

Engineering Statement

In Support of an

Application for a Construction Permit

WWIZ(FM), Mercer, Pennsylvania

WWIZ Protected/WOGF Interfering FM Overlap Study

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

WOGF
Channel = 282B
Max ERP = 50 kW
RCAMSL = 467 M
N. Lat = 40 37 48
W. Lng = 80 36 10

Protected
60 dBu

Interfering
100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
000.0	002.0091	0147.5	026.2	006.7	050.0000	0141.2	092.3	49.4
010.0	001.2706	0153.6	024.1	009.5	050.0000	0140.6	090.5	49.9
020.0	000.8035	0164.3	022.4	012.0	050.0000	0140.2	088.5	50.5
030.0	000.8035	0153.1	021.7	014.3	050.0000	0142.7	087.0	51.0
040.0	000.8035	0152.0	021.6	016.6	050.0000	0146.3	085.7	51.5
050.0	001.2706	0136.4	022.9	019.3	050.0000	0152.5	085.0	52.0
060.0	002.0091	0136.6	025.4	022.6	050.0000	0155.6	084.8	52.2
070.0	003.1769	0113.0	026.0	025.2	050.0000	0150.1	082.3	52.7
080.0	003.2000	0107.4	025.4	027.0	050.0000	0148.8	078.6	53.8
090.0	003.2000	0102.5	024.9	028.4	050.0000	0144.1	074.6	54.8
100.0	003.2000	0101.8	024.8	029.8	050.0000	0136.8	070.6	55.7
110.0	003.2000	0111.4	025.8	031.6	050.0000	0127.7	066.7	56.5
120.0	003.2000	0119.2	026.6	032.8	050.0000	0125.4	062.2	57.8
130.0	002.5404	0139.7	027.0	033.0	050.0000	0125.4	057.5	59.5
140.0	001.6032	0121.7	023.0	028.0	050.0000	0145.9	054.3	61.8
150.0	001.0143	0138.1	021.8	024.9	050.0000	0150.3	051.4	63.2
160.0	000.6423	0187.1	022.6	022.7	050.0000	0155.4	048.0	64.8
170.0	000.6386	0168.9	021.5	018.2	050.0000	0149.0	046.6	65.0
180.0	000.6386	0157.1	020.8	013.6	050.0000	0141.9	046.0	64.9
190.0	000.6386	0143.3	019.9	009.2	050.0000	0140.8	046.5	64.6
200.0	000.6386	0139.9	019.6	005.0	050.0000	0139.1	047.2	64.2
210.0	000.6386	0148.4	020.2	000.9	050.0000	0132.0	047.9	63.6
220.0	000.6423	0157.8	020.9	357.1	050.0000	0132.7	049.5	63.0
230.0	001.0143	0164.9	023.7	351.9	050.0000	0134.2	050.8	62.6
240.0	001.6032	0174.5	026.9	346.7	050.0000	0141.9	053.5	61.9
250.0	001.4243	0151.4	024.6	348.0	050.0000	0137.3	058.3	59.8
260.0	000.8987	0142.2	021.5	350.6	050.0000	0133.9	062.6	58.1
270.0	000.5672	0140.6	019.1	352.9	050.0000	0133.3	066.0	57.0
280.0	000.5672	0142.2	019.2	353.4	050.0000	0133.2	069.3	55.9
290.0	000.5672	0146.1	019.5	354.2	050.0000	0133.2	072.5	54.9
300.0	000.5672	0153.4	020.0	355.2	050.0000	0132.0	075.7	53.9
310.0	000.8987	0144.1	021.6	355.9	050.0000	0132.1	079.6	52.7
320.0	001.4243	0132.7	023.2	357.3	050.0000	0132.8	083.3	51.7
330.0	002.2568	0140.8	026.4	358.5	050.0000	0132.0	088.3	50.2
340.0	003.2000	0164.9	030.7	000.2	050.0000	0132.0	094.3	48.5
350.0	003.1769	0166.5	030.8	003.3	050.0000	0134.3	095.9	48.2