

Technical Exhibit
Vandalia 292D
281.6m RC-AMSL 60.3m Highest Radial
50m AGL
250 Watts

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Interference Compliance

Contour protection, as required by C.F.R. Section 74.1204 to co-channel and first, second and third adjacent channels is demonstrated herein by Figure 1.

Height Above Average Terrain

The proposed HAAT and the predicted 60 dBu contours were calculated in accordance with Section 47 C.F.R. 73.313. The average terrain elevations were calculated along 12 radials using the NED 03 Sec terrain database.

Figure 2 shows the HAAT of the 12 radials. The highest radial is 60.3m above average terrain.

Delivery Method

The instant application will re-broadcast KEFL Kirksville, MO (Fac. ID 171939) via Monroe City, MO 274D (Fac. ID 153375).

RF Electromagnetic Exposure Analysis

The proposed facility will not have a significant environmental impact and complies with maximum permissible radio frequency electromagnetic exposure limits for a controlled environment, in accordance with OET Bulletin No. 65.

Using a worst case assumption of maximum downward radiation ($F=1.0$) the RF exposure at 2m above ground level is $7.22218 \mu\text{W}/\text{cm}^2$ or 0.7% of the controlled standard. This is inconsequential when added to existing RF on the tower.

The site is fenced and RF warning signs are posted. The power will be reduced or shut off to allow necessary access to the tower.

Figure 1

Vandalia, MO 292D

REFERENCE CH# 292D - 106.3 MHz, Pwr= 0.25 kW, HAAT= 51.4 M, COR= 281.6 M
 39 17 07.4 N.
 91 36 01.5 W.
 Average Protected F(50-50)= 9.41 km
 Omni-directional

DISPLAY DATES
 DATA 03-05-13
 SEARCH 03-24-13

CH CITY	CALL	TYPE ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
292D Vandalia	647209	APP _C_ MO	80.1 260.2	9.52 BNPFT20030317BJK	39 18 00.0 91 29 30.0	0.250 62	32.5 287	9.8 Covenant	-35.0*	-30.9*
291C1 Ashland	KOQL	LIC NCN MO	234.6 54.0	102.05 BLH19981125KG	38 45 01.0 92 33 31.0	69.000 292	99.4 519	68.3 Cumulus Li censi ng LI c	-6.1	21.1
290C3 New London	KZZK	LIC _C_ MO	18.6 198.8	52.13 BLH19960416KB	39 43 48.0 91 24 19.0	10.000 157	3.8 333	38.3 Staradio Corp.	38.3	12.7
239C Mexico	KWWR«	LIC NCY MO	267.2 86.8	46.19 BLH20000530ACL	39 15 49.0 92 08 06.0	100.000 360	47.7 608	30.6 Kxeo Radi o, Inc.	28.5R	17.7M
295C Jefferson City	KTXV	LIC _CY MO	227.3 46.7	105.59 BLH19900727KA	38 38 16.0 92 29 34.0	100.000 381	11.8 609	81.2 Zimmer Radi o Of Mi d-mi ssou	85.1	23.1
293C1 Granite City	WARH	LIC _CN IL	125.3 306.1	135.94 BLH19890509KC	38 34 24.0 90 19 30.0	90.000 313	102.5 466	70.4 St. Loui s Fcc Li cense Sub,	24.1	52.2
293C1 Granite City	WARH	LIC _C_ IL	125.2 306.0	135.84 BLH20111026AGG	38 34 27.7 90 19 31.5	90.000 309	102.2 462	70.2 St. Loui s Fcc Li cense Sub,	24.3	52.3
293D Columbia	647801	APP _C_ MO	242.9 62.4	65.66 BNPFT20030317IMH	39 00 51.9 92 16 32.3	0.019 331	17.3 569	11.9 Radi o Assi st Mi ni stry, Inc	39.5	41.2
293D Moberly	650358	APP _C_ MO	281.9 101.4	71.27 BNPFT20030317KPS	39 24 54.0 92 24 37.0	0.250 92	17.9 339	12.2 Fm 105, Inc.	43.8	45.8
294B1 Mount Sterling	WPWQ	LIC _CN IL	36.6 217.0	91.24 BMLH19990429KB	39 56 33.0 90 57 44.0	25.000 100	4.0 311	44.1 Wpw Broadcasti ng, Inc.	77.6	45.2

Terrain database is NED 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
 In & Out distances between contours are shown at closest points. Reference zone= West Zone, Co to 3rd adjacent.
 All separation margins (if shown) include rounding
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
 "***affixed to 'IN' or 'OUT' values = site inside protected contour.
 « = Station meets FCC minimum distance spacing for its class.

HAAT Calculation

