INTERFERENCE ANALYSIS FOR PROPOSED WDFM-LP, DEFIANCE, OH, CHANNEL 35, DISPLACEMENT FACILITY (WORST-CASE SCENARIOS)

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tvstudy v2.2.5 (4uoc83)
Database: localhost,  Study: wdfm35p1,  Model: Longley-Rice

Study build station data: LMS TV 2018-04-04

    Proposal: WDFM35P1 D35 LD APP DEFIANCE, OH
 File number: wdfm35p1
 Facility ID: 73389
Station data: User record
   Record ID: 2535
     Country: U.S.
        Zone: I

Search options:
Non-U.S. records included

Stations potentially affected by proposal:
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IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WLWD-LD	N20+	TX	LIC	SPRINGFIELD, OH	BLTT20051219ADW	158.3 km
No	WCPX-TV	D34	DT	CP	CHICAGO, IL	BLANK0000026971	265.7
No	WCPX-TV	D34	DT	APP	CHICAGO, IL	BLANK0000034347	265.7
Yes	WISE-TV	D34	DT	CP	FORT WAYNE, IN	BLANK0000027665	58.1
No	WBND-LD	D34	LD	LIC	SOUTH BEND, IN	BLDTL20121022ABX	141.9
No	WKBD-TV	D34	DT	CP	DETROIT, MI	BLANK0000034396	166.8
No	WKEF	D34	DT	CP	DAYTON, OH	BLANK0000034522	175.8
No	WGBO-DT	D35	DT	CP	JOLIET, IL	BLANK0000034007	265.2
No	WTVP	D35	DT	CP	PEORIA, IL	BLANK0000028050	428.7
Yes	NEW	D35	LD	APP	FORT WAYNE, IN	BNPDTL20091218AFM	48.7
No	WPBY-LD	D35	LD	LIC	LAFAYETTE, IN	BLANK0000001715	212.4
No	WPBY-LD	D35	LD	CP	LAFAYETTE, IN	BLANK0000002944	187.0
No	WTWO	D35	DT	CP	TERRE HAUTE, IN	BLANK0000028193	332.3
No	WKLE	D35	DT	CP	LEXINGTON, KY	BLANK0000034653	379.7
No	WVIU-LD	D35	LD	CP	CADILLAC, MI	BNPDTL20091211AAU	323.0
No	WOLP-CD	D35	DC	CP	GRAND RAPIDS, MI	BLANK0000027729	174.7
No	WPBN-TV	D35	DT	CP	TRAVERSE CITY, MI	BLANK0000034373	386.6
No	WVIZ	D35	DT	CP	CLEVELAND, OH	BLANK0000034584	237.9
Yes	WPTD	D35	DT	CP	DAYTON, OH	BLANK0000026763	176.2
No	NEW	D35	LD	APP	ERIE, PA	BNPDTL20090825BID	380.2
No	WTAP-TV	D35	DT	CP	PARKERSBURG, WV	BLANK0000025208	331.6
No	WBXI-CD	D36	DC	APP	INDIANAPOLIS, IN	BLANK0000033774	209.6
No	WHME-TV	D36	DT	CP	SOUTH BEND, IN	BLANK0000034238	139.4
No	WAQP	D36	DT	CP	SAGINAW, MI	BLANK0000034899	218.2
No	WQHS-DT	D36	DT	CP	CLEVELAND, OH	BLANK0000034009	236.9
No	WRGT-TV	D36	DT	CP	DAYTON, OH	BLANK0000034495	175.8
No	WMNT-CD	D36	DC	CP	TOLEDO, OH	BLANK0000028583	93.1
No	WMNT-CD	D36	DC	APP	TOLEDO, OH	BLANK0000034589	93.1
No	WLMO-LP	N38z	TX	LIC	LIMA, OH	BLTTL20050527BIT	78.1
No	WDMY-LP	N38-	TX	LIC	TOLEDO, OH	BLTT20050805AAT	87.1
No	CHCJ-DT	D35	DT	LIC	HAMILTON, ON	BLANKCANADA174	441.0
No	CIII-DT-29	D35	DT	LIC	SARNIAOIL SPRINGS, ON	BLANKCANADA217	252.3

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No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D35
       Mask: Full Service
   Latitude:  41 17 29.00 N (NAD83)
  Longitude:  84 32 15.00 W
Height AMSL: 334.9 m
       HAAT: 0.0 m
   Peak ERP: 15.0 kW
    Antenna: Omnidirectional
Elev Pattrn: Generic
  Elec Tilt: 0.50

50.8 dBu contour:
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Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	116.5 m	44.6 km
45.0	15.0	121.8	45.0
90.0	15.0	120.9	45.0
135.0	15.0	118.7	44.8
180.0	15.0	117.0	44.7
225.0	15.0	117.2	44.7
270.0	15.0	113.8	44.4
315.0	15.0	109.6	44.0

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 117 m

**Proposal 25.77 dBu contour crosses Canadian border, coordination required
Distance to Canadian border: 137.7 km

Distance to Mexican border: 1985.1 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 321.7 degrees Distance: 187.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 272.7 degrees Distance: 1743.2 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%

Interference to BLANK0000027665 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WISE-TV	D34	DT	CP	FORT WAYNE, IN	BLANK0000027665	
Undesireds:	WDFM35P1	D35	LD	APP	DEFIANCE, OH	wdfm35p1	58.1 km
	WOKZ-CD	D33	DC	CP	KALAMAZOO, MI	BLANK0000027731	138.1
	WHIO-TV	D33	DT	CP	DAYTON, OH	BLANK0000025295	171.5
	WCIA	D34	DT	CP	CHAMPAIGN, IL	BLANK0000028445	296.9
	WCPX-TV	D34	DT	CP	CHICAGO, IL	BLANK0000026971	221.6
	WKMJ-TV	D34	DT	CP	LOUISVILLE, KY	BLANK0000034636	309.0
	WKBD-TV	D34	DT	CP	DETROIT, MI	BLANK0000034396	218.3
	WKEF	D34	DT	CP	DAYTON, OH	BLANK0000034522	172.2
	WWRS-TV	D34	DT	CP	MAYVILLE, WI	BLANK0000026658	377.9
	WOLP-CD	D35	DC	CP	GRAND RAPIDS, MI	BLANK0000027729	178.2
	WPTD	D35	DT	CP	DAYTON, OH	BLANK0000026763	172.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
20457.7	1,090,197	20454.6	1,090,079	20114.8	1,066,740	20072.5	1,064,537	0.21	0.21

Undesired	Total IX		Unique IX, before		Unique IX, after	
WDFM35P1 D35 LD APP	42.3	2,203			42.3	2,203
WCIA D34 DT CP	6.0	318	0.0	0	0.0	0
WCPX-TV D34 DT CP	4.0	168	0.0	0	0.0	0
WKBD-TV D34 DT CP	9.0	92	1.0	0	1.0	0
WKEF D34 DT CP	338.8	23,339	325.8	22,818	325.8	22,818

Interference to BNPDTL20091218AFM APP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	NEW	D35	LD	APP	FORT WAYNE, IN	BNPDTL20091218AFM	
Undesireds:	WDFM35P1	D35	LD	APP	DEFIANCE, OH	wdfm35p1	48.7 km

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            WISE-TV   D34   DT  CP      FORT WAYNE, IN            BLANK0000027665          12.5
            WPBY-LD   D35   LD  LIC     LAFAYETTE, IN             BLANK0000001715         164.2

        Service area       Terrain-limited       IX-free, before        IX-free, after    Percent New IX
   603.1     270,976     603.1     270,976     457.8     251,168     427.8     246,888     6.54     1.70

Undesired                          Total IX     Unique IX, before      Unique IX, after
WDFM35P1 D35 LD APP         79.3      13,812                           29.9       4,280
WISE-TV D34 DT CP          145.4      19,808     145.4      19,808      96.0      10,276

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Interference to BLANK0000026763 CP scenario 1

            Call      Chan  Svc Status  City, State               File Number             Distance
Desired:    WPTD      D35   DT  CP      DAYTON, OH                BLANK0000026763

Undesireds: WDFM35P1  D35   LD  APP     DEFIANCE, OH              wdfm35p1                176.2 km
            WISE-TV   D34   DT  CP      FORT WAYNE, IN            BLANK0000027665         172.7
            WKEF      D34   DT  CP      DAYTON, OH                BLANK0000034522           0.6
            WGBO-DT   D35   DT  CP      JOLIET, IL                BLANK0000034007         372.9
            WTWO      D35   DT  CP      TERRE HAUTE, IN           BLANK0000028193         274.7
            WKLE      D35   DT  CP      LEXINGTON, KY             BLANK0000034653         204.8
            WOLP-CD   D35   DC  CP      GRAND RAPIDS, MI          BLANK0000027729         346.1
            WVIZ      D35   DT  CP      CLEVELAND, OH             BLANK0000034584         284.6
            WTAP-TV   D35   DT  CP      PARKERSBURG, WV           BLANK0000025208         233.8
            WBXI-CD   D36   DC  APP     INDIANAPOLIS, IN          BLANK0000033774         168.1
            WRGT-TV   D36   DT  CP      DAYTON, OH                BLANK0000034495           0.6
            CIII-DT-29D35   DT  LIC     SARNIAOIL SPRINGS, ON     BLANKCANADA217          376.3

        Service area       Terrain-limited       IX-free, before        IX-free, after    Percent New IX
 25502.8   3,424,665   25286.9   3,412,307   24394.8   3,351,975   24277.1   3,349,719     0.48     0.07

Undesired                          Total IX     Unique IX, before      Unique IX, after
WDFM35P1 D35 LD APP        131.7       3,907                          117.7       2,256
WKEF D34 DT CP              97.6      30,838      59.7      19,998      59.7      19,998
WTWO D35 DT CP              48.0       5,135      37.0       3,634      34.0       3,619
WKLE D35 DT CP              27.8       4,691       8.0         365       8.0         365
WVIZ D35 DT CP              69.1       2,196       9.0         184       6.0         184
WTAP-TV D35 DT CP          738.5      25,106     660.5      19,298     659.5      19,284
WRGT-TV D36 DT CP           36.9      10,780       6.0         111       6.0         111
CIII-DT-29 D35 DT LIC        2.0         135       0.0           0       0.0           0

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Interference to proposal scenario 1

            Call      Chan  Svc Status  City, State               File Number             Distance
Desired:    WDFM35P1  D35   LD  APP     DEFIANCE, OH              wdfm35p1

Undesireds: WISE-TV   D34   DT  CP      FORT WAYNE, IN            BLANK0000027665          58.1 km
            NEW       D35   LD  APP     FORT WAYNE, IN            BNPDTL20091218AFM        48.7
            WPBY-LD   D35   LD  LIC     LAFAYETTE, IN             BLANK0000001715         212.4
            WMNT-CD   D36   DC  CP      TOLEDO, OH                BLANK0000028583          93.1

        Service area       Terrain-limited             IX-free        Percent IX
  6264.9     199,412    6264.9     199,412    6213.3     196,002     0.82     1.71

Undesired                          Total IX           Unique IX   Prcnt Unique IX
WISE-TV D34 DT CP           22.2       2,778      21.2       2,656     0.34     1.33
NEW D35 LD APP              30.4         754      29.3         632     0.47     0.32
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