------|--|--------------------------------|--|
| Antenna Height AGL (m): 167.6 | | | | |
| Translator's IX Contour: 112.8 | | | | |
| Antenna Type: Nicom BKG77 1 bay | | | | |
| Depression Angle <u>from Horizon</u> | Antenna <u>Relative Field</u> | ERP (kw) <u>from the Antenna RF</u> | <u>Dist. To IX Contour (m)</u> | Height IX Contour Above <u>Ground (m)</u> |
| 0 | 1.000 | 0.2350 | 246.3394 | 167.600 |
| 5 | 0.999 | 0.2345 | 246.0931 | 146.152 |
| 10 | 0.982 | 0.2266 | 241.9053 | 125.594 |
| 15 | 0.954 | 0.2139 | 235.0078 | 106.776 |
| 20 | 0.918 | 0.1980 | 226.1396 | 90.256 |
| 25 | 0.872 | 0.1787 | 214.8080 | 76.818 |
| 30 | 0.818 | 0.1571 | 201.3825 | 66.909 |
| 35 | 0.758 | 0.1350 | 186.7253 | 60.499 |
| 40 | 0.691 | 0.1122 | 170.2205 | 58.184 |
| 45 | 0.616 | 0.0892 | 151.7451 | 60.300 |
| 50 | 0.538 | 0.0680 | 132.5306 | 66.076 |
| 55 | 0.465 | 0.0508 | 114.5478 | 73.768 |
| 60 | 0.391 | 0.0359 | 96.3187 | 84.186 |
| 65 | 0.313 | 0.0230 | 77.1042 | 97.720 |
| 70 | 0.239 | 0.0134 | 58.8751 | 112.275 |
| 75 | 0.176 | 0.0073 | 43.3557 | 125.722 |
| 80 | 0.129 | 0.0039 | 31.7778 | 136.305 |
| 85 | 0.103 | 0.0025 | 25.3730 | 142.324 |
| 90 | 0.104 | 0.0025 | 25.6193 | 141.981 |

Technical Exhibit

Environmental Impact & RFR Compliance Statement

W236AN will be located at an established communications site that is in compliance with all environmental impact requirements.

This minor change application specifies a move to a new site. W236AN as proposed will operate at an antenna COR AGL height of 167.6 meters with 0.235 kW ERP (H&V, non-DA). For a worst case estimation at 2 meters above ground level the RFR is no more than 0.3% of the general population/uncontrolled MPE limit. There are no other broadcast facilities at the site.

Facilities that contribute no more than 5% of the general population/uncontrolled MPE limit at the site comply with the requirements of OET Bulletin No. 65 with no further study. Therefore W236AN as proposed is in compliance with all RFR requirements.

RFR hazard warning signs will be posted at the site and the site has restricted access to only authorized personnel. The applicant certifies that in cooperation with other users of the site all authorized personnel will be protected from RFR exposure in excess of FCC guidelines while accessing any controlled exposure area, including the tower, by either reducing power or ceasing operations.