

250-Mile Window Application Minor Modification of Permit: W254CN, BNPFT-20160129AFQ Facility ID No: 138368

This exhibit is for minor modification of translator permit for W254CN Facility ID No. 138368, BNPFT-20160129AFQ. It specifies changes of location of approximately 1.5 miles, a change of antenna type, and elevation. The facility will continue to be a fill in translator for AM Class C station WBIZ Facility ID 2107 Eau Claire, Wisconsin.

Antenna Location

The proposed antenna is to be mounted on an existing tower identified by registration number 1033663 at 247 meters above ground. Below as **Figure 1** is an overlap and spacing study from which it can be determined that this proposal is within the protected contour of, **third** adjacent channel station WISM-FM.

73.1204 Compliance

We will demonstrate that a lack of population and/or other factors allow this proposal to be compliant with 74.1204. The process commonly called “Living Way”, allows for the use of D/U Analysis, also known as “signal strength ratio methodology” to be utilized to demonstrate compliance. In this instant case the facility to be protected is on a second or third adjacent channel and is to be afforded protection from signals 40 dB stronger than the protected facility presents near the proposed translator antenna location.

Concerning WISM-FM; which is predicted to have 100 dBu signal at the protected facility. This proposal can only cause predicted interference to the protected facility by having a signal exceeding 140 dBu (100 + 40) in a habitable/populated area. Utilizing the line of sight equation it has been determined that a 100 dBu signal developed by 250 watts, as proposed, will not reach any habitable areas as can be seen in **Figure 3**, an image of the proposed antenna tower.

Fill-in and Minor Change Status

This proposal is to serve as a fill-in translator for station WBIZ, Facility ID 2107, Eau Claire, Wisconsin. The map of **Figure 4** demonstrates that the proposed 60 dBu contour is contained within the 2 mV/M signal and a 25 mile radius of the WBIZ facility. It can also be seen that the proposed and permitted facilities have contour overlap.

RF Fields Statement

The proposed facilities were evaluated in terms of potential radio frequency fields exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The proposed antenna system is a Scala FMV-MP a one (1) element, vertical polarity antenna, mounted 247 meters above ground. As this element type is not modeled in any current RF Fields calculation computer program, for purposes of this analysis the FM Model RF Fields program has been set to calculate values for an array of "worst case" type of antenna element(s) "Ring Stub", operated with an effective radiated power of 0.25 Kilowatts in the Vertical plane. At 2 meters above the surface, at 56.4 meters from the base of the tower, this proposal will contribute worst case, 0.132 microwatts per square centimeter, or 0.01 percent of the allowable ANSI limit for controlled exposure, and 0.05 percent of the allowable limit for uncontrolled exposure. This figure is less than 5.0% of the applicable FCC exposure limit at all locations extending out from the base of the tower. Section 1.1307(b)(3) excludes applications when the calculated level is predicted to be less than 5.0% of the applicable exposure limit. It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

Figure 1. Overlap and Spacing Study

W254CN at Gray TV tower ASR 1033663
Amfm Radio Licenses, L.L.C.

REFERENCE CH# 254D - 98.7 MHz, Pwr= 0.25 kw DA, HAAT= 0.0 M, COR= 518 M DISPLAY DATES
44 48 00.1 N. Average Protected F(50-50)= 7.09 km DATA 04-21-16
91 27 56.4 W. Standard Directional SEARCH 04-21-16

CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap)	*OUT* (in km)
254D	W254CN	CP _C_	195.7	2.63	44 46 38.0	0.250	39.9	11.6	-54.0*	-62.8*
	Eau Claire	WI	15.6	BMPFT20160129AFQ	91 28 28.8		348			
251C3	WISM-FM	LIC DCX	195.7	2.63	44 46 38.0	25.000	3.5	34.4	-17.6*	-32.6*
	Altoona	WI	15.7	BLH20090121ADV	91 28 29.0	84	362	Aloha Station Trust, Llc		
256D	W356AF	LIC _HN	21.8	17.75	44 56 54.0	0.250	1.1	12.0	-1.7*	4.8
	Chippewa Falls	WI	201.8	BLFT19950918TJ	91 22 55.0	69	359	Bushland Radio Specialties		
	Translator For WCFW, Chippewa Falls, WI-									
253C0	KTIS-FM	LIC _C_	283.0	134.04	45 03 30.0	100.000	105.2	72.5	7.8	30.4
	Minneapolis	MN	101.8	BMLE20030304AAJ	93 07 27.0	315	593	University of Northwestern		
255C0	WVCX	LIC _C_	142.4	132.34	43 51 10.0	100.000	104.1	71.6	13.9	39.1
	Tomah	WI	323.1	BMLE20020128ABE	90 27 36.0	300	645	Vcy America, Inc.		
256C2	WKFX	LIC NC_	330.8	73.14	45 22 23.0	44.000	6.0	52.7	47.2	19.4
	Rice Lake	WI	150.4	BLH19991105AAD	91 55 22.0	159	516	Tkc, Inc.		
254D	W274BW	CP DC_	191.5	85.94	44 02 31.0	0.250	42.2	12.5	27.1	19.7
	Medford	WI	11.3	BPFT20160201A0J	91 40 47.0		423	Edgewater Broadcasting, In		
254D	W254BB	LIC _C_	66.6	96.09	45 08 15.4	0.170	22.8	6.8	58.0	38.9
	Medford	WI	247.3	BLFT20150826AAS	90 20 39.3		450	wrvn, Inc.		
255D	K263AL	CP _C_	251.1	88.73	44 32 14.0	0.250	22.5	14.9	44.6	41.7
	Red Wing	MN	70.4	BPFT20160129AJL	92 31 20.0		363	Q Media Group, Llc		

Terrain database is NGDC 30 SEC. R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference zone= , Co to 3rd adjacent.
All separation margins (if shown) include rounding. Call signs with strikeout need not be protected.
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 restricted contour.

Figure 2. Contour Map

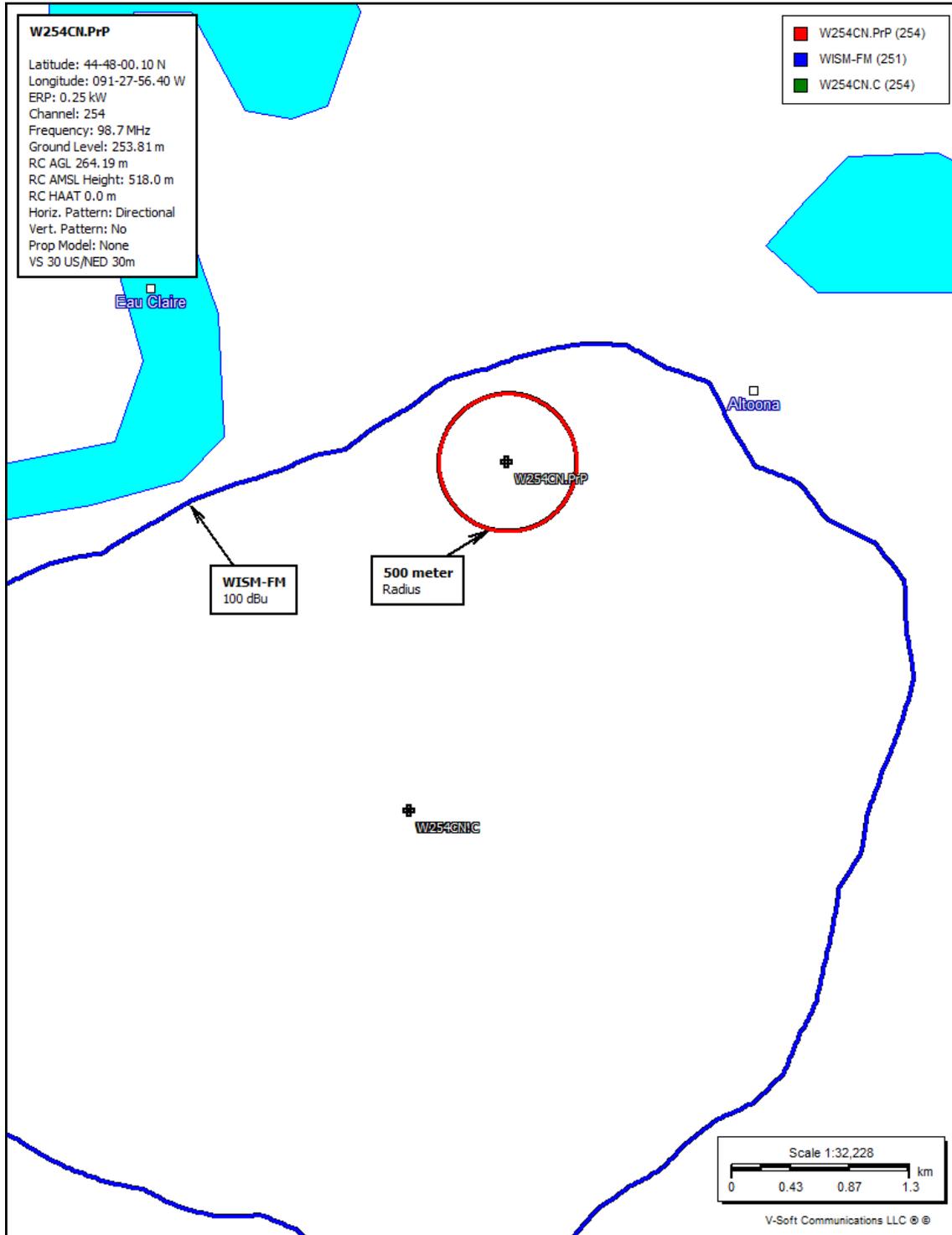


Figure 3. Image of Proposed Tower



Figure 4. Fill in and Overlap Map

