

Engineering Statement

In Support of an

Application for a Construction Permit

WWIZ(FM), Mercer, Pennsylvania

WQAL Protected/WWIZ Interfering FM Overlap Study

WQAL BLH19930222KD
Channel = 281B
Max ERP = 50 kW
RCAMSL = 414 M
N. Lat = 41 22 45
W. Lng = 81 43 12

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	0206.8	071.2	311.1	000.9495	0140.1	136.7	22.7
010.0	050.0000	0208.3	071.3	314.3	001.1119	0133.0	126.9	25.1
020.0	050.0000	0212.1	071.7	317.4	001.2761	0131.3	116.4	27.6
030.0	050.0000	0208.2	071.3	319.7	001.4072	0132.4	104.8	30.4
040.0	050.0000	0185.3	069.1	320.2	001.4399	0132.9	092.4	33.6
050.0	050.0000	0170.9	067.6	319.8	001.4142	0132.5	080.5	37.0
060.0	050.0000	0161.1	066.5	317.9	001.3040	0131.3	069.0	40.1
070.0	050.0000	0153.2	065.5	313.5	001.0709	0134.1	058.6	42.9
080.0	050.0000	0151.4	065.2	306.3	000.7660	0155.9	049.5	46.1
090.0	050.0000	0161.8	066.6	295.4	000.5672	0148.9	041.7	47.6
100.0	050.0000	0153.7	065.6	279.2	000.5672	0141.9	040.4	47.8
110.0	050.0000	0146.9	064.6	264.4	000.7418	0142.0	044.0	47.4
120.0	050.0000	0140.0	063.7	254.2	001.1871	0147.7	051.4	46.8
130.0	050.0000	0130.4	062.2	248.8	001.4450	0153.3	061.2	44.3
140.0	050.0000	0079.0	052.6	252.5	001.2793	0148.9	074.4	39.2
150.0	050.0000	0063.4	048.9	253.2	001.2424	0148.5	083.9	36.1
160.0	050.0000	0044.8	042.6	256.4	001.0738	0145.1	092.8	32.7
170.0	050.0000	0055.9	046.8	254.0	001.2013	0147.9	100.7	31.2
180.0	050.0000	0070.4	050.6	252.9	001.2582	0148.7	109.8	29.3
190.0	050.0000	0088.8	054.8	252.8	001.2647	0148.7	119.9	27.4
200.0	050.0000	0093.2	055.7	254.8	001.1563	0147.1	128.6	25.4
210.0	050.0000	0106.8	058.3	256.7	001.0580	0144.7	137.9	23.1
220.0	050.0000	0117.7	060.2	259.3	000.9308	0142.4	146.2	20.9
230.0	050.0000	0129.4	062.1	262.3	000.8164	0142.1	153.8	19.1
240.0	050.0000	0144.2	064.3	265.5	000.7077	0141.6	160.9	17.3
250.0	050.0000	0158.4	066.2	269.0	000.5979	0140.6	166.7	15.4
260.0	050.0000	0167.6	067.2	272.7	000.5672	0140.5	170.8	14.5
270.0	050.0000	0173.1	067.9	276.6	000.5672	0140.7	173.1	14.1
280.0	050.0000	0177.0	068.3	280.5	000.5672	0142.6	174.0	14.0
290.0	050.0000	0179.5	068.5	284.4	000.5672	0144.5	173.5	14.1
300.0	050.0000	0183.6	068.9	288.4	000.5672	0145.6	171.9	14.4
310.0	050.0000	0190.0	069.5	292.3	000.5672	0147.0	169.2	14.9
320.0	050.0000	0192.5	069.8	296.2	000.5672	0149.6	165.0	15.8
330.0	050.0000	0193.3	069.9	300.0	000.5684	0153.5	159.4	16.9
340.0	050.0000	0199.8	070.5	303.9	000.6865	0158.0	153.1	18.9
350.0	050.0000	0205.8	071.1	307.6	000.8125	0152.6	145.6	20.7