

Engineering Statement

In Support of an

Application for a Construction Permit

WWIZ(FM), Mercer, Pennsylvania

WRTS Protected/WWIZ Interfering FM Overlap Study

WRTS BMLH19871209KC
Channel = 279B
Max ERP = 50 kW
RCAMSL = 514 M
N. Lat = 42 05 25
W. Lng = 79 56 37

WWIZ
Channel = 280A
Max ERP = 3.2 kW
RCAMSL = 465 M
N. Lat = 411310
W. Lng = 802825

Protected
54 dBu

Interfering
48 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
000.0	050.0000	0281.3	077.8	013.9	001.0761	0165.5	180.0	16.3
010.0	050.0000	0266.4	076.5	018.1	000.8842	0167.2	181.3	15.2
020.0	050.0000	0237.0	073.9	022.3	000.8035	0160.1	180.0	14.8
030.0	050.0000	0199.6	070.5	026.3	000.8035	0155.6	176.5	15.4
040.0	050.0000	0142.8	064.1	029.9	000.8035	0153.1	168.9	16.7
050.0	050.0000	0095.5	056.2	032.8	000.8035	0153.3	158.8	18.5
060.0	050.0000	0077.6	052.3	035.6	000.8035	0154.2	152.0	19.6
070.0	050.0000	0080.4	052.9	038.8	000.8035	0153.1	148.3	20.2
080.0	050.0000	0081.5	053.2	041.8	000.8816	0149.5	143.3	21.4
090.0	050.0000	0071.4	050.9	044.0	000.9780	0145.4	135.6	23.2
100.0	050.0000	0054.9	046.5	045.0	001.0215	0143.7	126.3	25.2
110.0	050.0000	0072.0	051.0	048.8	001.2100	0137.5	121.6	26.6
120.0	050.0000	0089.6	054.9	052.5	001.4408	0136.1	115.0	28.5
130.0	050.0000	0095.1	056.1	054.7	001.5997	0137.5	106.3	30.8
140.0	050.0000	0077.4	052.3	053.5	001.5125	0136.5	096.3	32.9
150.0	050.0000	0089.9	055.0	055.3	001.6386	0137.9	087.0	36.0
160.0	050.0000	0110.1	058.9	057.0	001.7691	0138.8	076.6	39.4
170.0	050.0000	0085.2	054.0	050.6	001.3131	0136.2	069.1	40.3
180.0	050.0000	0091.3	055.3	046.7	001.1027	0140.9	060.7	42.6
190.0	050.0000	0120.8	060.7	042.2	000.8985	0148.8	050.0	46.2
200.0	050.0000	0119.7	060.6	030.5	000.8035	0152.9	046.3	47.4
210.0	050.0000	0110.9	059.1	017.9	000.8949	0167.4	047.9	47.9
220.0	050.0000	0105.4	058.1	007.5	001.4365	0149.6	052.7	47.2
230.0	050.0000	0115.3	059.8	358.5	002.1690	0149.6	058.3	46.9
240.0	050.0000	0122.3	061.0	352.7	002.8328	0162.0	066.8	45.7
250.0	050.0000	0155.3	065.8	346.8	003.1842	0168.7	076.3	43.5
260.0	050.0000	0192.5	069.8	344.0	003.1907	0169.4	088.1	39.8
270.0	050.0000	0227.0	073.0	343.6	003.1917	0169.2	100.9	36.2
280.0	050.0000	0247.1	074.8	345.1	003.1881	0169.4	113.6	33.3
290.0	050.0000	0268.8	076.7	347.4	003.1830	0168.4	126.1	30.8
300.0	050.0000	0283.5	078.0	350.3	003.1351	0166.1	137.7	28.4
310.0	050.0000	0289.6	078.5	353.8	002.6969	0159.4	148.1	25.6
320.0	050.0000	0292.4	078.8	357.6	002.2630	0151.2	157.2	23.2
330.0	050.0000	0293.7	078.9	001.5	001.8839	0146.4	165.1	20.9
340.0	050.0000	0297.1	079.1	005.5	001.5792	0149.2	171.9	19.0
350.0	050.0000	0292.3	078.8	009.7	001.2913	0152.7	176.9	17.3