

OET-69 Interference Analysis (WLUK-TV, Green Bay, WI, Channel 11)

Percent allowed new interference: 0.500
Percent allowed new interference to non Class A LPTV: 2.000
TW Census data selected 2000
Data Base Selected
/export/home/cdbs/pt_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 03-07-2011

Record Selected for Analysis

WLUK-TV USERRECORD-01 GREEN BAY WI US
Channel 11 ERP 40. kW HAAT 388. m RCAMSL 00615 m
Latitude 044-24-32 Longitude 0087-59-31
Status APP Zone 2 Border Site number: 01
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility (site # 01) meets maximum height/power limits

| Site number | 1 | | | |
|-------------|--------|-------|-------------------|--|
| Azimuth | ERP | HAAT | 36.0 dBu F(50,90) | |
| (Deg) | (kW) | (m) | (km) | |
| 0.0 | 40.000 | 436.5 | 114.9 | |
| 45.0 | 40.000 | 385.6 | 110.2 | |
| 90.0 | 40.000 | 368.9 | 108.9 | |
| 135.0 | 40.000 | 344.7 | 107.0 | |
| 180.0 | 40.000 | 339.4 | 106.5 | |
| 225.0 | 40.000 | 387.1 | 110.4 | |
| 270.0 | 40.000 | 419.8 | 113.3 | |
| 315.0 | 40.000 | 422.9 | 113.6 | |

Evaluation toward Class A Stations from site # 01

No Spacing violations or contour overlap
to Class A stations from site # 01

Class A Evaluation Complete

Checks to Site Number 01

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is within the Canadian coordination distance
Distance to border = 351.7km

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

| Channel | Proposed Station | | |
|---------|------------------|--------------|--------------|
| | Call | City/State | ARN |
| 11 | WLUK-TV | GREEN BAY WI | USERRECORD01 |

Stations Potentially Affected by Proposed Station

OET-69 Interference Analysis (WLUK-TV, Green Bay, WI, Channel 11)

| Chan | Call | City/State | Dist(km) | Status | Application | Ref. No. |
|------|---------|-----------------|----------|--------|-------------|-------------|
| 11 | WBKB-TV | ALPENA MI | 355.3 | CP MOD | BMPCDT | 20080521AAC |
| 11 | WGVU-TV | GRAND RAPIDS MI | 233.1 | LIC | BLEDT | 20060703ABP |
| 11 | WGVU-TV | GRAND RAPIDS MI | 233.1 | CP | BPEDT | 20090618AAK |
| 11 | KARE | MINNEAPOLIS MN | 412.8 | CP | BPCDT | 20100315ABP |
| 12 | WMOW | CRANDON WI | 147.1 | CP MOD | BMPCDT | 20100422ABB |

%%%

Analysis of Interference to Affected Station 1

Analysis of current record

| Channel | Call | City/State | Application | Ref. No. |
|---------|---------|------------|-------------|--------------|
| 11 | WBKB-TV | ALPENA MI | BMPCDT | -20080521AAC |

Stations Potentially Affecting This Station

| Chan | Call | City/State | Dist(km) | Status | Application | Ref. No. |
|------|---------|---------------------|----------|--------|---------------|--------------|
| 10 | WWUP-TV | SAULT STE. MARIE MI | 157.4 | CP MOD | BMPCDT | -20100219ABB |
| 11 | WGVU-TV | GRAND RAPIDS MI | 271.5 | LIC | BLEDT | -20060703ABP |
| 11 | WGVU-TV | GRAND RAPIDS MI | 271.5 | CP | BPEDT | -20090618AAK |
| 11 | WTOL | TOLEDO OH | 337.0 | CP MOD | BMPCDT | -20081124AKP |
| 11 | WLUK-TV | GREEN BAY WI | 355.3 | PLN | DTVPLN | -DTPV0344 |
| 12 | WJRT-TV | FLINT MI | 169.2 | CP | BPCDT | -20091013AHC |
| 11 | WLUK-TV | GREEN BAY WI | 355.3 | APP | USERRECORD-01 | |

Total scenarios = 2

Result key: 1

Scenario 1 Affected station 1
Before Analysis

Results for: 11A MI ALPENA BMPCDT 20080521AAC CP

| HAAT | 202.0 m, ATV ERP | 20.0 kW | POPULATION | AREA (sq km) |
|--------------------------------|------------------|---------|------------|--------------|
| within Noise Limited Contour | | | 142999 | 21631.5 |
| not affected by terrain losses | | | 133991 | 20974.2 |
| lost to NTSC IX | | | 0 | 0.0 |
| lost to additional IX by ATV | | | 2640 | 312.6 |
| lost to ATV IX only | | | 2640 | 312.6 |
| lost to all IX | | | 2640 | 312.6 |

Potential Interfering Stations Included in above Scenario 1

| | | | |
|-------------------------|--------|-------------|-----|
| 10A MI SAULT STE. MARIE | BMPCDT | 20100219ABB | CP |
| 11A MI GRAND RAPIDS | BLEDT | 20060703ABP | LIC |
| 11A OH TOLEDO | BMPCDT | 20081124AKP | CP |
| 11A WI GREEN BAY | DTVPLN | DTPV0344 | PLN |

After Analysis

Results for: 11A MI ALPENA BMPCDT 20080521AAC CP

| HAAT | 202.0 m, ATV ERP | 20.0 kW | POPULATION | AREA (sq km) |
|--------------------------------|------------------|---------|------------|--------------|
| within Noise Limited Contour | | | 142999 | 21631.5 |
| not affected by terrain losses | | | 133991 | 20974.2 |
| lost to NTSC IX | | | 0 | 0.0 |
| lost to additional IX by ATV | | | 2653 | 320.6 |
| lost to ATV IX only | | | 2653 | 320.6 |
| lost to all IX | | | 2653 | 320.6 |

Potential Interfering Stations Included in above Scenario 1

| | | | |
|-------------------------|--------------|-------------|-----|
| 10A MI SAULT STE. MARIE | BMPCDT | 20100219ABB | CP |
| 11A MI GRAND RAPIDS | BLEDT | 20060703ABP | LIC |
| 11A OH TOLEDO | BMPCDT | 20081124AKP | CP |
| 11A WI GREEN BAY | USERRECORD01 | | APP |

Percent new IX = 0.0099%

Result key: 2

Scenario 2 Affected station 1
Before Analysis

Results for: 11A MI ALPENA BMPCDT 20080521AAC CP

| HAAT | 202.0 m, ATV ERP | 20.0 kW | POPULATION | AREA (sq km) |
|--------------------------------|------------------|---------|------------|--------------|
| within Noise Limited Contour | | | 142999 | 21631.5 |
| not affected by terrain losses | | | 133991 | 20974.2 |
| lost to NTSC IX | | | 0 | 0.0 |
| lost to additional IX by ATV | | | 2452 | 280.6 |

OET-69 Interference Analysis (WLUK-TV, Green Bay, WI, Channel 11)

| | | |
|---------------------|------|-------|
| lost to ATV IX only | 2452 | 280.6 |
| lost to all IX | 2452 | 280.6 |

Potential Interfering Stations Included in above Scenario 2

| | | | |
|-------------------------|--------|-------------|-----|
| 10A MI SAULT STE. MARIE | BMPCDT | 20100219ABB | CP |
| 11A MI GRAND RAPIDS | BPEDT | 20090618AAK | CP |
| 11A OH TOLEDO | BMPCDT | 20081124AKP | CP |
| 11A WI GREEN BAY | DTVPLN | DTVP0344 | PLN |

After Analysis

| | | | |
|--------------------------------|------------|--------------|----|
| Results for: 11A MI ALPENA | BMPCDT | 20080521AAC | CP |
| HAAT 202.0 m, ATV ERP 20.0 kW | | | |
| | POPULATION | AREA (sq km) | |
| within Noise Limited Contour | 142999 | 21631.5 | |
| not affected by terrain losses | 133991 | 20974.2 | |
| lost to NTSC IX | 0 | 0.0 | |
| lost to additional IX by ATV | 2459 | 284.6 | |
| lost to ATV IX only | 2459 | 284.6 | |
| lost to all IX | 2459 | 284.6 | |

Potential Interfering Stations Included in above Scenario 2

| | | | |
|-------------------------|--------------|-------------|-----|
| 10A MI SAULT STE. MARIE | BMPCDT | 20100219ABB | CP |
| 11A MI GRAND RAPIDS | BPEDT | 20090618AAK | CP |
| 11A OH TOLEDO | BMPCDT | 20081124AKP | CP |
| 11A WI GREEN BAY | USERRECORD01 | | APP |

Percent new IX = 0.0053%

Worst case new IX 0.0099% Scenario 1

#####

Analysis of Interference to Affected Station 2

Analysis of current record

| | | | | |
|---------|---------|-----------------|-------------|--------------|
| Channel | Call | City/State | Application | Ref. No. |
| 11 | WGVU-TV | GRAND RAPIDS MI | BLEDT | -20060703ABP |

Stations Potentially Affecting This Station

| | | | | | | |
|------|---------|--------------|----------|--------|---------------|--------------|
| Chan | Call | City/State | Dist(km) | Status | Application | Ref. No. |
| 10 | WILX-TV | ONONDAGA MI | 122.4 | CP MOD | BMPCDT | -20080618AAZ |
| 11 | WLFI-TV | LAFAYETTE IN | 291.9 | LIC | BLCDT | -20040520AIX |
| 11 | WBKB-TV | ALPENA MI | 271.5 | CP MOD | BMPCDT | -20080521AAC |
| 11 | WTOL | TOLEDO OH | 251.4 | CP MOD | BMPCDT | -20081124AKP |
| 11 | WLUK-TV | GREEN BAY WI | 233.0 | PLN | DTVPLN | -DTVP0344 |
| 12 | WBBM-TV | CHICAGO IL | 186.6 | CP | BPCDT | -20080328ADQ |
| 12 | WINM | ANGOLA IN | 190.0 | APP | BPCDT | -20090817ACR |
| 12 | WINM | ANGOLA IN | 190.0 | LIC | BLCDT | -20021025AAN |
| 12 | WJRT-TV | FLINT MI | 152.1 | CP | BPCDT | -20091013AHC |
| 11 | WLUK-TV | GREEN BAY WI | 233.1 | APP | USERRECORD-01 | |

Total scenarios = 1

Result key: 3

Scenario 1 Affected station 2

Before Analysis

| | | | |
|----------------------------------|------------|--------------|-----|
| Results for: 11A MI GRAND RAPIDS | BLEDT | 20060703ABP | LIC |
| HAAT 238.0 m, ATV ERP 50.0 kW | | | |
| | POPULATION | AREA (sq km) | |
| within Noise Limited Contour | 1790126 | 28225.9 | |
| not affected by terrain losses | 1752483 | 27285.6 | |
| lost to NTSC IX | 0 | 0.0 | |
| lost to additional IX by ATV | 65205 | 1763.6 | |
| lost to ATV IX only | 65205 | 1763.6 | |
| lost to all IX | 65205 | 1763.6 | |

Potential Interfering Stations Included in above Scenario 1

| | | | |
|------------------|--------|-------------|-----|
| 10A MI ONONDAGA | BMPCDT | 20080618AAZ | CP |
| 11A IN LAFAYETTE | BLCDT | 20040520AIX | LIC |
| 11A MI ALPENA | BMPCDT | 20080521AAC | CP |
| 11A OH TOLEDO | BMPCDT | 20081124AKP | CP |
| 12A MI FLINT | BPCDT | 20091013AHC | CP |
| 11A WI GREEN BAY | DTVPLN | DTVP0344 | PLN |

After Analysis

OET-69 Interference Analysis (WLUK-TV, Green Bay, WI, Channel 11)

Results for: 11A MI GRAND RAPIDS BLEDT 20060703ABP LIC

HAAT 238.0 m, ATV ERP 50.0 kW

| | POPULATION | AREA (sq km) |
|--------------------------------|------------|--------------|
| within Noise Limited Contour | 1790126 | 28225.9 |
| not affected by terrain losses | 1752483 | 27285.6 |
| lost to NTSC IX | 0 | 0.0 |
| lost to additional IX by ATV | 68847 | 2401.3 |
| lost to ATV IX only | 68847 | 2401.3 |
| lost to all IX | 68847 | 2401.3 |

Potential Interfering Stations Included in above Scenario 1

| | | | |
|------------------|--------------|-------------|-----|
| 10A MI ONONDAGA | BMPCDT | 20080618AAZ | CP |
| 11A IN LAFAYETTE | BLCDT | 20040520AIX | LIC |
| 11A MI ALPENA | BMPCDT | 20080521AAC | CP |
| 11A OH TOLEDO | BMPCDT | 20081124AKP | CP |
| 12A MI FLINT | BPCDT | 20091013AHC | CP |
| 11A WI GREEN BAY | USERRECORD01 | | APP |

Percent new IX = 0.2159%

Worst case new IX 0.2159% Scenario 1

#####

Analysis of Interference to Affected Station 3

Analysis of current record

| Channel | Call | City/State | Application Ref. No. |
|---------|---------|-----------------|----------------------|
| 11 | WGVU-TV | GRAND RAPIDS MI | BPEDT -20090618AAK |

Stations Potentially Affecting This Station

| Chan | Call | City/State | Dist(km) | Status | Application Ref. No. |
|------|---------|--------------|----------|--------|----------------------|
| 10 | WILX-TV | ONONDAGA MI | 122.4 | CP MOD | BMPCDT -20080618AAZ |
| 11 | WLFI-TV | LAFAYETTE IN | 291.9 | LIC | BLCDT -20040520AIX |
| 11 | WBKB-TV | ALPENA MI | 271.5 | CP MOD | BMPCDT -20080521AAC |
| 11 | WTOL | TOLEDO OH | 251.4 | CP MOD | BMPCDT -20081124AKP |
| 11 | WLUK-TV | GREEN BAY WI | 233.0 | PLN | DTVPLN -DTVPO344 |
| 12 | WBBM-TV | CHICAGO IL | 186.6 | CP | BPCDT -20080328ADQ |
| 12 | WINM | ANGOLA IN | 190.0 | APP | BPCDT -20090817ACR |
| 12 | WINM | ANGOLA IN | 190.0 | LIC | BLCDT -20021025AAN |
| 12 | WJRT-TV | FLINT MI | 152.1 | CP | BPCDT -20091013AHC |
| 11 | WLUK-TV | GREEN BAY WI | 233.1 | APP | USERRECORD-01 |

Total scenarios = 1

Result key: 4

Scenario 1 Affected station 3

Before Analysis

Results for: 11A MI GRAND RAPIDS BPEDT 20090618AAK CP

HAAT 260.0 m, ATV ERP 41.5 kW

| | POPULATION | AREA (sq km) |
|--------------------------------|------------|--------------|
| within Noise Limited Contour | 1790214 | 28141.4 |
| not affected by terrain losses | 1766395 | 27306.0 |
| lost to NTSC IX | 0 | 0.0 |
| lost to additional IX by ATV | 66331 | 1670.8 |
| lost to ATV IX only | 66331 | 1670.8 |
| lost to all IX | 66331 | 1670.8 |

Potential Interfering Stations Included in above Scenario 1

| | | | |
|------------------|--------|-------------|-----|
| 10A MI ONONDAGA | BMPCDT | 20080618AAZ | CP |
| 11A IN LAFAYETTE | BLCDT | 20040520AIX | LIC |
| 11A MI ALPENA | BMPCDT | 20080521AAC | CP |
| 11A OH TOLEDO | BMPCDT | 20081124AKP | CP |
| 12A MI FLINT | BPCDT | 20091013AHC | CP |
| 11A WI GREEN BAY | DTVPLN | DTVPO344 | PLN |

After Analysis

Results for: 11A MI GRAND RAPIDS BPEDT 20090618AAK CP

HAAT 260.0 m, ATV ERP 41.5 kW

| | POPULATION | AREA (sq km) |
|--------------------------------|------------|--------------|
| within Noise Limited Contour | 1790214 | 28141.4 |
| not affected by terrain losses | 1766395 | 27306.0 |
| lost to NTSC IX | 0 | 0.0 |
| lost to additional IX by ATV | 69609 | 2264.1 |
| lost to ATV IX only | 69609 | 2264.1 |

OET-69 Interference Analysis (WLUK-TV, Green Bay, WI, Channel 11)

lost to all IX 69609 2264.1

Potential Interfering Stations Included in above Scenario 1

| | | | |
|------------------|--------------|-------------|-----|
| 10A MI ONONDAGA | BMPCDT | 20080618AAZ | CP |
| 11A IN LAFAYETTE | BLCDT | 20040520AIX | LIC |
| 11A MI ALPENA | BMPCDT | 20080521AAC | CP |
| 11A OH TOLEDO | BMPCDT | 20081124AKP | CP |
| 12A MI FLINT | BPCDT | 20091013AHC | CP |
| 11A WI GREEN BAY | USERRECORD01 | | APP |

Percent new IX = 0.1928%

Worst case new IX 0.1928% Scenario 1

#####

Analysis of Interference to Affected Station 4

Analysis of current record

| Channel | Call | City/State | Application Ref. No. |
|---------|------|----------------|----------------------|
| 11 | KARE | MINNEAPOLIS MN | BPCDT -20100315ABP |

Stations Potentially Affecting This Station

| Chan | Call | City/State | Dist(km) | Status | Application Ref. No. |
|------|---------|----------------|----------|--------|----------------------|
| 10 | KWCM-TV | APPLETON MN | 224.7 | CP | BPEDT -20080617ACY |
| 10 | WDIO-DT | DULUTH MN | 207.2 | CP MOD | BMPCDT -20080620ABZ |
| 10 | KTTC | ROCHESTER MN | 175.2 | CP | BPCDT -20100720AIW |
| 11 | KDIN-TV | DES MOINES IA | 363.6 | LIC | BLEDT -20090612AIB |
| 11 | KRII | CHISHOLM MN | 311.4 | LIC | BLCDT -20090625ABG |
| 11 | KELO-TV | SIOUX FALLS SD | 320.0 | LIC | BLCDT -20090619AAZ |
| 11 | WLUK-TV | GREEN BAY WI | 412.8 | PLN | DTVPLN -DTVP0344 |
| 12 | KEYC-TV | MANKATO MN | 160.6 | CP MOD | BMPCDT -20080620AHS |
| 11 | WLUK-TV | GREEN BAY WI | 412.8 | APP | USERRECORD-01 |

Proposal causes no interference

#####

Analysis of Interference to Affected Station 5

Analysis of current record

| Channel | Call | City/State | Application Ref. No. |
|---------|------|------------|----------------------|
| 12 | WMOW | CRANDON WI | BMPCDT -20100422ABB |

Stations Potentially Affecting This Station

| Chan | Call | City/State | Dist(km) | Status | Application Ref. No. |
|------|---------|---------------|----------|--------|----------------------|
| 11 | WLUK-TV | GREEN BAY WI | 147.2 | PLN | DTVPLN -DTVP0344 |
| 12 | WBBM-TV | CHICAGO IL | 422.6 | CP | BPCDT -20080328ADQ |
| 13 | WNNM | MARQUETTE MI | 117.6 | LIC | BLEDT -20090609ACL |
| 13 | WEAU-TV | EAU CLAIRE WI | 191.8 | LIC | BLCDT -20090622ACW |
| 11 | WLUK-TV | GREEN BAY WI | 147.1 | APP | USERRECORD-01 |

Proposal causes no interference

#####

Analysis of Interference to Affected Station 6

Analysis of current record

| Channel | Call | City/State | Application Ref. No. |
|---------|---------|--------------|----------------------|
| 11 | WLUK-TV | GREEN BAY WI | USERRECORD-01 |

Stations Potentially Affecting This Station

| Chan | Call | City/State | Dist(km) | Status | Application Ref. No. |
|------|---------|-----------------|----------|--------|----------------------|
| 11 | WBKB-TV | ALPENA MI | 355.3 | CP MOD | BMPCDT -20080521AAC |
| 11 | WGVU-TV | GRAND RAPIDS MI | 233.1 | LIC | BLEDT -20060703ABP |
| 11 | WGVU-TV | GRAND RAPIDS MI | 233.1 | CP | BPEDT -20090618AAK |
| 11 | KARE | MINNEAPOLIS MN | 412.8 | CP | BPCDT -20100315ABP |
| 12 | WMOW | CRANDON WI | 147.1 | CP MOD | BMPCDT -20100422ABB |

Total scenarios = 2

Result key: 5
Scenario 1 Affected station 6
Before Analysis

OET-69 Interference Analysis (WLUK-TV, Green Bay, WI, Channel 11)

Results for: 11A WI GREEN BAY USERRECORD01 APP

| | | |
|--------------------------------|------------|--------------|
| HAAT 388.0 m, ATV ERP 40.0 kW | POPULATION | AREA (sq km) |
| within Noise Limited Contour | 1185588 | 38454.7 |
| not affected by terrain losses | 1180438 | 38168.9 |
| lost to NTSC IX | 0 | 0.0 |
| lost to additional IX by ATV | 7189 | 277.8 |
| lost to ATV IX only | 7189 | 277.8 |
| lost to all IX | 7189 | 277.8 |

Potential Interfering Stations Included in above Scenario 1

11A MI GRAND RAPIDS BLEDT 20060703ABP LIC

Result key: 6
Scenario 2 Affected station 6
Before Analysis

Results for: 11A WI GREEN BAY USERRECORD01 APP

| | | |
|--------------------------------|------------|--------------|
| HAAT 388.0 m, ATV ERP 40.0 kW | POPULATION | AREA (sq km) |
| within Noise Limited Contour | 1185588 | 38454.7 |
| not affected by terrain losses | 1180438 | 38168.9 |
| lost to NTSC IX | 0 | 0.0 |
| lost to additional IX by ATV | 7039 | 233.5 |
| lost to ATV IX only | 7039 | 233.5 |
| lost to all IX | 7039 | 233.5 |

Potential Interfering Stations Included in above Scenario 2

11A MI GRAND RAPIDS BPEDT 20090618AAK CP

#####

FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED