

WEKH

Eastern Kentucky University

Hazard, Kentucky

Engineering Exhibit

September 2007

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WEKH
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Declaration

I declare, under penalty of perjury, that I am a technical consultant to broadcasting and other communications systems, that I have over twenty-five years of experience in the engineering of broadcast and other communications systems, that I am familiar with the Federal Communications Commission's Rules found in the Code of Federal Regulations Title 47, that I am a Professional Engineer registered in North Carolina, that I have prepared or supervised the preparation of the attached Allotment Exhibit for Eastern Kentucky University, and that all of the facts therein, except for facts of which the Federal Communications Commission may take official notice, are true to the best of my knowledge and belief.



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Narrative

WEKH is licensed on Channel 205 C1 in Hazard, Kentucky. This Exhibit supports a minor modification application for WEKH. The modification consists of an increase in Effective Radiated Power, a change to Class C0, a change to vertical polarization, and a new directional antenna.

Allocations

An allocations table is included in this exhibit. Figure 1 shows the licensed and proposed protected service contours for WEKH. Figure 2 is an allocations study for all facilities where the lack of overlap of contours is less than 16 kilometers. Additional figures show individual protections where the lack of overlap is less than 5 kilometers.

The proposed facilities provide the contour protection required in §73.509 for all facilities and applications with the exception of the licensed facilities of WFGH, where grandfathered overlap exists.

WFGH operates with facilities licensed in File Number BLED-1458. WEKH operates with facilities licensed in BLED-20011206AAK. The WEKH modification was the remounting of an antenna with an increase in height and reduction in effective radiated power. The grandfathered overlap of contours between the two stations existed at that time. In this application, WEKH proposes to maintain the existing effective radiated power of 31 kilowatts over the range of azimuths from 15° through 35° inclusive which includes all areas where there is existing overlap of contours. The center of radiation of the antenna remains constant. Therefore, this proposal is in compliance with the requirements of §73.509(d) in that (1) the total area of overlap is not increased, (2) the area of overlap between WEKH and WFGH is not increased, (3) the area of overlap remains in the same area, and therefore does not move

significantly closer to WEKH, and (4) no area of overlap is created for any additional stations. Figure 3 shows the present and proposed WEKH contours with the WFGH 60 dBu F(50,50) contour.

Figure 4 shows the lack of prohibited contour overlap with second adjacent channel station WISE-FM, Wise, Virginia. Table 2 is the tabular output of FMOVER, showing the lack of prohibited contour overlap between the proposed WEKH facilities and the licensed facilities of WISE-FM. Figure 5 shows the lack of prohibited contour overlap with co-channel station WWOX, Cookeville, Tennessee. Table 3 is the tabular output of FMOVER, showing the lack of prohibited contour overlap between the proposed WEKH facilities and the licensed facilities of WWOX. Figure 6 shows a lack of prohibited overlap with first adjacent channel facilities authorized in BPED-19961203ME, Newport, Tennessee. Table 4 is the tabular output of FMOVER, showing the lack of prohibited Contour overlap between the proposed WEKH facilities and those authorized in BPED-19961203ME. Figure 7 shows the lack of prohibited contour overlap with co-channel station WXAF, Charleston, West Virginia. Table 5 is the tabular output of FMOVER, showing the lack of prohibited contour overlap between the proposed WEKH facilities and the facilities of WXAF.

Terrain Data

All contours for existing and proposed facilities are calculated using height above average terrain calculated at one degree horizontal increments. Terrain data is extracted from the V-Soft Communications NED 03 terrain database. The NED 03 database is derived from the USGS National Elevation Data 30 meter terrain database. The USGS National Elevation Dataset has been developed by merging the highest-resolution, best-quality elevation data available across the United States into a seamless raster format. NED is the result of the maturation of the USGS effort to provide 1:24,000-scale Digital Elevation Model (DEM) data for the conterminous US and 1:63,360-scale DEM data for Alaska.

Television Channel 6

There is one television channel 6 stations within the study distance required by §73.525, WATE-TV, Knoxville, Tennessee. The proposed WEKH facilities utilize vertical polarization. Figure 8 shows the WATE-TV 47 dBu F(50,50) contour and the proposed WEKH horizontal equivalent 74 dBu F(50,10) contour. The equivalent effective radiated power for WEKH is 2.5 kilowatts, or 100/40 as permitted in §73.525. As shown in Figure 8, there is no overlap of the proposed WEKH interference contour and the WATE-TV Grade B contour. Therefore, the facilities proposed in this application comply with §73.525.

Directional Antenna Description

This application proposes a directional antenna. The pattern is tabulated and plotted as Figure 8 of this Exhibit. The antenna is a Shively 6510-4-DA. The antenna will comply with the requirements of §73.316. A complete proof of performance from the antenna manufacturer will be provided in the license application. The antenna will be mounted to the tower as specified in the manufacturer's mounting instructions. The antenna will not be mounted on the top of an antenna tower which includes a top-mounted platform larger than the nominal cross-sectional area of the tower in the horizontal plane. No other antenna of any type will be mounted on the same tower level as a directional antenna, and that no antenna of any type will be mounted within any horizontal or vertical distance specified by the antenna manufacturer as being necessary for proper directional operation. Antenna installation will be supervised by an engineer experienced in directional antennas. The supervising engineer will provide a statement of qualifications and a statement that the antenna was assembled and installed according to the manufacturer's instruction. A registered land surveyor will verify the orientation of the antenna and provide a statement that the antenna is properly oriented. The only other FM or TV broadcasting antennas within 60 meters of the proposed site are the television antennas for WKHA-TV and WKHA-DT, located above the WEKH antenna on the same tower. Both television stations currently operate with the existing WEKH facilities.

Should any interference develop from the modified WEKH facilities, Eastern Kentucky University will take corrective actions, including but not limited to a reduction in power or temporary cessation of broadcasting until the problems can be resolved. There are no AM broadcasting antennas within 3.2 kilometers of the proposed site.

Table 1: Allocation Table

REFERENCE		CH# 215C0- 90.9 MHz, Pwr= 100 kw, HAAT= 319.5 M, COR= 725 M							DISPLAY DATES		
37 11 35.0 N.		Average Protected F(50-50)= 73.8 km							DATA 09-06-07		
83 11 17.0 W.									SEARCH 09-06-07		
CH	CALL	TYPE ANT	AZI.	DIST	LAT.	Pwr(kw)	INT(km)	PRO(km)	*IN*	*OUT*	
CITY		STATE	<--	FILE #	LNG.	HAAT(M)	COR(M)	LICENSEE	(Overlap	in km)	
215C1 WEKH		LIC CX	0.0	0.00	37 11 35.0	31.000	153.0	65.4	-225.29*	-233.98*	
Hazard		KY	0.0	BLD20011206AAK	83 11 17.0	324	725	Eastern Kentucky University			
This is the facility being modified.											
06Z2C WATETV		LI HY	207.2	148.26	36 00 13.0	100.000		121.9	165.8R	-17.6M	
Knoxville		TN	26.8	BMLCT20041203AEH	83 56 34.0	548	859	Wate, G.p.			
214B1 WFGH		LIC CN	26.4	116.74	38 07 58.0	7.800	40.4	26.0	14.13	-0.30<	
Fort Gay		WV	206.8	BLD1458	82 35 37.0	62	303	Wayne County Board Of Educ			
213A WISE-FM		LIC C	113.2	65.12	36 57 39.0	0.220	1.0	18.0	0.71	39.25	
Wise		VA	293.6	BLD20010328AAC	82 30 56.0	204	932	virginia Tech Foundation,			
215C1 WWOX		LIC DCN	240.8	225.22	36 11 05.0	40.000	137.4	54.1	16.73	3.43	
Cookeville		TN	59.5	BLD19941114KF	85 22 30.0	208	599	Somerset Educational Broad			
214C2 961203ME		CP DVN	183.9	143.17	35 54 21.0	1.000	59.7	39.7	15.97	4.65	
Newport		TN	3.9	BPED19961203ME	83 17 49.0	711	1116	Bible Broadcasting Network			
Vertical Polarization Only											
215A WXAF		LIC CN	50.1	189.46	38 16 25.0	0.800	71.1	23.8	52.33	7.68	
Charleston		WV	231.1	BLD19930730KD	81 31 27.0	190	509	Maranatha Broadcasting, In			
217A WLMU		LIC CN	212.3	79.65	36 35 10.0	0.190	1.0	8.6	8.09	61.31	
Harrogate		TN	32.0	BLD19880627KD	83 39 54.0	87	564	Lincoln Memorial Universit			
218A WVCT		LIC EN	254.8	87.22	36 59 01.0	2.400	2.2	24.0	9.61	52.45	
Keavy		KY	74.2	BLD19981201KA	84 08 01.0	116	469	Victory Training School Co			
215B WGUC		LIC CN	331.9	244.15	39 07 27.0	15.000	125.0	51.4	43.55	15.47	
Cincinnati		OH	151.1	BLD19811119AK	84 31 18.0	268	477	Cincinnati Public Radio, I			
214C3 WPTJ		LIC DCX	327.0	150.78	38 19 40.0	10.000	32.5	21.9	41.74	16.33	
Paris		KY	146.5	BLD20060821ACM	84 07 44.0	96	357	Lay Witness Outreach, Inc.			
212A WCSK		LIC CN	144.0	91.33	36 31 37.0	0.195	1.0	20.4	19.38	61.10	
Kingsport		TN	324.3	BLD19810803AJ	82 35 12.0	280	719	Kingsport City Schools Bd.			
216C1 WPIB		LIC DCX	87.1	178.48	37 15 26.0	12.000	81.5	55.4	25.94	19.96	
Bluefield		WV	268.3	BLD20020717AAA	81 10 43.0	361	1146	Positive Alternative Radio			
214A WEHC		LIC C	110.9	129.38	36 46 19.0	0.500	19.8	13.3	47.98	25.92	
Emory		VA	291.7	BLD20070806ACW	81 49 59.0	29	682	Emory & Henry College			
212C1 WMKY		LIC DCX	350.2	110.89	38 10 38.0	37.000	7.1	59.4	27.99	40.73	
Morehead		KY	170.1	BLD20031022ALF	83 24 17.0	276	571	Morehead State University			
06-1C WVVA		CP HN	87.1	178.18	37 15 21.0	50.100		100.8	146.4R	31.7M	
Bluefield		WV	268.4	BPCT20010725ADN	81 10 55.0	374	1162	wvva Television, Inc.			
06-1C WVVA		LI HN	87.1	178.18	37 15 21.0	50.100		100.4	146.1R	32.1M	
Bluefield		WV	268.4	BMLCT19880907KE	81 10 55.0	372	1157	wvva Television, Inc.			
215C3 WKUE		LIC CN	285.3	246.64	37 44 46.0	5.200	97.5	37.0	74.91	34.81	
Elizabethtown		KY	103.6	BLD19911126KA	85 53 18.0	193	417	Western Kentucky Universit			
216B1 WKA0		CP DCX	26.6	152.75	38 25 11.0	7.000	41.2	26.6	49.09	34.88	
Ashland		KY	207.1	BPED19960328MC	82 24 06.0	108	317	Positive Alternative Radio			
Transmitter Site Located in West Virginia, Zone 1.											
215C1 WRAF		LIC DEN	183.2	288.25	34 35 57.0	100.000	157.7	60.6	62.22	62.41	
Toccoa Falls		GA	3.1	BLD19860211KD	83 21 55.0	172	513	Toccoa Falls College			
217C WUKY		LIC DCN	297.1	147.58	37 47 18.0	95.000	8.3	65.6	63.43	71.13	
Lexington		KY	116.2	BLD19891211KA	84 40 49.0	306	562	Board Of Trustees, Univers			

Terrain database is NED 03 SEC

ERP and HAAT on direct-line with reference station.

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.

<" = Contour overlap

Table 2: FMOVER Protection of WISE-FM

09-06-2007 NED 03 SEC Terrain Data				FMOver Analysis				
WEKH				WISE-FM BLED20010328AAC				
Channel = 215C0				Channel = 213A				
Max ERP = 100 kW				Max ERP = 0.22 kW				
RCAMSL = 725.05 M				RCAMSL = 932 M				
N. Lat. 37 11 35.0				N. Lat. 36 57 39.0				
W. Lng. 83 11 17.0				W. Lng. 82 30 56.0				
Protected				Interfering				
60 dBu				100 dBu				
Azimuth (degrees)	WEKH ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	WISE-FM ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
053.0	070.8964	0307.1	069.4	356.4	000.2200	0263.0	067.7	38.33
054.0	074.3044	0300.1	069.4	357.0	000.2200	0271.4	066.6	38.98
055.0	077.7924	0305.7	070.3	358.2	000.2200	0282.1	066.1	39.53
056.0	081.3604	0302.8	070.5	358.9	000.2200	0278.8	065.2	39.74
057.0	085.0084	0288.6	069.8	359.0	000.2200	0278.2	063.8	40.22
058.0	088.7364	0279.1	069.5	359.3	000.2200	0275.8	062.6	40.58
059.0	092.5444	0276.4	069.7	000.1	000.2200	0276.4	061.7	40.95
060.0	096.4324	0292.5	071.4	002.0	000.2200	0293.8	061.5	41.60
061.0	100.0000	0286.1	071.3	002.5	000.2200	0297.2	060.4	42.14
062.0	100.0000	0290.0	071.6	003.4	000.2200	0307.1	059.5	42.82
063.0	100.0000	0297.5	072.2	004.5	000.2200	0307.3	058.7	43.11
064.0	100.0000	0312.0	073.3	006.0	000.2200	0321.1	058.2	43.77
065.0	100.0000	0306.5	072.9	006.4	000.2200	0325.9	056.9	44.43
066.0	100.0000	0301.0	072.5	006.7	000.2200	0329.2	055.6	45.04
067.0	100.0000	0305.9	072.8	007.7	000.2200	0343.2	054.7	45.84
068.0	100.0000	0316.0	073.6	009.0	000.2200	0357.0	054.0	46.55
069.0	100.0000	0323.8	074.2	010.2	000.2200	0369.2	053.2	47.22
070.0	100.0000	0325.1	074.2	011.0	000.2200	0355.5	052.1	47.21
071.0	100.0000	0338.8	075.3	012.7	000.2200	0346.6	051.6	47.16
072.0	100.0000	0346.2	075.8	014.0	000.2200	0336.5	050.7	47.16
073.0	100.0000	0353.0	076.3	015.3	000.2200	0333.6	049.9	47.40
074.0	100.0000	0356.1	076.5	016.3	000.2200	0330.2	048.9	47.69
075.0	100.0000	0357.6	076.6	017.3	000.2200	0323.3	047.8	47.89
076.0	100.0000	0349.2	076.0	017.5	000.2200	0321.9	046.3	48.43
077.0	100.0000	0350.5	076.1	018.5	000.2200	0319.0	045.3	48.78
078.0	100.0000	0349.6	076.1	019.3	000.2200	0320.9	044.1	49.32
079.0	100.0000	0336.0	075.1	019.0	000.2200	0321.4	042.4	50.04
080.0	100.0000	0350.0	076.1	021.1	000.2200	0303.7	041.8	49.77
081.0	097.5156	0352.5	076.0	022.0	000.2200	0291.9	040.7	49.93
082.0	095.0625	0348.9	075.5	022.3	000.2200	0287.4	039.3	50.43
083.0	092.6406	0335.5	074.2	021.7	000.2200	0296.7	037.5	51.52
084.0	090.2500	0328.6	073.5	021.6	000.2200	0298.3	036.0	52.28
085.0	087.8906	0307.9	071.7	019.8	000.2200	0316.0	034.1	53.72
086.0	085.5625	0303.4	071.1	019.8	000.2200	0316.7	032.7	54.42
087.0	083.2656	0307.1	071.1	020.6	000.2200	0308.1	031.5	54.75
088.0	081.0000	0307.1	070.8	021.1	000.2200	0304.3	030.3	55.32
089.0	078.7656	0304.3	070.3	021.1	000.2200	0303.9	029.0	56.08
090.0	076.5625	0303.5	069.9	021.4	000.2200	0300.7	027.7	56.78
091.0	074.3561	0302.4	069.6	021.5	000.2200	0298.4	026.4	57.55
092.0	072.1820	0303.6	069.4	022.1	000.2200	0291.0	025.2	58.18
093.0	070.0402	0302.7	069.0	022.2	000.2200	0289.3	023.9	59.04
094.0	067.9306	0305.5	068.9	022.9	000.2200	0286.0	022.8	59.82

WEKH				WISE-FM				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
095.0	065.8532	0309.1	068.8	023.8	000.2200	0282.8	021.6	60.61
096.0	063.8081	0299.3	067.8	022.0	000.2200	0291.8	020.2	62.02
097.0	061.7953	0297.6	067.3	021.6	000.2200	0297.0	018.9	63.18
098.0	059.8148	0315.0	068.3	025.5	000.2200	0275.1	018.0	63.26
099.0	057.8664	0314.8	068.0	025.6	000.2200	0274.3	016.8	64.27
100.0	055.9504	0323.6	068.3	027.8	000.2200	0250.5	015.8	64.42
101.0	053.6849	0327.8	068.2	028.8	000.2200	0239.9	014.6	64.92
102.0	051.4663	0326.5	067.6	028.2	000.2200	0247.4	013.3	66.83
103.0	049.2944	0327.9	067.3	028.2	000.2200	0247.5	012.1	68.61
104.0	047.1694	0319.7	066.3	024.3	000.2200	0283.4	010.7	72.00
105.0	045.0912	0316.6	065.6	021.5	000.2200	0299.6	009.5	74.53
106.0	043.0598	0297.9	063.7	009.6	000.2200	0365.5	008.3	77.78
107.0	041.0753	0274.8	061.5	352.5	000.2200	0276.5	007.8	76.79
108.0	039.1375	0267.0	060.5	341.8	000.2200	0268.5	007.5	77.33
109.0	037.2466	0278.4	060.9	338.8	000.2200	0267.4	006.4	79.55
110.0	035.4025	0284.2	060.8	331.3	000.2200	0262.9	005.7	81.07
111.0	036.9907	0291.9	061.8	329.0	000.2200	0256.5	004.2	84.72
112.0	038.6138	0302.4	063.0	325.7	000.2200	0256.0	002.6	90.40
113.0	040.2717	0303.3	063.5	303.7	000.2200	0187.4	001.8	94.08
114.0	041.9645	0288.6	062.8	275.4	000.2200	0202.4	002.6	90.19
115.0	043.6921	0291.1	063.4	247.7	000.2200	0190.4	002.7	89.41
116.0	045.4546	0297.6	064.2	221.9	000.2200	-0006.5	003.2	72.99
117.0	047.2519	0293.3	064.3	217.1	000.2200	0001.9	004.3	67.92
118.0	049.0840	0285.9	064.1	217.2	000.2200	0001.9	005.4	64.02
119.0	050.9510	0286.1	064.5	212.3	000.2200	0051.5	006.5	65.52
120.0	052.8529	0307.8	066.5	197.0	000.2200	0113.8	007.8	69.30
121.0	054.6565	0321.9	067.9	190.5	000.2200	0157.2	009.4	69.14
122.0	056.4903	0328.1	068.7	188.9	000.2200	0163.4	010.8	67.06
123.0	058.3543	0347.2	070.4	184.0	000.2200	0177.7	012.6	64.98
124.0	060.2486	0351.0	071.0	184.4	000.2200	0179.4	014.0	63.23
125.0	062.1732	0346.7	071.0	186.7	000.2200	0175.0	015.1	61.91
126.0	064.1281	0340.8	070.9	189.2	000.2200	0162.3	016.1	60.32
127.0	066.1132	0331.5	070.5	192.2	000.2200	0146.9	017.1	58.57
128.0	068.1285	0329.3	070.7	193.5	000.2200	0137.1	018.2	56.96
129.0	070.1741	0323.2	070.5	195.4	000.2200	0122.3	019.3	55.12
130.0	072.2500	0319.6	070.6	196.7	000.2200	0114.8	020.5	53.67
131.0	074.8225	0325.0	071.3	196.3	000.2200	0116.6	021.9	52.69
132.0	077.4400	0317.8	071.1	198.0	000.2200	0115.7	023.0	51.83
133.0	080.1025	0299.2	070.1	201.5	000.2200	0106.9	023.7	50.58
134.0	082.8100	0297.5	070.3	202.2	000.2200	0114.6	024.9	50.34
135.0	085.5625	0296.9	070.6	202.6	000.2200	0125.0	026.1	50.20
136.0	088.3600	0294.4	070.7	203.4	000.2200	0138.2	027.3	50.28
137.0	091.2025	0300.8	071.5	202.9	000.2200	0130.2	028.8	48.83
138.0	094.0900	0302.0	071.9	203.1	000.2200	0136.0	030.1	48.44
139.0	097.0225	0307.0	072.6	203.0	000.2200	0133.5	031.5	47.49
140.0	100.0000	0307.7	073.0	203.4	000.2200	0138.3	032.8	47.13
141.0	100.0000	0300.3	072.4	205.3	000.2200	0115.8	033.7	45.25
142.0	100.0000	0299.9	072.4	206.2	000.2200	0110.4	034.9	44.32
143.0	100.0000	0285.4	071.2	208.8	000.2200	0114.6	035.5	44.32
144.0	100.0000	0282.5	071.0	210.0	000.2200	0095.3	036.6	42.27
145.0	100.0000	0281.1	070.8	210.9	000.2200	0079.0	037.6	40.18
146.0	100.0000	0270.1	069.9	213.0	000.2200	0045.1	038.4	35.45
147.0	100.0000	0278.6	070.6	212.7	000.2200	0046.5	039.8	35.19
148.0	100.0000	0284.0	071.1	212.9	000.2200	0045.5	041.1	34.55
149.0	100.0000	0288.4	071.5	213.2	000.2200	0043.9	042.4	33.85

WEKH				WISE-FM				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
150.0	100.0000	0304.8	072.7	212.4	000.2200	0050.1	044.1	34.29
151.0	100.0000	0310.2	073.1	212.7	000.2200	0046.6	045.4	33.34
152.0	100.0000	0305.7	072.8	213.8	000.2200	0036.5	046.4	31.36
153.0	100.0000	0293.2	071.8	215.6	000.2200	0012.7	047.1	30.01
154.0	100.0000	0279.0	070.7	217.5	000.2200	0002.4	047.6	29.88
155.0	100.0000	0280.3	070.8	218.1	000.2200	-0001.3	048.8	29.63
156.0	100.0000	0302.0	072.5	217.0	000.2200	0002.6	050.7	29.21
157.0	100.0000	0301.0	072.5	217.8	000.2200	0001.9	051.8	28.98
158.0	100.0000	0284.8	071.2	219.7	000.2200	-0006.0	052.3	28.88
159.0	100.0000	0271.7	070.1	221.4	000.2200	-0004.2	052.8	28.75
160.0	100.0000	0264.8	069.5	222.5	000.2200	-0008.8	053.6	28.58
161.0	100.0000	0279.8	070.7	222.0	000.2200	-0006.8	055.3	28.21
162.0	100.0000	0280.2	070.8	222.6	000.2200	-0008.9	056.4	27.98
163.0	100.0000	0271.9	070.1	223.8	000.2200	-0010.1	057.1	27.83
164.0	100.0000	0262.1	069.2	225.1	000.2200	-0007.3	057.8	27.69
165.0	100.0000	0257.1	068.8	226.1	000.2200	0000.4	058.7	27.51
166.0	100.0000	0263.7	069.4	226.2	000.2200	0001.8	060.0	27.24
167.0	100.0000	0252.1	068.4	227.5	000.2200	0005.7	060.5	27.12
168.0	100.0000	0247.9	068.1	228.4	000.2200	0000.1	061.4	26.95
169.0	100.0000	0244.1	067.8	229.2	000.2200	-0001.0	062.3	26.77
170.0	100.0000	0244.4	067.8	229.7	000.2200	0001.6	063.3	26.57
171.0	098.8036	0235.5	066.9	230.9	000.2200	0004.2	063.9	26.46
172.0	097.6144	0229.1	066.2	232.0	000.2200	0001.8	064.6	26.33
173.0	096.4324	0228.7	066.1	232.6	000.2200	-0003.5	065.5	26.16

09-06-2007 NED 03 SEC Terrain Data

WISE-FM BLED20010328AAC

Channel = 213A

Max ERP = 0.22 kW

RCAMSL = 932 M

N. Lat. 36 57 39.0

W. Lng. 82 30 56.0

Protected

60 dBu

WEKH

Channel = 215C0

Max ERP = 100 kW

RCAMSL = 725.05 M

N. Lat. 37 11 35.0

W. Lng. 83 11 17.0

Interfering

100 dBu

WISE-FM				WEKH				
Azimuth	ERP	HAAT	Dist	Azimuth	ERP	HAAT	Dist	Actual
(degrees)	(kW)	(m)	(km)	(degrees)	(kW)	(m)	(km)	(dBu)
234.0	000.2200	-0011.4	006.9	118.7	050.3934	0283.7	061.9	64.71
235.0	000.2200	-0006.6	006.9	118.7	050.3018	0283.6	061.8	64.73
236.0	000.2200	-0013.7	006.9	118.6	050.2086	0283.5	061.7	64.77
237.0	000.2200	-0022.6	006.9	118.6	050.1121	0283.5	061.6	64.79
238.0	000.2200	-0021.9	006.9	118.5	050.0117	0283.5	061.5	64.83
239.0	000.2200	0005.3	006.9	118.4	049.9081	0283.7	061.4	64.86
240.0	000.2200	0038.0	007.7	119.0	051.0211	0286.6	060.9	65.25
241.0	000.2200	0068.6	010.5	121.3	055.1476	0322.3	059.3	67.39
242.0	000.2200	0093.8	012.1	122.6	057.5348	0340.1	058.3	68.54
243.0	000.2200	0109.6	013.0	123.3	058.8560	0349.8	057.7	69.21
244.0	000.2200	0122.4	013.7	123.8	059.8126	0351.5	057.1	69.54
245.0	000.2200	0132.1	014.3	124.1	060.4727	0350.9	056.6	69.75
246.0	000.2200	0142.6	014.9	124.5	061.2383	0349.4	056.1	69.96
247.0	000.2200	0169.7	016.5	125.8	063.7305	0341.8	055.0	70.30
248.0	000.2200	0194.4	017.7	126.7	065.5050	0334.3	054.2	70.50
249.0	000.2200	0189.7	017.5	126.3	064.7848	0338.5	054.0	70.65
250.0	000.2200	0191.8	017.6	126.2	064.5964	0339.3	053.7	70.78
251.0	000.2200	0203.8	018.1	126.5	065.1697	0336.3	053.2	70.93
252.0	000.2200	0229.6	019.2	127.3	066.7638	0330.3	052.3	71.19
253.0	000.2200	0250.5	020.1	127.9	067.8740	0328.9	051.5	71.51
254.0	000.2200	0259.2	020.4	128.0	068.0333	0329.1	051.0	71.72
255.0	000.2200	0258.8	020.4	127.7	067.5213	0328.6	050.7	71.78
256.0	000.2200	0249.7	020.0	127.1	066.3956	0330.8	050.7	71.80
257.0	000.2200	0239.0	019.6	126.5	065.1609	0336.3	050.7	71.89
258.0	000.2200	0231.1	019.3	126.0	064.1106	0340.8	050.6	71.98
259.0	000.2200	0228.1	019.1	125.6	063.4009	0342.3	050.5	72.04
260.0	000.2200	0230.4	019.2	125.4	063.0419	0343.1	050.2	72.16
261.0	000.2200	0237.8	019.5	125.4	062.9920	0343.3	049.7	72.33
262.0	000.2200	0237.7	019.5	125.1	062.4288	0345.6	049.5	72.46
263.0	000.2200	0231.9	019.3	124.7	061.5046	0348.5	049.4	72.50
264.0	000.2200	0227.1	019.1	124.2	060.6500	0350.7	049.4	72.54
265.0	000.2200	0221.7	018.9	123.7	059.7606	0351.5	049.3	72.51
266.0	000.2200	0220.7	018.8	123.4	059.1295	0350.7	049.2	72.50
267.0	000.2200	0216.9	018.7	123.0	058.3366	0347.1	049.1	72.36
268.0	000.2200	0217.5	018.7	122.7	057.7898	0342.8	048.9	72.27
269.0	000.2200	0227.7	019.1	122.7	057.7257	0342.1	048.3	72.45
270.0	000.2200	0222.6	018.9	122.2	056.8518	0331.3	048.3	72.05
271.0	000.2200	0209.9	018.4	121.5	055.6223	0323.6	048.6	71.60
272.0	000.2200	0202.4	018.0	121.0	054.6772	0322.0	048.8	71.43
273.0	000.2200	0208.2	018.3	120.8	054.3392	0320.9	048.4	71.51
274.0	000.2200	0202.9	018.1	120.4	053.5079	0315.6	048.4	71.26

WISE-FM				WEKH				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
275.0	000.2200	0202.4	018.0	120.0	052.8835	0308.2	048.3	71.02
276.0	000.2200	0201.0	018.0	119.6	052.1781	0298.7	048.2	70.70
277.0	000.2200	0202.6	018.0	119.3	051.5849	0291.3	048.1	70.49
278.0	000.2200	0194.8	017.7	118.8	050.6469	0284.6	048.3	70.12
279.0	000.2200	0195.7	017.7	118.5	050.0303	0283.5	048.1	70.09
280.0	000.2200	0189.2	017.5	118.1	049.1769	0285.6	048.3	70.01
281.0	000.2200	0185.8	017.3	117.7	048.4421	0287.8	048.3	70.00
282.0	000.2200	0189.8	017.5	117.4	047.9154	0290.9	048.1	70.15
283.0	000.2200	0195.9	017.7	117.1	047.4194	0293.0	047.7	70.30
284.0	000.2200	0201.2	018.0	116.8	046.8773	0293.7	047.4	70.39
285.0	000.2200	0201.8	018.0	116.4	046.2209	0296.1	047.4	70.45
286.0	000.2200	0200.0	017.9	116.0	045.5203	0297.6	047.4	70.42
287.0	000.2200	0198.2	017.9	115.6	044.8295	0295.7	047.4	70.28
288.0	000.2200	0193.1	017.6	115.2	044.1085	0292.9	047.6	70.05
289.0	000.2200	0185.2	017.3	114.8	043.3858	0289.9	047.9	69.76
290.0	000.2200	0189.7	017.5	114.5	042.7961	0288.5	047.7	69.75
291.0	000.2200	0193.5	017.6	114.1	042.1856	0287.9	047.5	69.75
292.0	000.2200	0198.3	017.9	113.8	041.5642	0291.4	047.2	69.88
293.0	000.2200	0200.9	018.0	113.4	040.9249	0297.7	047.1	70.06
294.0	000.2200	0201.8	018.0	113.0	040.2805	0303.3	047.1	70.18
295.0	000.2200	0199.3	017.9	112.6	039.6491	0305.1	047.2	70.12
296.0	000.2200	0195.1	017.7	112.3	039.0424	0304.0	047.4	69.94
297.0	000.2200	0190.3	017.5	111.9	038.4648	0301.6	047.6	69.70
298.0	000.2200	0194.2	017.7	111.5	037.8300	0297.4	047.5	69.56
299.0	000.2200	0196.8	017.8	111.1	037.2016	0293.3	047.4	69.39
300.0	000.2200	0198.7	017.9	110.7	036.5781	0289.2	047.4	69.20
301.0	000.2200	0198.9	017.9	110.4	035.9818	0286.0	047.4	69.02
302.0	000.2200	0196.9	017.8	110.0	035.4319	0284.3	047.6	68.83
303.0	000.2200	0190.4	017.5	109.7	035.8934	0283.6	047.9	68.73
304.0	000.2200	0186.1	017.3	109.4	036.4435	0282.3	048.2	68.65
305.0	000.2200	0183.0	017.2	109.1	037.0057	0279.9	048.4	68.56
306.0	000.2200	0184.4	017.2	108.8	037.6848	0275.5	048.4	68.48
307.0	000.2200	0183.6	017.2	108.4	038.3008	0270.9	048.5	68.35
308.0	000.2200	0180.7	017.1	108.2	038.8422	0267.7	048.8	68.22
309.0	000.2200	0172.3	016.7	108.0	039.1366	0267.0	049.3	68.03
310.0	000.2200	0172.2	016.6	107.7	039.7376	0267.4	049.4	68.07
311.0	000.2200	0170.8	016.6	107.4	040.2725	0269.2	049.6	68.11
312.0	000.2200	0174.8	016.8	107.0	041.0698	0274.7	049.5	68.41
313.0	000.2200	0179.7	017.0	106.6	041.9207	0284.2	049.4	68.84
314.0	000.2200	0181.8	017.1	106.2	042.6381	0293.0	049.4	69.17
315.0	000.2200	0189.1	017.4	105.7	043.6198	0303.4	049.3	69.66
316.0	000.2200	0202.5	018.0	105.1	044.9697	0315.8	048.9	70.32
317.0	000.2200	0213.9	018.5	104.4	046.2657	0319.6	048.7	70.66
318.0	000.2200	0226.7	019.1	103.8	047.6924	0321.1	048.4	70.95
319.0	000.2200	0241.7	019.7	103.0	049.2947	0327.9	048.1	71.43
320.0	000.2200	0244.2	019.8	102.6	050.1632	0329.4	048.2	71.50
321.0	000.2200	0236.2	019.5	102.5	050.3539	0329.0	048.7	71.33
322.0	000.2200	0238.8	019.6	102.1	051.2082	0327.2	048.8	71.29
323.0	000.2200	0244.7	019.8	101.6	052.2844	0325.3	048.8	71.31
324.0	000.2200	0250.6	020.1	101.1	053.3689	0328.0	048.9	71.46
325.0	000.2200	0251.2	020.1	100.8	054.0852	0328.1	049.1	71.43
326.0	000.2200	0260.1	020.4	100.2	055.3884	0327.1	049.1	71.50
327.0	000.2200	0261.7	020.5	099.9	056.1310	0322.2	049.3	71.32
328.0	000.2200	0261.6	020.5	099.6	056.6566	0318.7	049.6	71.15
329.0	000.2200	0256.5	020.3	099.5	056.8593	0317.5	050.0	70.97

WISE-FM					WEKH				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)		Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
330.0	000.2200	0257.0	020.3		099.2	057.3929	0315.2	050.3	70.84
331.0	000.2200	0263.7	020.6		098.8	058.3228	0315.9	050.4	70.88
332.0	000.2200	0255.7	020.3		098.8	058.2712	0315.7	050.8	70.69
333.0	000.2200	0261.2	020.5		098.4	059.1067	0316.5	051.0	70.71
334.0	000.2200	0273.9	020.9		097.7	060.4226	0310.1	051.0	70.59
335.0	000.2200	0265.4	020.6		097.8	060.2847	0311.3	051.5	70.44
336.0	000.2200	0265.0	020.6		097.6	060.6851	0307.7	051.8	70.23
337.0	000.2200	0262.7	020.5		097.4	060.9289	0305.6	052.2	70.04
338.0	000.2200	0263.8	020.6		097.2	061.3983	0301.3	052.5	69.82
339.0	000.2200	0268.7	020.7		096.8	062.1316	0295.2	052.7	69.59
340.0	000.2200	0270.7	020.8		096.6	062.6388	0293.3	053.0	69.45
341.0	000.2200	0272.2	020.9		096.4	063.0985	0294.3	053.3	69.39
342.0	000.2200	0266.6	020.7		096.4	063.0314	0294.0	053.7	69.21
343.0	000.2200	0261.0	020.5		096.4	062.9306	0293.5	054.1	69.02
344.0	000.2200	0254.2	020.2		096.5	062.7243	0293.3	054.5	68.83
345.0	000.2200	0250.9	020.1		096.5	062.7539	0293.2	054.9	68.69
346.0	000.2200	0252.6	020.1		096.3	063.1484	0294.6	055.2	68.64
347.0	000.2200	0257.7	020.3		096.0	063.7971	0299.2	055.5	68.73
348.0	000.2200	0259.5	020.4		095.8	064.1739	0301.9	055.8	68.72
349.0	000.2200	0260.3	020.4		095.7	064.4558	0303.6	056.1	68.67
350.0	000.2200	0263.5	020.6		095.5	064.9147	0306.1	056.4	68.66
351.0	000.2200	0269.8	020.8		095.1	065.5848	0309.0	056.7	68.69
352.0	000.2200	0279.7	021.1		094.7	066.5000	0308.5	057.0	68.63
353.0	000.2200	0272.1	020.9		094.9	066.1061	0309.0	057.4	68.46
354.0	000.2200	0266.9	020.7		095.0	065.8714	0309.1	057.8	68.29

Table 3: FMOVER Protection of WWOG

09-06-2007 NED 03 SEC Terrain Data				FMOVER Analysis				
WEKH				WWOG BLED19941114KF				
Channel = 215C0				Channel = 215C1				
Max ERP = 100 kW				Max ERP = 40 kW				
RCAMSL = 725.05 M				RCAMSL = 599 M				
N. Lat. 37 11 35.0				N. Lat. 36 11 05.0				
W. Lng. 83 11 17.0				W. Lng. 85 22 30.0				
Protected				Interfering				
60 dBu				40 dBu				
WEKH				WWOG				
Azimuth	ERP	HAAT	Dist	Azimuth	ERP	HAAT	Dist	Actual
(degrees)	(kW)	(m)	(km)	(degrees)	(kW)	(m)	(km)	(dBu)
181.0	087.6096	0255.6	067.4	076.4	040.0000	0175.1	200.1	28.50
182.0	086.8624	0264.9	068.1	076.6	040.0000	0174.3	198.8	28.72
183.0	086.1184	0271.7	068.6	076.6	040.0000	0173.9	197.5	28.94
184.0	085.3776	0259.0	067.4	076.2	040.0000	0177.3	196.6	29.16
185.0	084.6400	0265.5	067.9	076.2	040.0000	0177.1	195.4	29.39
186.0	083.9056	0265.9	067.8	076.1	040.0000	0178.3	194.3	29.61
187.0	083.1744	0259.2	067.2	075.8	040.0000	0181.4	193.4	29.84
188.0	082.4464	0267.4	067.8	075.9	040.0000	0181.0	192.1	30.07
189.0	081.7216	0273.3	068.2	075.8	040.0000	0181.2	190.8	30.31
190.0	081.0000	0283.5	068.9	075.9	040.0000	0180.4	189.4	30.55
191.0	082.0836	0289.0	069.5	075.9	040.0000	0180.2	188.1	30.79
192.0	083.1744	0264.6	067.6	075.2	040.0000	0183.9	187.8	30.93
193.0	084.2724	0257.1	067.1	075.0	040.0000	0184.7	187.0	31.10
194.0	085.3776	0265.3	068.0	075.0	040.0000	0184.5	185.5	31.36
195.0	086.4900	0272.2	068.7	075.0	040.0000	0184.4	184.2	31.62
196.0	087.6096	0271.5	068.7	074.9	040.0000	0185.1	183.1	31.84
197.0	088.7364	0261.0	068.0	074.5	040.0000	0186.3	182.5	31.99
198.0	089.8704	0271.5	069.0	074.5	040.0000	0186.2	180.9	32.27
199.0	091.0116	0268.7	068.9	074.3	040.0000	0186.2	180.0	32.45
200.0	092.1600	0267.1	068.9	074.1	040.0000	0186.1	179.0	32.63
201.0	092.9296	0274.7	069.6	074.0	040.0000	0186.1	177.6	32.89
202.0	093.7024	0276.7	069.8	073.9	040.0000	0186.1	176.4	33.10
203.0	094.4784	0274.2	069.7	073.6	040.0000	0186.2	175.6	33.27
204.0	095.2576	0280.8	070.3	073.5	040.0000	0186.0	174.2	33.51
205.0	096.0400	0283.9	070.7	073.3	040.0000	0185.6	173.1	33.71
206.0	096.8256	0267.1	069.4	072.7	040.0000	0184.9	173.0	33.70
207.0	097.6144	0262.8	069.1	072.4	040.0000	0184.6	172.3	33.82
208.0	098.4064	0264.9	069.3	072.2	040.0000	0185.0	171.3	34.02
209.0	099.2016	0269.4	069.8	072.0	040.0000	0185.5	170.1	34.24
210.0	100.0000	0272.6	070.1	071.8	040.0000	0185.9	169.0	34.45
211.0	100.0000	0267.4	069.7	071.4	040.0000	0186.8	168.5	34.56
212.0	100.0000	0275.2	070.4	071.2	040.0000	0187.3	167.2	34.80
213.0	100.0000	0283.9	071.1	071.0	040.0000	0187.4	165.9	35.04
214.0	100.0000	0293.1	071.8	070.9	040.0000	0187.4	164.5	35.28
215.0	100.0000	0296.0	072.1	070.6	040.0000	0187.5	163.6	35.45
216.0	100.0000	0288.1	071.4	070.1	040.0000	0187.5	163.4	35.49
217.0	100.0000	0284.9	071.2	069.7	040.0000	0186.7	162.9	35.56
218.0	100.0000	0289.5	071.5	069.4	040.0000	0185.9	161.9	35.72
219.0	100.0000	0289.8	071.6	069.0	040.0000	0185.7	161.2	35.84

WEKH				WWOG				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
220.0	100.0000	0290.9	071.7	068.6	040.0000	0186.1	160.5	35.97
221.0	098.1090	0302.3	072.4	068.3	040.0000	0187.4	159.3	36.21
222.0	096.2361	0310.4	072.8	068.0	040.0000	0189.9	158.3	36.42
223.0	094.3812	0306.7	072.3	067.5	040.0000	0194.7	158.2	36.55
224.0	092.5444	0304.4	071.9	067.1	040.0000	0198.0	158.0	36.65
225.0	090.7256	0310.3	072.2	066.7	040.0000	0196.5	157.3	36.74
226.0	088.9249	0306.7	071.7	066.2	040.0000	0193.7	157.2	36.69
227.0	087.1422	0305.2	071.4	065.7	040.0000	0192.8	157.1	36.69
228.0	085.3776	0303.3	071.0	065.2	040.0000	0192.3	157.0	36.69
229.0	083.6310	0301.0	070.6	064.8	040.0000	0190.5	157.0	36.65
230.0	081.9025	0303.7	070.6	064.3	040.0000	0188.1	156.7	36.66
231.0	081.4506	0304.3	070.6	063.9	040.0000	0185.1	156.4	36.64
232.0	081.0000	0301.1	070.3	063.4	040.0000	0181.6	156.4	36.57
233.0	080.5506	0304.6	070.5	063.0	040.0000	0178.3	155.9	36.56
234.0	080.1025	0302.7	070.3	062.5	040.0000	0176.0	155.9	36.52
235.0	079.6556	0310.7	070.9	062.1	040.0000	0175.4	155.2	36.62
236.0	079.2100	0309.4	070.7	061.7	040.0000	0176.5	155.2	36.64
237.0	078.7656	0300.7	070.0	061.2	040.0000	0177.5	155.7	36.57
238.0	078.3225	0303.2	070.2	060.7	040.0000	0179.0	155.5	36.65
239.0	077.8806	0302.4	070.0	060.3	040.0000	0181.3	155.6	36.69
240.0	077.4400	0310.0	070.5	059.8	040.0000	0183.5	155.0	36.83
241.0	079.5664	0314.1	071.1	059.4	040.0000	0186.6	154.4	36.99
242.0	081.7216	0311.4	071.2	058.9	040.0000	0188.8	154.4	37.05
243.0	083.9056	0311.7	071.5	058.4	040.0000	0188.8	154.2	37.08
244.0	086.1184	0312.0	071.8	058.0	040.0000	0190.1	154.0	37.14
245.0	088.3600	0315.9	072.3	057.5	040.0000	0193.8	153.6	37.29
246.0	090.6304	0310.4	072.2	057.0	040.0000	0196.7	153.9	37.31
247.0	092.9296	0317.7	073.0	056.5	040.0000	0198.2	153.3	37.44
248.0	095.2576	0320.8	073.4	056.0	040.0000	0201.2	153.0	37.54
249.0	097.6144	0327.1	074.2	055.5	040.0000	0204.4	152.6	37.69
250.0	100.0000	0324.8	074.2	055.0	040.0000	0205.9	152.8	37.68
251.0	100.0000	0332.1	074.8	054.5	040.0000	0207.9	152.6	37.76
252.0	100.0000	0340.8	075.4	053.9	040.0000	0208.0	152.4	37.80
253.0	100.0000	0341.4	075.4	053.5	040.0000	0205.9	152.8	37.69
254.0	100.0000	0346.9	075.9	052.9	040.0000	0201.9	152.8	37.60
255.0	100.0000	0339.4	075.3	052.5	040.0000	0198.4	153.8	37.36
256.0	100.0000	0344.2	075.7	052.0	040.0000	0193.7	154.0	37.22
257.0	100.0000	0352.1	076.2	051.5	040.0000	0189.3	154.0	37.13
258.0	100.0000	0353.2	076.3	051.0	040.0000	0185.2	154.5	36.95
259.0	100.0000	0354.0	076.4	050.6	040.0000	0180.8	155.0	36.77
260.0	100.0000	0353.8	076.4	050.2	040.0000	0176.4	155.7	36.56
261.0	100.0000	0346.9	075.9	049.8	040.0000	0172.7	156.7	36.30
262.0	100.0000	0341.9	075.5	049.5	040.0000	0169.1	157.7	36.05
263.0	100.0000	0350.0	076.1	049.0	040.0000	0165.0	157.9	35.91
264.0	100.0000	0352.7	076.3	048.5	040.0000	0163.0	158.5	35.77
265.0	100.0000	0343.1	075.6	048.3	040.0000	0161.4	159.8	35.50
266.0	100.0000	0334.0	074.9	048.0	040.0000	0159.9	161.2	35.23
267.0	100.0000	0336.6	075.1	047.6	040.0000	0158.6	161.8	35.08
268.0	100.0000	0338.6	075.2	047.2	040.0000	0157.6	162.5	34.93
269.0	100.0000	0343.2	075.6	046.8	040.0000	0156.3	163.1	34.79
270.0	100.0000	0346.0	075.8	046.4	040.0000	0154.0	163.8	34.60
271.0	100.0000	0333.7	074.9	046.3	040.0000	0152.9	165.4	34.29
272.0	100.0000	0323.0	074.1	046.1	040.0000	0151.6	166.9	33.99
273.0	100.0000	0331.4	074.7	045.7	040.0000	0149.7	167.3	33.85
274.0	100.0000	0335.6	075.0	045.3	040.0000	0149.3	168.1	33.70

WEKH					WVOG				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)		Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
275.0	100.0000	0348.1	075.9		044.8	040.0000	0150.9	168.5	33.68
276.0	100.0000	0353.6	076.3		044.4	040.0000	0151.6	169.2	33.56
277.0	100.0000	0340.1	075.4		044.4	040.0000	0151.6	170.9	33.26
278.0	100.0000	0344.5	075.7		044.0	040.0000	0151.9	171.7	33.12
279.0	100.0000	0353.2	076.3		043.6	040.0000	0153.9	172.4	33.04
280.0	100.0000	0350.8	076.1		043.4	040.0000	0154.6	173.6	32.85
281.0	100.0000	0341.2	075.4		043.3	040.0000	0154.6	175.1	32.58
282.0	100.0000	0336.9	075.1		043.2	040.0000	0154.7	176.3	32.35
283.0	100.0000	0333.2	074.8		043.0	040.0000	0154.9	177.6	32.13
284.0	100.0000	0330.0	074.6		042.9	040.0000	0155.4	178.8	31.91
285.0	100.0000	0323.6	074.1		042.8	040.0000	0155.7	180.2	31.67
286.0	100.0000	0327.0	074.4		042.5	040.0000	0156.5	181.2	31.51
287.0	100.0000	0335.6	075.0		042.2	040.0000	0156.9	182.1	31.36
288.0	100.0000	0339.3	075.3		041.9	040.0000	0156.9	183.1	31.16
289.0	100.0000	0341.4	075.4		041.7	040.0000	0156.7	184.3	30.95
290.0	100.0000	0343.3	075.6		041.5	040.0000	0156.7	185.4	30.74
291.0	100.0000	0353.1	076.3		041.1	040.0000	0156.8	186.4	30.57
292.0	100.0000	0359.1	076.8		040.9	040.0000	0156.6	187.5	30.36
293.0	100.0000	0356.2	076.5		040.8	040.0000	0156.5	188.8	30.12
294.0	100.0000	0356.1	076.5		040.7	040.0000	0156.6	190.1	29.89
295.0	100.0000	0344.4	075.7		040.8	040.0000	0156.5	191.6	29.61
296.0	100.0000	0343.9	075.6		040.7	040.0000	0156.6	192.9	29.38
297.0	100.0000	0347.3	075.9		040.5	040.0000	0156.8	194.1	29.17
298.0	100.0000	0348.7	076.0		040.4	040.0000	0157.1	195.3	28.95
299.0	100.0000	0353.5	076.3		040.2	040.0000	0158.0	196.5	28.75
300.0	100.0000	0359.7	076.8		040.0	040.0000	0159.5	197.8	28.57
301.0	100.0000	0353.8	076.4		040.0	040.0000	0159.1	199.1	28.32

09-06-2007 NED 03 SEC Terrain Data

WVOG BLED19941114KF

Channel = 215C1

Max ERP = 40 kW

RCAMSL = 599 M

N. Lat. 36 11 05.0

W. Lng. 85 22 30.0

Protected

60 dBu

WEKH

Channel = 215C0

Max ERP = 100 kW

RCAMSL = 725.05 M

N. Lat. 37 11 35.0

W. Lng. 83 11 17.0

Interfering

40 dBu

WVOG				WEKH				
Azimuth	ERP	HAAT	Dist	Azimuth	ERP	HAAT	Dist	Actual
(degrees)	(kW)	(m)	(km)	(degrees)	(kW)	(m)	(km)	(dBu)
359.0	038.9352	0288.6	062.0	256.3	100.0000	0348.7	202.1	35.50
000.0	040.0000	0288.6	062.3	256.3	100.0000	0348.6	201.0	35.70
001.0	040.0000	0285.7	062.1	256.2	100.0000	0347.0	200.0	35.85
002.0	040.0000	0283.0	061.9	256.0	100.0000	0344.7	199.0	35.98
003.0	040.0000	0282.1	061.8	255.9	100.0000	0342.5	198.0	36.11
004.0	040.0000	0276.9	061.4	255.7	100.0000	0339.3	197.1	36.21
005.0	040.0000	0268.3	060.8	255.4	100.0000	0337.8	196.3	36.32
006.0	040.0000	0260.6	060.2	255.1	100.0000	0338.4	195.5	36.47
007.0	040.0000	0255.7	059.8	254.9	100.0000	0340.0	194.7	36.65
008.0	040.0000	0262.3	060.3	254.9	100.0000	0339.9	193.5	36.86
009.0	040.0000	0263.7	060.4	254.8	100.0000	0340.6	192.5	37.06
010.0	040.0000	0261.1	060.2	254.6	100.0000	0341.7	191.7	37.24
011.0	040.0000	0258.2	060.0	254.4	100.0000	0343.0	190.8	37.43
012.0	040.0000	0256.3	059.9	254.2	100.0000	0344.7	190.0	37.63
013.0	040.0000	0255.4	059.8	254.1	100.0000	0346.4	189.1	37.83
014.0	040.0000	0258.1	060.0	254.0	100.0000	0347.1	188.1	38.03
015.0	040.0000	0263.7	060.4	253.9	100.0000	0347.3	187.0	38.25
016.0	040.0000	0266.6	060.7	253.8	100.0000	0347.4	186.0	38.45
017.0	040.0000	0265.3	060.6	253.6	100.0000	0346.6	185.1	38.58
018.0	040.0000	0264.9	060.5	253.4	100.0000	0345.0	184.3	38.71
019.0	040.0000	0260.7	060.2	253.1	100.0000	0342.4	183.6	38.78
020.0	040.0000	0253.6	059.7	252.8	100.0000	0340.8	183.1	38.84
021.0	040.0000	0245.3	059.1	252.4	100.0000	0341.8	182.7	38.94
022.0	040.0000	0244.7	059.0	252.2	100.0000	0341.4	181.9	39.07
023.0	040.0000	0243.7	058.9	252.0	100.0000	0340.5	181.2	39.19
024.0	040.0000	0245.7	059.1	251.8	100.0000	0339.2	180.4	39.32
025.0	040.0000	0249.1	059.3	251.6	100.0000	0337.0	179.4	39.45
026.0	040.0000	0247.7	059.2	251.3	100.0000	0333.8	178.8	39.50
027.0	040.0000	0243.7	058.9	251.0	100.0000	0332.2	178.3	39.55
028.0	040.0000	0238.8	058.6	250.7	100.0000	0331.1	177.9	39.60
029.0	040.0000	0234.0	058.2	250.4	100.0000	0328.3	177.5	39.61
030.0	040.0000	0229.6	057.8	250.1	100.0000	0325.1	177.1	39.61
031.0	040.0000	0225.4	057.5	249.7	099.3392	0323.6	176.8	39.61
032.0	040.0000	0219.2	057.0	249.4	098.4795	0324.5	176.6	39.63
033.0	040.0000	0211.9	056.4	249.0	097.5804	0327.2	176.5	39.66
034.0	040.0000	0207.8	056.0	248.7	096.8024	0329.0	176.2	39.71
035.0	040.0000	0198.5	055.2	248.2	095.8426	0325.3	176.4	39.56
036.0	040.0000	0190.1	054.5	247.9	094.9324	0318.6	176.5	39.35
037.0	040.0000	0184.3	054.0	247.5	094.1230	0317.2	176.4	39.29
038.0	040.0000	0175.9	053.2	247.1	093.2264	0317.6	176.6	39.22
039.0	040.0000	0168.8	052.5	246.8	092.3578	0316.0	176.9	39.11

WVOG				WEKH				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
040.0	040.0000	0159.4	051.4	246.3	091.3915	0312.5	177.5	38.88
041.0	040.0000	0156.7	051.1	246.0	090.6877	0310.5	177.4	38.82
042.0	040.0000	0157.0	051.1	245.8	090.0909	0310.7	177.0	38.87
043.0	040.0000	0154.9	050.8	245.5	089.4101	0312.9	176.9	38.89
044.0	040.0000	0151.9	050.4	245.2	088.6989	0315.3	177.0	38.90
045.0	040.0000	0150.0	050.2	244.9	088.0300	0315.7	176.9	38.88
046.0	040.0000	0150.4	050.2	244.6	087.4330	0314.5	176.6	38.89
047.0	040.0000	0157.2	051.1	244.4	087.0019	0313.4	175.5	39.04
048.0	040.0000	0159.8	051.5	244.1	086.4345	0312.6	174.9	39.10
049.0	040.0000	0165.2	052.1	243.9	085.9104	0311.6	174.1	39.20
050.0	040.0000	0174.7	053.1	243.7	085.4233	0310.9	172.9	39.37
051.0	040.0000	0184.8	054.0	243.4	084.8890	0310.6	171.8	39.53
052.0	040.0000	0193.4	054.8	243.2	084.3005	0311.4	170.9	39.67
053.0	040.0000	0202.5	055.5	242.9	083.6920	0312.0	169.9	39.82
054.0	040.0000	0208.1	056.0	242.6	083.0272	0311.9	169.3	39.89
055.0	040.0000	0205.9	055.8	242.3	082.2930	0311.8	169.4	39.83
056.0	040.0000	0201.2	055.4	241.9	081.5532	0311.4	169.7	39.73
057.0	040.0000	0196.8	055.1	241.6	080.8293	0312.4	170.0	39.66
058.0	040.0000	0189.8	054.5	241.3	080.1143	0313.4	170.5	39.55
059.0	040.0000	0188.7	054.4	240.9	079.4275	0314.3	170.6	39.52
060.0	040.0000	0182.6	053.8	240.6	078.7484	0313.5	171.1	39.38
061.0	040.0000	0178.1	053.4	240.3	078.0871	0311.5	171.5	39.23
062.0	040.0000	0175.4	053.2	240.0	077.4407	0310.0	171.8	39.11
063.0	040.0000	0178.4	053.5	239.7	077.5801	0308.8	171.6	39.13
064.0	040.0000	0185.9	054.1	239.3	077.7266	0305.6	171.0	39.17
065.0	040.0000	0191.6	054.6	239.0	077.8745	0302.5	170.6	39.19
066.0	040.0000	0193.1	054.7	238.7	078.0176	0300.0	170.6	39.15
067.0	040.0000	0197.9	055.2	238.3	078.1682	0300.9	170.4	39.22
068.0	040.0000	0190.0	054.5	238.1	078.2901	0302.7	171.2	39.12
069.0	040.0000	0185.7	054.1	237.8	078.4167	0303.4	171.8	39.04
070.0	040.0000	0187.4	054.2	237.5	078.5578	0301.1	171.8	39.00
071.0	040.0000	0187.4	054.2	237.2	078.6936	0299.9	172.1	38.94
072.0	040.0000	0185.5	054.1	236.9	078.8220	0301.5	172.5	38.91
073.0	040.0000	0185.2	054.1	236.6	078.9543	0303.3	172.8	38.90
074.0	040.0000	0186.1	054.1	236.3	079.0902	0306.6	173.0	38.93
075.0	040.0000	0184.5	054.0	236.0	079.2150	0309.5	173.4	38.92
076.0	040.0000	0179.4	053.6	235.8	079.3208	0311.3	174.2	38.83
077.0	040.0000	0172.0	052.8	235.6	079.4076	0312.7	175.2	38.68
078.0	040.0000	0168.6	052.5	235.3	079.5103	0313.4	175.9	38.58
079.0	040.0000	0160.5	051.5	235.2	079.5744	0312.8	177.1	38.35
080.0	040.0000	0151.0	050.3	235.1	079.6155	0311.8	178.6	38.06
081.0	040.0000	0146.8	049.8	234.9	079.6906	0309.7	179.5	37.86
082.0	040.0000	0143.7	049.3	234.7	079.7715	0307.4	180.3	37.67
083.0	040.0000	0145.1	049.5	234.5	079.8921	0304.6	180.5	37.58
084.0	040.0000	0146.5	049.7	234.2	080.0127	0302.7	180.8	37.50
085.0	040.0000	0152.4	050.5	233.8	080.1770	0303.7	180.6	37.57
086.0	040.0000	0158.3	051.3	233.5	080.3415	0306.0	180.4	37.65
087.0	040.0000	0159.9	051.5	233.2	080.4630	0305.4	180.8	37.58
088.0	040.0000	0152.2	050.5	233.1	080.4856	0305.2	182.1	37.33
089.0	040.0000	0137.8	048.5	233.3	080.4186	0305.9	184.2	36.94
090.0	040.0000	0133.9	048.0	233.2	080.4648	0305.4	185.1	36.75
091.0	040.0000	0130.5	047.5	233.1	080.5135	0304.9	186.0	36.57
092.0	040.0000	0132.3	047.7	232.8	080.6241	0304.2	186.4	36.50
093.0	040.0000	0133.3	047.9	232.6	080.7242	0303.9	186.8	36.42
094.0	040.0000	0124.4	046.6	232.7	080.6928	0304.1	188.3	36.14

WVOG				WEKH				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
095.0	040.0000	0114.5	045.2	232.8	080.6433	0304.3	189.9	35.84
096.0	040.0000	0101.1	043.1	233.1	080.5201	0304.9	192.0	35.47
097.0	040.0000	0094.0	041.8	233.2	080.4739	0305.3	193.4	35.22
098.0	040.0000	0095.7	042.1	233.0	080.5719	0304.5	193.7	35.15
099.0	040.0000	0094.6	041.9	232.8	080.6194	0304.2	194.4	35.03
100.0	040.0000	0095.9	042.2	232.7	080.7063	0304.0	194.8	34.96
101.0	040.0000	0096.4	042.3	232.5	080.7796	0303.5	195.3	34.87
102.0	040.0000	0094.2	041.9	232.4	080.8025	0303.3	196.1	34.72
103.0	040.0000	0093.0	041.7	232.4	080.8402	0302.9	196.8	34.59
104.0	040.0000	0091.0	041.3	232.3	080.8596	0302.7	197.6	34.45
105.0	040.0000	0091.8	041.4	232.2	080.9308	0302.0	198.1	34.35
106.0	040.0000	0088.9	040.9	232.2	080.9274	0302.0	199.0	34.19
107.0	040.0000	0084.5	040.0	232.2	080.8891	0302.5	200.0	34.01
108.0	040.0000	0075.8	038.3	232.6	080.7492	0303.7	201.6	33.75
109.0	040.0000	0062.6	035.3	233.2	080.4807	0305.2	203.8	33.39
110.0	040.0000	0049.9	031.8	233.9	080.1441	0303.2	206.2	32.91
111.0	040.0000	0042.5	029.3	234.4	079.9251	0303.9	208.0	32.61
112.0	040.0000	0040.5	028.7	234.5	079.8881	0304.7	208.8	32.49
113.0	040.0000	0040.9	028.8	234.4	079.9325	0303.7	209.2	32.42
114.0	040.0000	0043.1	029.5	234.1	080.0400	0302.5	209.3	32.39
115.0	040.0000	0044.3	029.9	234.0	080.1144	0302.8	209.5	32.35
116.0	040.0000	0046.5	030.7	233.7	080.2236	0304.6	209.6	32.37
117.0	040.0000	0048.7	031.4	233.5	080.3338	0305.9	209.8	32.37
118.0	040.0000	0048.5	031.3	233.4	080.3533	0306.1	210.3	32.28
119.0	040.0000	0050.1	031.8	233.2	080.4391	0305.7	210.6	32.23

Table 4: FMOVER Protection of BPED-19961203ME

09-06-2007				NED 03 SEC Terrain Data				FMOver Analysis	
WEKH				961203ME				BPED19961203ME	
Channel = 215C0				Channel = 214C2					
Max ERP = 100 kW				Max ERP = 1 kW					
RCAMSL = 725.05 M				RCAMSL = 1116 M					
N. Lat. 37 11 35.0				N. Lat. 35 54 21.0					
W. Lng. 83 11 17.0				W. Lng. 83 17 49.0					
Protected				Interfering					
60 dBu				54 dBu					
WEKH				BPED-19961203ME					
Azimuth	ERP	HAAT	Dist	Azimuth	ERP	HAAT	Dist	Actual	
(degrees)	(kW)	(m)	(km)	(degrees)	(kW)	(m)	(km)	(dBu)	
124.0	060.2486	0351.0	071.0	033.3	000.1283	0679.5	124.0	29.53	
125.0	062.1732	0346.7	071.0	033.3	000.1285	0679.7	122.6	29.91	
126.0	064.1281	0340.8	070.9	033.2	000.1288	0680.0	121.4	30.26	
127.0	066.1132	0331.5	070.5	033.0	000.1295	0680.1	120.2	30.63	
128.0	068.1285	0329.3	070.7	033.1	000.1294	0680.1	119.0	30.98	
129.0	070.1741	0323.2	070.5	032.9	000.1298	0680.1	117.7	31.33	
130.0	072.2500	0319.6	070.6	032.9	000.1300	0680.2	116.5	31.68	
131.0	074.8225	0325.0	071.3	033.2	000.1289	0680.2	115.2	32.02	
132.0	077.4400	0317.8	071.1	033.0	000.1296	0680.1	114.0	32.37	
133.0	080.1025	0299.2	070.1	032.4	000.1318	0683.7	112.9	32.78	
134.0	082.8100	0297.5	070.3	032.4	000.1318	0683.8	111.7	33.13	
135.0	085.5625	0296.9	070.6	032.4	000.1318	0683.7	110.4	33.47	
136.0	088.3600	0294.4	070.7	032.3	000.1321	0683.9	109.2	33.82	
137.0	091.2025	0300.8	071.5	032.6	000.1311	0682.2	107.8	34.15	
138.0	094.0900	0302.0	071.9	032.6	000.1309	0681.7	106.5	34.50	
139.0	097.0225	0307.0	072.6	032.8	000.1303	0680.5	105.1	34.84	
140.0	100.0000	0307.7	073.0	032.8	000.1303	0680.5	103.8	35.20	
141.0	100.0000	0300.3	072.4	032.3	000.1321	0684.0	102.7	35.60	
142.0	100.0000	0299.9	072.4	032.1	000.1330	0684.1	101.6	35.96	
143.0	100.0000	0285.4	071.2	031.2	000.1362	0686.7	100.8	36.31	
144.0	100.0000	0282.5	071.0	030.8	000.1376	0686.9	099.7	36.66	
145.0	100.0000	0281.1	070.8	030.5	000.1389	0688.0	098.7	37.02	
146.0	100.0000	0270.1	069.9	029.7	000.1417	0686.9	097.9	37.30	
147.0	100.0000	0278.6	070.6	029.7	000.1415	0686.5	096.5	37.70	
148.0	100.0000	0284.0	071.1	029.6	000.1419	0687.2	095.2	38.11	
149.0	100.0000	0288.4	071.5	029.5	000.1424	0688.8	093.9	38.53	
150.0	100.0000	0304.8	072.7	029.8	000.1414	0686.3	092.2	38.99	
151.0	100.0000	0310.2	073.1	029.6	000.1420	0687.5	090.9	39.43	
152.0	100.0000	0305.7	072.8	029.0	000.1441	0692.0	090.0	39.85	
153.0	100.0000	0293.2	071.8	028.0	000.1473	0693.8	089.5	40.13	
154.0	100.0000	0279.0	070.7	027.0	000.1510	0693.0	089.2	40.33	
155.0	100.0000	0280.3	070.8	026.5	000.1525	0692.2	088.1	40.70	
156.0	100.0000	0302.0	072.5	026.9	000.1512	0693.0	086.1	41.33	
157.0	100.0000	0301.0	072.5	026.4	000.1532	0691.6	085.1	41.66	
158.0	100.0000	0284.8	071.2	025.2	000.1575	0689.8	085.1	41.78	
159.0	100.0000	0271.7	070.1	024.1	000.1614	0696.4	084.9	42.03	
160.0	100.0000	0264.8	069.5	023.2	000.1645	0699.0	084.5	42.29	
161.0	100.0000	0279.8	070.7	023.2	000.1646	0699.1	082.7	42.85	
162.0	100.0000	0280.2	070.8	022.6	000.1669	0701.1	081.9	43.20	
163.0	100.0000	0271.9	070.1	021.6	000.1705	0709.7	081.6	43.50	
164.0	100.0000	0262.1	069.2	020.6	000.1743	0717.9	081.6	43.74	

WEKH				BPED-19961203ME				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
165.0	100.0000	0257.1	068.8	019.7	000.1789	0724.0	081.2	44.05
166.0	100.0000	0263.7	069.4	019.2	000.1830	0723.1	080.0	44.49
167.0	100.0000	0252.1	068.4	018.1	000.1924	0725.6	080.2	44.69
168.0	100.0000	0247.9	068.1	017.3	000.2000	0728.2	079.9	44.99
169.0	100.0000	0244.1	067.8	016.4	000.2077	0729.1	079.6	45.25
170.0	100.0000	0244.4	067.8	015.7	000.2145	0729.7	079.1	45.57
171.0	098.8036	0235.5	066.9	014.7	000.2241	0729.6	079.4	45.68
172.0	097.6144	0229.1	066.2	013.7	000.2332	0732.3	079.5	45.83
173.0	096.4324	0228.7	066.1	012.9	000.2411	0734.4	079.3	46.09
174.0	095.2576	0233.8	066.4	012.2	000.2482	0734.7	078.6	46.43
175.0	094.0900	0234.8	066.4	011.4	000.2563	0734.6	078.3	46.66
176.0	092.9296	0242.3	066.9	010.7	000.2636	0736.3	077.5	47.05
177.0	091.7764	0231.9	065.9	009.7	000.2741	0740.5	078.2	47.07
178.0	090.6304	0237.7	066.3	008.9	000.2826	0744.0	077.6	47.43
179.0	089.4916	0257.8	067.8	008.2	000.2899	0746.4	075.8	48.09
180.0	088.3600	0258.4	067.7	007.4	000.3000	0746.3	075.7	48.27
181.0	087.6096	0255.6	067.4	006.5	000.3105	0747.7	075.9	48.38
182.0	086.8624	0264.9	068.1	005.6	000.3205	0750.0	075.1	48.78
183.0	086.1184	0271.7	068.6	004.7	000.3311	0753.4	074.6	49.13
184.0	085.3776	0259.0	067.4	003.8	000.3422	0756.1	075.7	48.97
185.0	084.6400	0265.5	067.9	002.9	000.3532	0760.0	075.3	49.29
186.0	083.9056	0265.9	067.8	002.0	000.3644	0761.2	075.4	49.41
187.0	083.1744	0259.2	067.2	001.2	000.3751	0765.5	076.2	49.36
188.0	082.4464	0267.4	067.8	000.3	000.3872	0766.2	075.7	49.65
189.0	081.7216	0273.3	068.2	359.3	000.3960	0767.3	075.5	49.82
190.0	081.0000	0283.5	068.9	358.3	000.4042	0769.7	075.0	50.10
191.0	082.0836	0289.0	069.5	357.4	000.4124	0774.6	074.7	50.34
192.0	083.1744	0264.6	067.6	356.8	000.4167	0773.0	076.8	49.72
193.0	084.2724	0257.1	067.1	356.1	000.4229	0769.1	077.6	49.50
194.0	085.3776	0265.3	068.0	355.1	000.4315	0766.1	077.2	49.67
195.0	086.4900	0272.2	068.7	354.1	000.4401	0767.7	076.9	49.85
196.0	087.6096	0271.5	068.7	353.3	000.4473	0769.5	077.3	49.83
197.0	088.7364	0261.0	068.0	352.7	000.4524	0770.1	078.5	49.53
198.0	089.8704	0271.5	069.0	351.6	000.4620	0769.8	078.1	49.74
199.0	091.0116	0268.7	068.9	350.8	000.4685	0771.2	078.7	49.62
200.0	092.1600	0267.1	068.9	350.1	000.4752	0773.0	079.3	49.52
201.0	092.9296	0274.7	069.6	349.1	000.4900	0773.0	079.3	49.65
202.0	093.7024	0276.7	069.8	348.3	000.5029	0771.6	079.8	49.61
203.0	094.4784	0274.2	069.7	347.6	000.5131	0771.3	080.6	49.45
204.0	095.2576	0280.8	070.3	346.6	000.5284	0772.2	080.8	49.52
205.0	096.0400	0283.9	070.7	345.8	000.5416	0770.8	081.3	49.45
206.0	096.8256	0267.1	069.4	345.8	000.5426	0770.7	083.1	48.89
207.0	097.6144	0262.8	069.1	345.3	000.5506	0772.7	084.1	48.67
208.0	098.4064	0264.9	069.3	344.6	000.5623	0775.0	084.7	48.59
209.0	099.2016	0269.4	069.8	343.8	000.5754	0776.3	085.3	48.54
210.0	100.0000	0272.6	070.1	343.0	000.5877	0781.6	085.9	48.50
211.0	100.0000	0267.4	069.7	342.7	000.5932	0783.0	087.1	48.17
212.0	100.0000	0275.2	070.4	341.9	000.6075	0780.8	087.6	48.09
213.0	100.0000	0283.9	071.1	341.0	000.6225	0780.1	088.1	48.03
214.0	100.0000	0293.1	071.8	340.1	000.6376	0779.0	088.6	47.94
215.0	100.0000	0296.0	072.1	339.6	000.6465	0779.4	089.5	47.73
216.0	100.0000	0288.1	071.4	339.5	000.6479	0779.4	090.9	47.30
217.0	100.0000	0284.9	071.2	339.2	000.6519	0779.6	092.1	46.95
218.0	100.0000	0289.5	071.5	338.6	000.6606	0779.5	093.0	46.74
219.0	100.0000	0289.8	071.6	338.2	000.6663	0777.6	094.1	46.42

WEKH				BPED-19961203ME				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
220.0	100.0000	0290.9	071.7	337.8	000.6722	0776.1	095.1	46.11
221.0	098.1090	0302.3	072.4	337.1	000.6827	0775.2	095.9	45.93
222.0	096.2361	0310.4	072.8	336.5	000.6908	0775.6	096.9	45.69
223.0	094.3812	0306.7	072.3	336.5	000.6914	0775.6	098.3	45.29
224.0	092.5444	0304.4	071.9	336.4	000.6926	0775.6	099.6	44.91
225.0	090.7256	0310.3	072.2	336.0	000.6984	0774.9	100.6	44.62
226.0	088.9249	0306.7	071.7	336.0	000.6983	0774.9	102.0	44.22
227.0	087.1422	0305.2	071.4	336.0	000.6993	0774.5	103.3	43.85
228.0	085.3776	0303.3	071.0	335.9	000.6997	0774.3	104.6	43.48
229.0	083.6310	0301.0	070.6	335.9	000.6997	0774.3	105.9	43.10
230.0	081.9025	0303.7	070.6	335.8	000.7024	0773.2	107.0	42.77
231.0	081.4506	0304.3	070.6	335.6	000.7048	0772.7	108.2	42.44
232.0	081.0000	0301.1	070.3	335.6	000.7048	0772.7	109.5	42.08
233.0	080.5506	0304.6	070.5	335.4	000.7085	0772.2	110.7	41.78
234.0	080.1025	0302.7	070.3	335.3	000.7089	0772.2	111.9	41.43
235.0	079.6556	0310.7	070.9	335.0	000.7146	0773.0	113.0	41.17
236.0	079.2100	0309.4	070.7	334.9	000.7150	0773.0	114.3	40.83
237.0	078.7656	0300.7	070.0	335.2	000.7110	0772.4	115.6	40.44
238.0	078.3225	0303.2	070.2	335.1	000.7131	0772.8	116.8	40.13
239.0	077.8806	0302.4	070.0	335.1	000.7132	0772.8	118.0	39.80
240.0	077.4400	0310.0	070.5	334.8	000.7177	0773.0	119.2	39.50
241.0	079.5664	0314.1	071.1	334.4	000.7224	0772.0	120.4	39.19
242.0	081.7216	0311.4	071.2	334.4	000.7233	0771.8	121.6	38.86
243.0	083.9056	0311.7	071.5	334.2	000.7256	0771.3	122.8	38.53
244.0	086.1184	0312.0	071.8	334.1	000.7277	0770.7	124.1	38.19

09-06-2007 NED 03 SEC Terrain Data

961203ME BPED19961203ME

Channel = 214C2

Max ERP = 1 kW

RCAMSL = 1116 M

N. Lat. 35 54 21.0

W. Lng. 83 17 49.0

Protected

60 dBu

WEKH

Channel = 215C0

Max ERP = 100 kW

RCAMSL = 725.05 M

N. Lat. 37 11 35.0

W. Lng. 83 11 17.0

Interfering

54 dBu

BPED-19961203ME				WEKH				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
304.0	001.0000	0792.4	051.0	204.5	095.6588	0286.2	125.6	48.44
305.0	001.0000	0792.7	051.0	204.5	095.6265	0286.0	124.7	48.61
306.0	001.0000	0791.2	051.0	204.4	095.5477	0285.2	123.9	48.77
307.0	001.0000	0788.9	050.9	204.3	095.4550	0283.9	123.0	48.91
308.0	001.0000	0787.1	050.8	204.1	095.3603	0282.4	122.1	49.05
309.0	001.0000	0784.8	050.8	204.0	095.2541	0280.7	121.3	49.19
310.0	001.0000	0783.2	050.7	203.9	095.1474	0279.3	120.5	49.32
311.0	000.9960	0780.5	050.6	203.7	095.0094	0277.5	119.7	49.45
312.0	000.9920	0780.2	050.6	203.5	094.8895	0276.4	118.8	49.60
313.0	000.9880	0781.0	050.6	203.4	094.7737	0275.6	118.0	49.76
314.0	000.9841	0783.1	050.6	203.2	094.6639	0275.1	117.2	49.93
315.0	000.9801	0784.5	050.6	203.1	094.5404	0274.5	116.3	50.09
316.0	000.9761	0786.5	050.6	202.9	094.4153	0273.7	115.5	50.25
317.0	000.9722	0785.3	050.5	202.7	094.2507	0272.7	114.7	50.40
318.0	000.9683	0782.4	050.4	202.5	094.0610	0272.7	114.0	50.57
319.0	000.9643	0785.4	050.4	202.3	093.9248	0274.1	113.2	50.79
320.0	000.9604	0786.5	050.4	202.1	093.7616	0276.2	112.4	51.03
321.0	000.9428	0784.4	050.2	201.8	093.5107	0278.0	111.7	51.23
322.0	000.9254	0784.7	050.0	201.4	093.2765	0277.1	111.1	51.37
323.0	000.9082	0784.5	049.8	201.1	093.0308	0275.6	110.4	51.48
324.0	000.8911	0783.8	049.6	200.8	092.7722	0272.9	109.8	51.56
325.0	000.8742	0783.7	049.4	200.5	092.5137	0269.1	109.2	51.61
326.0	000.8575	0784.2	049.3	200.1	092.2544	0267.2	108.6	51.71
327.0	000.8409	0783.4	049.1	199.8	091.8844	0266.9	108.0	51.84
328.0	000.8245	0781.2	048.8	199.4	091.4376	0268.1	107.5	51.99
329.0	000.8082	0778.1	048.5	199.0	090.9718	0268.6	107.0	52.12
330.0	000.7921	0775.7	048.3	198.6	090.5071	0268.2	106.6	52.21
331.0	000.7762	0775.0	048.0	198.2	090.0599	0270.3	106.1	52.39
332.0	000.7604	0772.2	047.8	197.7	089.5767	0271.0	105.7	52.50
333.0	000.7448	0770.1	047.5	197.3	089.0981	0264.7	105.3	52.41
334.0	000.7293	0770.2	047.3	196.9	088.6420	0260.4	104.9	52.39
335.0	000.7140	0772.9	047.2	196.5	088.2115	0262.3	104.4	52.55
336.0	000.6989	0774.7	047.0	196.1	087.7619	0269.6	104.0	52.87
337.0	000.6839	0775.3	046.8	195.7	087.2934	0273.7	103.6	53.08
338.0	000.6691	0776.8	046.7	195.3	086.8299	0273.3	103.2	53.15
339.0	000.6545	0779.7	046.5	194.9	086.3761	0271.6	102.9	53.19
340.0	000.6400	0779.1	046.3	194.5	085.8802	0268.6	102.6	53.16
341.0	000.6225	0780.1	046.1	194.0	085.3810	0265.3	102.3	53.12
342.0	000.6053	0781.6	045.8	193.6	084.8839	0261.6	102.1	53.05
343.0	000.5883	0781.8	045.6	193.1	084.3734	0257.6	101.9	52.96
344.0	000.5715	0775.3	045.1	192.6	083.8037	0256.7	101.9	52.89

BPED-19961203ME				WEKH				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
345.0	000.5550	0773.8	044.8	192.1	083.2819	0262.6	101.9	53.07
346.0	000.5388	0771.4	044.4	191.6	082.7559	0275.2	101.8	53.43
347.0	000.5227	0771.1	044.1	191.2	082.2485	0287.1	101.8	53.78
348.0	000.5069	0771.1	043.8	190.7	081.7456	0289.4	101.7	53.83
349.0	000.4914	0773.0	043.6	190.2	081.2582	0286.0	101.7	53.72
350.0	000.4761	0773.0	043.3	189.8	081.1593	0281.5	101.7	53.58
351.0	000.4672	0770.8	043.0	189.3	081.4817	0277.4	101.7	53.47
352.0	000.4583	0769.8	042.8	188.9	081.7990	0272.4	101.6	53.35
353.0	000.4496	0769.6	042.7	188.5	082.1133	0270.9	101.6	53.33
354.0	000.4409	0767.9	042.4	188.0	082.4317	0267.7	101.6	53.24
355.0	000.4323	0766.1	042.2	187.6	082.7489	0262.2	101.7	53.07
356.0	000.4238	0768.7	042.1	187.2	083.0543	0258.8	101.7	53.00
357.0	000.4154	0773.9	042.0	186.8	083.3545	0261.5	101.6	53.12
358.0	000.4070	0771.8	041.8	186.3	083.6687	0265.5	101.7	53.22
359.0	000.3988	0767.8	041.5	185.9	083.9829	0265.9	101.9	53.18
000.0	000.3906	0766.4	041.2	185.5	084.2894	0265.8	102.1	53.15
001.0	000.3776	0765.9	040.9	185.1	084.5956	0265.8	102.3	53.09
002.0	000.3648	0761.2	040.5	184.6	084.8986	0263.0	102.8	52.89
003.0	000.3522	0759.9	040.1	184.3	085.1923	0259.6	103.1	52.71
004.0	000.3399	0755.2	039.6	183.9	085.4795	0259.8	103.6	52.59
005.0	000.3278	0752.3	039.2	183.5	085.7585	0264.3	104.0	52.61
006.0	000.3158	0749.2	038.8	183.1	086.0292	0270.5	104.4	52.67
007.0	000.3042	0747.4	038.4	182.8	086.2923	0272.6	104.9	52.62
008.0	000.2927	0746.6	038.0	182.4	086.5490	0271.2	105.3	52.46
009.0	000.2814	0743.6	037.5	182.1	086.7944	0266.7	105.8	52.20
010.0	000.2704	0738.6	037.0	181.8	087.0274	0259.8	106.4	51.85
011.0	000.2601	0735.3	036.6	181.5	087.2546	0255.5	107.0	51.59
012.0	000.2500	0735.1	036.2	181.2	087.4793	0255.0	107.4	51.45
013.0	000.2401	0734.4	035.8	180.9	087.6943	0255.9	107.9	51.35
014.0	000.2304	0730.4	035.4	180.6	087.8923	0255.8	108.5	51.19
015.0	000.2209	0731.2	035.0	180.4	088.0938	0256.8	109.0	51.10
016.0	000.2116	0730.0	034.6	180.1	088.2811	0258.0	109.6	50.99
017.0	000.2025	0729.4	034.2	179.9	088.5116	0258.8	110.2	50.88
018.0	000.1936	0725.6	033.7	179.7	088.7513	0259.3	110.8	50.74
019.0	000.1849	0722.9	033.2	179.5	088.9806	0259.8	111.5	50.60
020.0	000.1764	0722.6	032.7	179.2	089.2088	0259.7	112.1	50.46
021.0	000.1726	0715.5	032.4	179.1	089.4337	0258.1	112.7	50.29
022.0	000.1689	0706.6	031.9	178.9	089.6368	0256.1	113.3	50.10
023.0	000.1652	0699.7	031.5	178.7	089.8421	0252.6	113.8	49.89
024.0	000.1616	0696.5	031.3	178.5	090.0623	0247.8	114.3	49.67
025.0	000.1580	0690.3	030.9	178.3	090.2552	0243.9	114.9	49.45
026.0	000.1544	0690.5	030.8	178.1	090.4818	0239.8	115.3	49.27
027.0	000.1509	0693.0	030.6	177.9	090.7168	0236.7	115.6	49.12
028.0	000.1475	0693.9	030.5	177.7	090.9347	0235.1	116.0	49.00
029.0	000.1440	0691.9	030.3	177.6	091.1264	0233.8	116.5	48.87
030.0	000.1406	0686.0	029.9	177.4	091.2816	0232.6	117.0	48.73
031.0	000.1369	0686.5	029.7	177.3	091.4687	0231.9	117.5	48.63
032.0	000.1332	0684.1	029.5	177.1	091.6277	0231.8	118.0	48.53
033.0	000.1296	0680.1	029.2	177.0	091.7671	0231.9	118.5	48.42
034.0	000.1260	0675.6	028.9	176.9	091.8950	0232.4	119.1	48.33
035.0	000.1225	0676.4	028.7	176.8	092.0544	0233.8	119.5	48.27
036.0	000.1190	0680.8	028.6	176.6	092.2338	0235.7	119.9	48.24
037.0	000.1156	0684.3	028.5	176.5	092.3991	0238.3	120.3	48.23
038.0	000.1122	0689.7	028.4	176.3	092.5726	0240.3	120.7	48.20
039.0	000.1089	0695.1	028.3	176.2	092.7400	0242.0	121.1	48.17

BPED-19961203ME				WEKH				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
040.0	000.1056	0699.4	028.2	176.0	092.8909	0242.3	121.5	48.09
041.0	000.1024	0704.2	028.1	175.9	093.0384	0241.7	122.0	48.00
042.0	000.0992	0708.6	028.0	175.8	093.1760	0240.6	122.4	47.89
043.0	000.0961	0705.6	027.7	175.7	093.2485	0240.2	122.9	47.77
044.0	000.0930	0704.5	027.4	175.7	093.3277	0239.7	123.5	47.66
045.0	000.0900	0701.2	027.2	175.6	093.3831	0239.2	124.0	47.54
046.0	000.0870	0698.7	026.9	175.6	093.4375	0238.6	124.5	47.42
047.0	000.0841	0695.2	026.6	175.5	093.4760	0238.2	125.1	47.30
048.0	000.0812	0689.3	026.3	175.5	093.4892	0238.1	125.6	47.19
049.0	000.0784	0683.5	026.0	175.5	093.4960	0238.0	126.2	47.07
050.0	000.0756	0677.3	025.6	175.5	093.4919	0238.0	126.8	46.96
051.0	000.0743	0673.4	025.4	175.5	093.5472	0237.5	127.2	46.86
052.0	000.0729	0668.2	025.2	175.4	093.5866	0237.2	127.7	46.76
053.0	000.0716	0667.8	025.1	175.4	093.6591	0236.6	128.1	46.67
054.0	000.0702	0664.3	024.9	175.3	093.7014	0236.3	128.6	46.57
055.0	000.0689	0659.9	024.7	175.3	093.7308	0236.2	129.1	46.48
056.0	000.0676	0657.1	024.6	175.3	093.7670	0236.0	129.5	46.39
057.0	000.0663	0655.3	024.4	175.2	093.8068	0235.8	130.0	46.30
058.0	000.0650	0656.6	024.3	175.2	093.8679	0235.5	130.4	46.21
059.0	000.0638	0663.6	024.3	175.1	093.9705	0235.2	130.8	46.14
060.0	000.0625	0667.8	024.3	175.0	094.0459	0234.9	131.2	46.05
061.0	000.0625	0668.6	024.3	175.0	094.1420	0234.6	131.6	45.98
062.0	000.0625	0670.7	024.4	174.9	094.2448	0234.2	131.9	45.90
063.0	000.0625	0682.3	024.6	174.7	094.4223	0233.8	132.2	45.84
064.0	000.0625	0687.7	024.7	174.6	094.5455	0233.6	132.6	45.77

Table 5: FMOVER Protection of WXAF

09-06-2007 NED 03 SEC Terrain Data				FMOver Analysis				
WEKH				WXAF BLED19930730KD				
Channel = 215C0				Channel = 215A				
Max ERP = 100 kW				Max ERP = 0.8 kW				
RCAMSL = 725.05 M				RCAMSL = 509 M				
N. Lat. 37 11 35.0				N. Lat. 38 16 25.0				
W. Lng. 83 11 17.0				W. Lng. 81 31 27.0				
Protected				Interfering				
60 dBu				40 dBu				
Azimuth (degrees)	WEKH ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	WXAF ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
350.0	096.4324	0351.4	075.8	254.6	000.8000	0199.3	165.4	18.38
351.0	092.5444	0365.8	076.5	254.8	000.8000	0199.7	164.1	18.63
352.0	088.7364	0361.6	075.7	254.5	000.8000	0198.5	162.9	18.82
353.0	085.0084	0362.0	075.3	254.2	000.8000	0198.3	161.6	19.03
354.0	081.3604	0360.3	074.7	254.0	000.8000	0197.8	160.4	19.23
355.0	077.7924	0357.2	074.1	253.6	000.8000	0194.4	159.3	19.36
356.0	074.3044	0360.4	073.8	253.4	000.8000	0191.3	158.1	19.50
357.0	070.8964	0365.4	073.7	253.3	000.8000	0189.1	156.9	19.66
358.0	067.5684	0367.3	073.3	253.0	000.8000	0186.0	155.7	19.78
359.0	064.3204	0365.8	072.7	252.7	000.8000	0183.4	154.7	19.89
000.0	061.1524	0367.3	072.3	252.4	000.8000	0181.3	153.6	20.02
001.0	058.6756	0354.8	071.0	251.8	000.8000	0180.4	152.9	20.12
002.0	056.2500	0356.6	070.7	251.5	000.8000	0179.4	151.8	20.26
003.0	053.8756	0356.9	070.3	251.2	000.8000	0176.6	150.8	20.35
004.0	051.5524	0366.0	070.5	251.0	000.8000	0175.2	149.6	20.52
005.0	049.2804	0362.6	069.8	250.6	000.8000	0171.9	148.8	20.57
006.0	047.0596	0365.1	069.5	250.3	000.8000	0172.2	147.8	20.74
007.0	044.8900	0372.9	069.5	250.1	000.8000	0173.5	146.7	20.96
008.0	042.7716	0373.5	069.1	249.7	000.8000	0173.8	145.9	21.12
009.0	040.7044	0369.1	068.3	249.2	000.8000	0173.2	145.2	21.22
010.0	038.6884	0355.0	066.8	248.5	000.8000	0168.7	145.0	21.15
011.0	037.0637	0362.3	066.8	248.2	000.8000	0168.8	144.0	21.34
012.0	035.4739	0368.9	066.9	248.0	000.8000	0168.7	143.0	21.51
013.0	033.9190	0364.9	066.1	247.4	000.8000	0165.9	142.5	21.54
014.0	032.3989	0356.6	065.1	246.8	000.8000	0158.4	142.2	21.40
015.0	030.9136	0361.5	065.0	246.5	000.8000	0157.7	141.4	21.53
016.0	030.9136	0354.1	064.4	246.1	000.8000	0164.7	140.8	21.82
017.0	030.9136	0361.8	065.0	245.9	000.8000	0166.4	139.6	22.10
018.0	030.9136	0355.8	064.6	245.5	000.8000	0167.4	139.1	22.23
019.0	030.9136	0346.1	063.9	244.9	000.8000	0161.5	138.7	22.14
020.0	030.9136	0333.2	063.0	244.4	000.8000	0162.7	138.6	22.20
021.0	030.9136	0332.8	063.0	244.0	000.8000	0166.3	137.9	22.43
022.0	030.9136	0342.8	063.7	243.9	000.8000	0168.3	136.6	22.73
023.0	030.9136	0343.7	063.7	243.5	000.8000	0173.8	135.9	23.02
024.0	030.9136	0341.7	063.6	243.1	000.8000	0181.3	135.3	23.32
025.0	030.9136	0332.4	062.9	242.6	000.8000	0187.2	135.1	23.49
026.0	030.9136	0320.0	062.0	242.0	000.8000	0194.8	135.2	23.65
027.0	030.9136	0328.8	062.7	241.7	000.8000	0196.5	134.0	23.91
028.0	030.9136	0327.6	062.6	241.3	000.8000	0194.0	133.5	23.96
029.0	030.9136	0324.6	062.4	240.9	000.8000	0184.4	133.1	23.81

WEKH				WXAF				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
030.0	030.9136	0331.2	062.8	240.6	000.8000	0181.6	132.2	23.94
031.0	030.9136	0338.3	063.3	240.3	000.8000	0182.0	131.2	24.14
032.0	030.9136	0331.2	062.8	239.7	000.8000	0184.0	131.1	24.20
033.0	030.9136	0325.1	062.4	239.2	000.8000	0180.2	131.0	24.13
034.0	030.9136	0332.4	062.9	238.9	000.8000	0177.6	130.1	24.25
035.0	030.9136	0327.2	062.6	238.4	000.8000	0176.4	130.0	24.24
036.0	032.3989	0320.7	062.6	237.9	000.8000	0176.1	129.6	24.31
037.0	033.9190	0308.1	062.1	237.4	000.8000	0172.2	129.6	24.21
038.0	035.4739	0300.8	062.0	236.9	000.8000	0165.9	129.3	24.11
039.0	037.0637	0306.4	062.9	236.6	000.8000	0160.2	128.2	24.18
040.0	038.6884	0305.7	063.2	236.2	000.8000	0157.3	127.5	24.23
041.0	040.7044	0305.2	063.7	235.7	000.8000	0155.9	126.8	24.33
042.0	042.7716	0301.1	063.9	235.3	000.8000	0158.9	126.3	24.50
043.0	044.8900	0312.6	065.2	234.9	000.8000	0165.6	124.8	24.97
044.0	047.0596	0310.6	065.6	234.4	000.8000	0178.0	124.3	25.39
045.0	049.2804	0297.5	065.0	233.8	000.8000	0192.4	124.6	25.67
046.0	051.5524	0302.1	065.9	233.4	000.8000	0198.5	123.6	26.00
047.0	053.8756	0303.3	066.4	232.8	000.8000	0201.4	123.0	26.19
048.0	056.2500	0287.6	065.6	232.3	000.8000	0203.9	123.7	26.12
049.0	058.6756	0277.3	065.2	231.7	000.8000	0198.9	124.0	25.94
050.0	061.1524	0279.5	065.8	231.2	000.8000	0190.1	123.4	25.85
051.0	064.3204	0296.2	067.6	230.7	000.8000	0181.6	121.5	26.01
052.0	067.5684	0310.6	069.2	230.1	000.8000	0173.5	120.0	26.11
053.0	070.8964	0307.1	069.4	229.5	000.8000	0167.3	119.8	25.98
054.0	074.3044	0300.1	069.4	228.9	000.8000	0164.6	120.0	25.87
055.0	077.7924	0305.7	070.3	228.3	000.8000	0173.9	119.2	26.27
056.0	081.3604	0302.8	070.5	227.7	000.8000	0186.2	119.2	26.60
057.0	085.0084	0288.6	069.8	227.2	000.8000	0190.6	120.0	26.53
058.0	088.7364	0279.1	069.5	226.6	000.8000	0190.5	120.6	26.41
059.0	092.5444	0276.4	069.7	226.0	000.8000	0192.3	120.7	26.44
060.0	096.4324	0292.5	071.4	225.3	000.8000	0197.1	119.3	26.83
061.0	100.0000	0286.1	071.3	224.7	000.8000	0200.6	119.8	26.82
062.0	100.0000	0290.0	071.6	224.1	000.8000	0207.9	119.9	26.98
063.0	100.0000	0297.5	072.2	223.4	000.8000	0212.1	119.7	27.11
064.0	100.0000	0312.0	073.3	222.7	000.8000	0205.3	119.1	27.06
065.0	100.0000	0306.5	072.9	222.2	000.8000	0198.5	120.0	26.72
066.0	100.0000	0301.0	072.5	221.7	000.8000	0188.5	120.9	26.31
067.0	100.0000	0305.9	072.8	221.1	000.8000	0179.3	121.1	26.04
068.0	100.0000	0316.0	073.6	220.4	000.8000	0166.5	121.0	25.72
069.0	100.0000	0323.8	074.2	219.7	000.8000	0162.1	121.1	25.58
070.0	100.0000	0325.1	074.2	219.2	000.8000	0169.7	121.7	25.67
071.0	100.0000	0338.8	075.3	218.4	000.8000	0175.9	121.6	25.87
072.0	100.0000	0346.2	075.8	217.8	000.8000	0176.0	121.8	25.82
073.0	100.0000	0353.0	076.3	217.1	000.8000	0178.9	122.2	25.82
074.0	100.0000	0356.1	076.5	216.6	000.8000	0187.2	122.8	25.90
075.0	100.0000	0357.6	076.6	216.0	000.8000	0191.0	123.6	25.83
076.0	100.0000	0349.2	076.0	215.8	000.8000	0191.3	124.9	25.58
077.0	100.0000	0350.5	076.1	215.3	000.8000	0189.8	125.7	25.38
078.0	100.0000	0349.6	076.1	214.9	000.8000	0191.7	126.7	25.24
079.0	100.0000	0336.0	075.1	214.7	000.8000	0192.7	128.3	24.94
080.0	100.0000	0350.0	076.1	214.0	000.8000	0202.3	128.5	25.12
081.0	097.5156	0352.5	076.0	213.6	000.8000	0207.4	129.6	25.04
082.0	095.0625	0348.9	075.5	213.4	000.8000	0207.8	130.9	24.79
083.0	092.6406	0335.5	074.2	213.5	000.8000	0207.9	132.7	24.43
084.0	090.2500	0328.6	073.5	213.4	000.8000	0207.7	134.2	24.14

WEKH				WXAF				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
085.0	087.8906	0307.9	071.7	213.6	000.8000	0207.4	136.3	23.72
086.0	085.5625	0303.4	071.1	213.5	000.8000	0207.8	137.7	23.47
087.0	083.2656	0307.1	071.1	213.2	000.8000	0206.6	138.7	23.25
088.0	081.0000	0307.1	070.8	213.0	000.8000	0203.6	139.9	22.96
089.0	078.7656	0304.3	070.3	212.9	000.8000	0201.4	141.2	22.66
090.0	076.5625	0303.5	069.9	212.8	000.8000	0198.3	142.4	22.36
091.0	074.3561	0302.4	069.6	212.6	000.8000	0195.5	143.6	22.06
092.0	072.1820	0303.6	069.4	212.5	000.8000	0191.8	144.8	21.76
093.0	070.0402	0302.7	069.0	212.4	000.8000	0189.8	146.0	21.49
094.0	067.9306	0305.5	068.9	212.2	000.8000	0186.9	147.1	21.22
095.0	065.8532	0309.1	068.8	212.0	000.8000	0184.9	148.2	20.99
096.0	063.8081	0299.3	067.8	212.2	000.8000	0186.5	149.7	20.76
097.0	061.7953	0297.6	067.3	212.1	000.8000	0186.1	151.0	20.55
098.0	059.8148	0315.0	068.3	211.6	000.8000	0182.3	151.7	20.35
099.0	057.8664	0314.8	068.0	211.6	000.8000	0181.6	152.9	20.13
100.0	055.9504	0323.6	068.3	211.3	000.8000	0176.3	153.9	19.85
101.0	053.6849	0327.8	068.2	211.2	000.8000	0173.9	155.1	19.60
102.0	051.4663	0326.5	067.6	211.2	000.8000	0174.8	156.4	19.42
103.0	049.2944	0327.9	067.3	211.2	000.8000	0174.4	157.6	19.21
104.0	047.1694	0319.7	066.3	211.4	000.8000	0179.6	159.0	19.09
105.0	045.0912	0316.6	065.6	211.6	000.8000	0181.7	160.3	18.91
106.0	043.0598	0297.9	063.7	212.1	000.8000	0185.8	161.9	18.71
107.0	041.0753	0274.8	061.5	212.7	000.8000	0197.5	163.6	18.67
108.0	039.1375	0267.0	060.5	213.0	000.8000	0203.0	164.9	18.55
109.0	037.2466	0278.4	060.9	212.8	000.8000	0198.6	165.8	18.29
110.0	035.4025	0284.2	060.8	212.7	000.8000	0197.3	166.9	18.08

09-06-2007 NED 03 SEC Terrain Data

WXAF BLED19930730KD

Channel = 215A

Max ERP = 0.8 kW

RCAMSL = 509 M

N. Lat. 38 16 25.0

W. Lng. 81 31 27.0

Protected

60 dBu

WEKH

Channel = 215C0

Max ERP = 100 kW

RCAMSL = 725.05 M

N. Lat. 37 11 35.0

W. Lng. 83 11 17.0

Interfering

40 dBu

WXAF				WEKH				
Azimuth	ERP	HAAT	Dist	Azimuth	ERP	HAAT	Dist	Actual
(degrees)	(kW)	(m)	(km)	(degrees)	(kW)	(m)	(km)	(dBu)
171.0	000.8000	0191.5	024.0	056.8	084.2281	0291.1	178.8	37.90
172.0	000.8000	0195.6	024.2	056.8	084.2737	0290.9	178.3	37.99
173.0	000.8000	0197.5	024.3	056.8	084.1797	0291.2	177.9	38.06
174.0	000.8000	0194.1	024.1	056.7	083.7659	0292.7	177.6	38.12
175.0	000.8000	0193.7	024.1	056.6	083.5182	0293.8	177.2	38.19
176.0	000.8000	0182.1	023.4	056.4	082.6295	0297.8	177.1	38.23
177.0	000.8000	0172.1	022.9	056.1	081.8171	0301.1	177.1	38.25
178.0	000.8000	0162.2	022.3	055.9	080.9694	0304.3	177.0	38.27
179.0	000.8000	0151.5	021.6	055.6	080.0391	0307.3	177.1	38.27
180.0	000.8000	0148.7	021.4	055.5	079.6242	0308.0	176.9	38.30
181.0	000.8000	0136.6	020.5	055.2	078.5737	0307.5	177.0	38.20
182.0	000.8000	0134.3	020.4	055.1	078.1838	0306.7	176.9	38.20
183.0	000.8000	0146.3	021.2	055.3	078.7291	0307.8	176.1	38.39
184.0	000.8000	0145.3	021.1	055.2	078.4097	0307.2	175.8	38.41
185.0	000.8000	0149.6	021.4	055.2	078.4138	0307.2	175.3	38.49
186.0	000.8000	0154.3	021.7	055.2	078.4220	0307.3	174.8	38.58
187.0	000.8000	0160.7	022.2	055.2	078.5120	0307.4	174.3	38.69
188.0	000.8000	0160.2	022.1	055.1	078.1840	0306.7	174.0	38.70
189.0	000.8000	0159.7	022.1	055.0	077.8553	0305.9	173.8	38.71
190.0	000.8000	0169.4	022.7	055.1	078.0643	0306.4	173.1	38.86
191.0	000.8000	0178.4	023.2	055.1	078.1788	0306.7	172.4	38.98
192.0	000.8000	0172.3	022.9	054.9	077.5503	0305.1	172.4	38.92
193.0	000.8000	0169.2	022.7	054.8	077.0652	0304.0	172.2	38.90
194.0	000.8000	0158.0	022.0	054.5	076.1736	0302.7	172.5	38.78
195.0	000.8000	0160.9	022.2	054.5	075.9810	0302.5	172.1	38.83
196.0	000.8000	0180.4	023.3	054.6	076.5090	0302.9	171.0	39.07
197.0	000.8000	0175.7	023.1	054.5	075.9449	0302.5	170.9	39.03
198.0	000.8000	0174.6	023.0	054.4	075.5318	0302.2	170.7	39.04
199.0	000.8000	0162.3	022.3	054.1	074.6411	0300.9	171.1	38.90
200.0	000.8000	0163.4	022.3	054.0	074.3247	0300.2	170.8	38.92
201.0	000.8000	0157.9	022.0	053.8	073.7230	0299.1	170.9	38.85
202.0	000.8000	0146.0	021.2	053.6	072.8567	0299.7	171.3	38.73
203.0	000.8000	0141.7	020.9	053.4	072.3181	0301.3	171.4	38.72
204.0	000.8000	0142.1	020.9	053.3	071.9832	0302.5	171.2	38.76
205.0	000.8000	0148.5	021.4	053.3	071.8730	0302.9	170.6	38.85
206.0	000.8000	0156.8	021.9	053.3	071.8037	0303.2	169.9	38.97
207.0	000.8000	0169.8	022.7	053.3	071.8508	0303.0	169.0	39.12
208.0	000.8000	0163.5	022.3	053.1	071.2494	0305.5	169.2	39.11
209.0	000.8000	0156.2	021.9	052.9	070.6184	0308.4	169.5	39.08
210.0	000.8000	0156.7	021.9	052.8	070.2392	0309.9	169.3	39.12
211.0	000.8000	0169.9	022.7	052.8	070.2125	0310.1	168.4	39.28
212.0	000.8000	0185.0	023.6	052.8	070.1617	0310.3	167.4	39.44
213.0	000.8000	0203.1	024.6	052.8	070.1323	0310.4	166.3	39.63
214.0	000.8000	0202.4	024.6	052.6	069.6551	0312.3	166.2	39.66

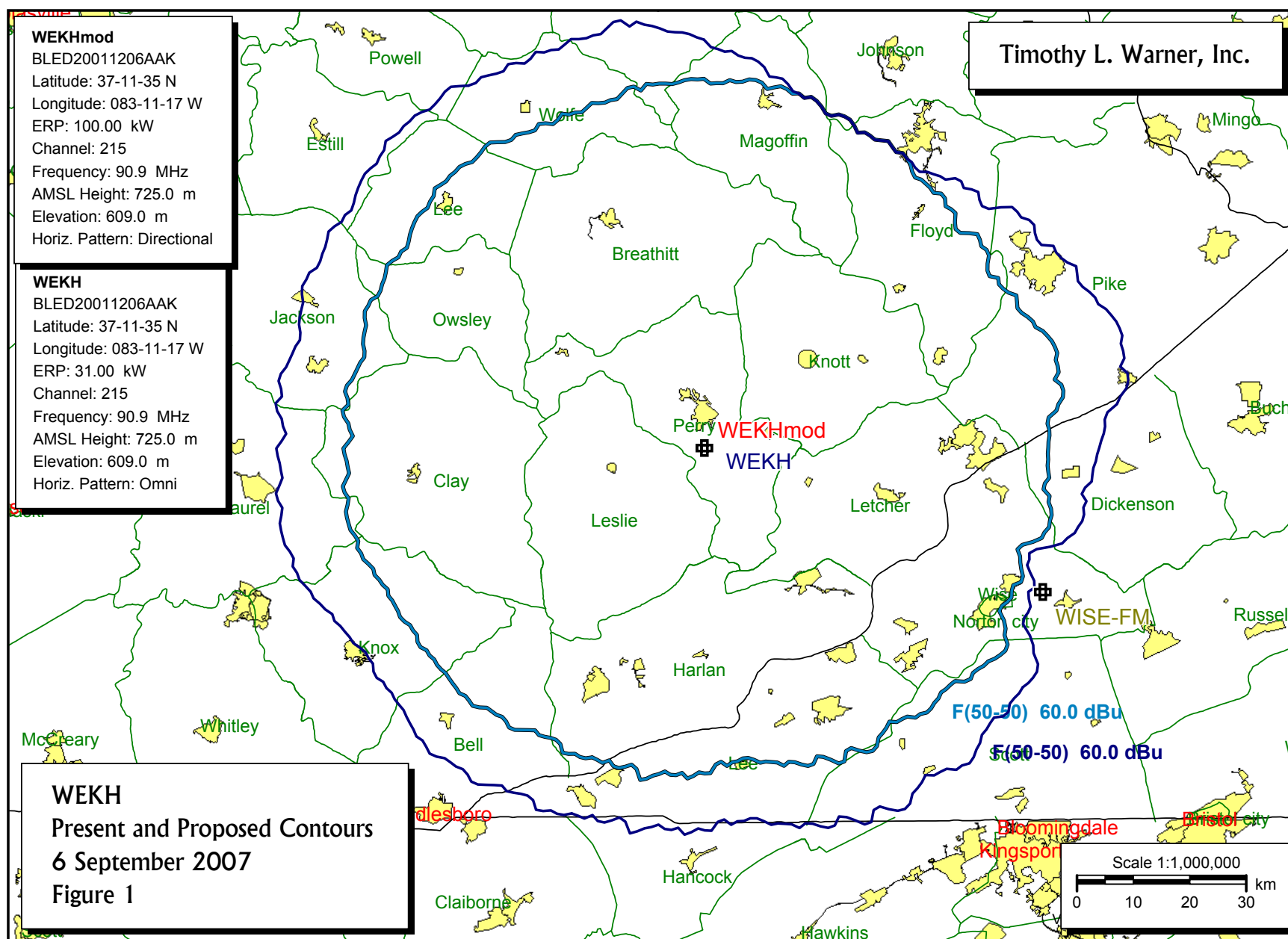
WRAF				WEKH				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
215.0	000.8000	0190.3	023.9	052.4	068.9445	0313.9	166.7	39.56
216.0	000.8000	0191.1	023.9	052.3	068.5061	0313.8	166.6	39.56
217.0	000.8000	0180.1	023.3	052.1	067.8619	0311.9	167.0	39.40
218.0	000.8000	0176.2	023.1	051.9	067.3553	0309.7	167.1	39.30
219.0	000.8000	0172.4	022.9	051.8	066.8560	0307.3	167.2	39.20
220.0	000.8000	0161.6	022.2	051.6	066.2564	0304.6	167.8	39.02
221.0	000.8000	0178.0	023.2	051.5	066.0590	0303.7	166.8	39.16
222.0	000.8000	0194.6	024.1	051.5	065.8044	0302.5	165.8	39.29
223.0	000.8000	0209.3	024.9	051.4	065.4932	0301.2	164.9	39.40
224.0	000.8000	0209.4	025.0	051.2	065.0127	0299.2	164.8	39.34
225.0	000.8000	0199.2	024.4	051.0	064.4492	0296.8	165.3	39.17
226.0	000.8000	0192.6	024.0	050.9	063.9367	0294.4	165.7	39.04
227.0	000.8000	0190.8	023.9	050.7	063.4676	0292.0	165.7	38.96
228.0	000.8000	0180.1	023.3	050.6	062.9680	0289.6	166.3	38.79
229.0	000.8000	0164.2	022.4	050.4	062.4771	0287.1	167.2	38.56
230.0	000.8000	0172.5	022.9	050.3	062.0687	0284.8	166.7	38.58
231.0	000.8000	0186.5	023.7	050.2	061.6427	0282.4	165.9	38.65
232.0	000.8000	0202.3	024.6	050.0	061.1829	0279.7	165.0	38.72
233.0	000.8000	0200.1	024.4	049.9	060.8092	0277.3	165.2	38.63
234.0	000.8000	0188.2	023.8	049.7	060.4719	0276.0	165.8	38.47
235.0	000.8000	0163.3	022.3	049.6	060.2065	0275.4	167.3	38.20
236.0	000.8000	0156.5	021.9	049.5	059.9111	0275.2	167.8	38.09
237.0	000.8000	0166.9	022.6	049.3	059.5273	0275.8	167.1	38.18
238.0	000.8000	0176.5	023.1	049.2	059.1343	0276.6	166.6	38.25
239.0	000.8000	0178.4	023.2	049.0	058.7837	0277.2	166.6	38.24
240.0	000.8000	0183.7	023.5	048.9	058.4049	0277.6	166.4	38.26
241.0	000.8000	0186.6	023.7	048.7	058.0406	0278.7	166.3	38.26
242.0	000.8000	0194.6	024.1	048.6	057.6235	0280.3	165.9	38.31
243.0	000.8000	0182.6	023.5	048.5	057.4067	0281.0	166.7	38.18
244.0	000.8000	0166.4	022.5	048.4	057.2704	0281.6	167.7	38.01
245.0	000.8000	0162.1	022.3	048.3	057.0159	0282.5	168.0	37.94
246.0	000.8000	0165.3	022.5	048.2	056.6616	0284.6	168.0	37.96
247.0	000.8000	0160.5	022.2	048.1	056.4308	0286.2	168.4	37.90
248.0	000.8000	0168.7	022.7	047.9	055.9966	0289.9	168.0	37.99
249.0	000.8000	0171.7	022.9	047.7	055.6417	0292.9	168.0	38.02
250.0	000.8000	0173.7	023.0	047.6	055.3051	0295.5	168.0	38.03
251.0	000.8000	0174.7	023.0	047.5	054.9861	0297.8	168.1	38.03
252.0	000.8000	0180.1	023.3	047.3	054.5900	0300.0	168.0	38.05
253.0	000.8000	0185.8	023.6	047.1	054.1877	0302.0	167.9	38.08
254.0	000.8000	0198.0	024.3	046.9	053.6544	0304.1	167.5	38.15
255.0	000.8000	0200.4	024.4	046.8	053.3030	0305.2	167.5	38.13
256.0	000.8000	0196.7	024.2	046.7	053.0784	0305.6	167.9	38.05
257.0	000.8000	0197.4	024.3	046.5	052.7680	0305.8	168.1	38.00
258.0	000.8000	0193.2	024.0	046.4	052.5719	0305.7	168.5	37.92
259.0	000.8000	0193.8	024.1	046.3	052.2749	0305.2	168.7	37.85
260.0	000.8000	0189.4	023.8	046.2	052.0977	0304.6	169.1	37.75
261.0	000.8000	0184.3	023.6	046.2	051.9465	0303.9	169.6	37.64
262.0	000.8000	0183.0	023.5	046.1	051.7133	0302.9	169.8	37.56
263.0	000.8000	0194.5	024.1	045.8	051.1690	0300.2	169.6	37.51
264.0	000.8000	0194.3	024.1	045.7	050.9158	0299.0	169.8	37.42
265.0	000.8000	0191.6	024.0	045.6	050.7299	0298.2	170.2	37.32
266.0	000.8000	0203.1	024.6	045.4	050.1707	0297.0	170.0	37.29
267.0	000.8000	0197.7	024.3	045.4	050.0699	0296.9	170.5	37.20
268.0	000.8000	0204.1	024.7	045.2	049.6462	0296.8	170.5	37.16
269.0	000.8000	0209.6	025.0	045.0	049.2482	0297.6	170.6	37.12

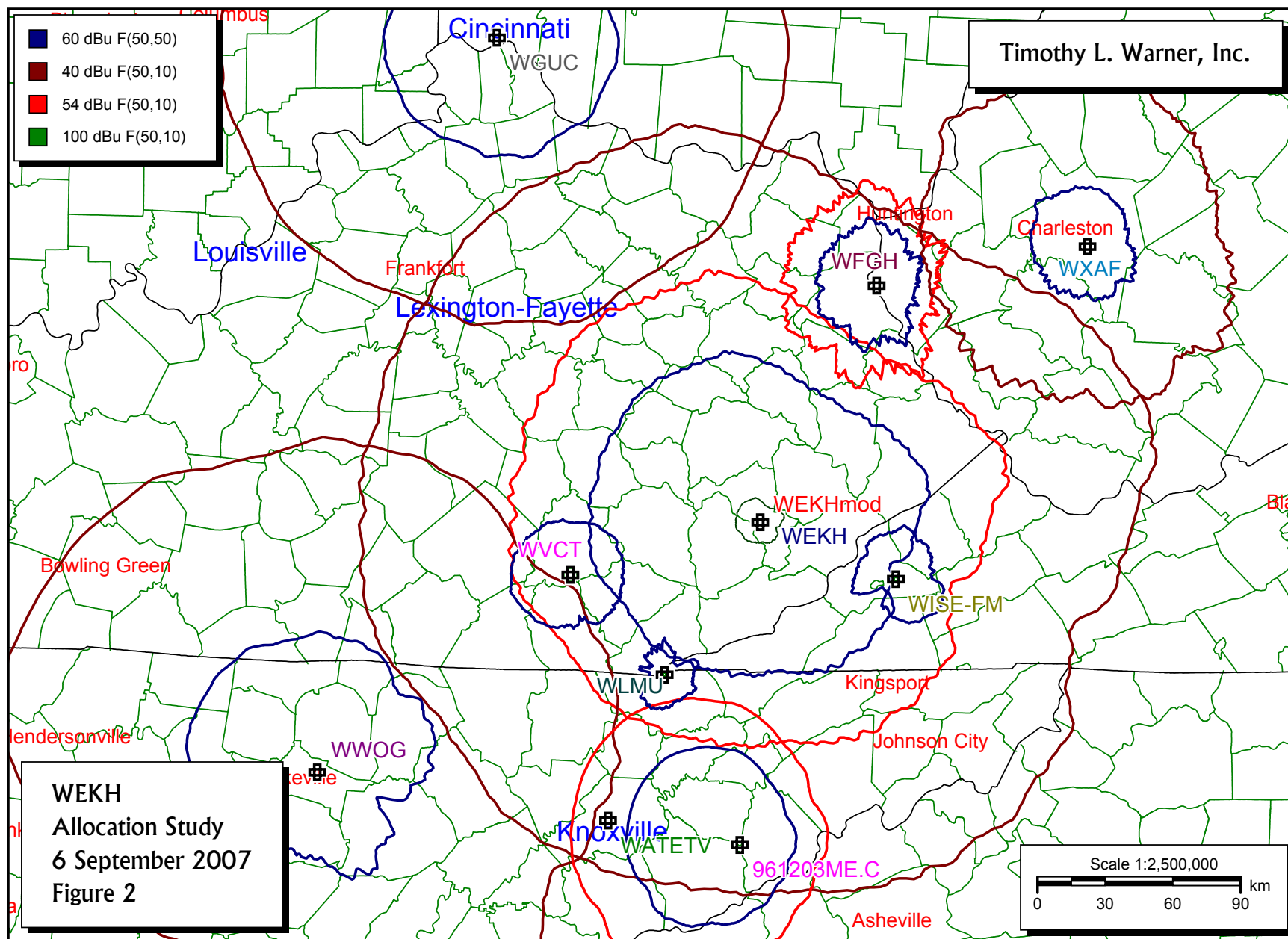
WXAF					WEKH				
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)		Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
270.0	000.8000	0200.8	024.5		045.0	049.2672	0297.5	171.2	37.01
271.0	000.8000	0198.9	024.4		044.9	049.0945	0298.2	171.6	36.94
272.0	000.8000	0201.6	024.5		044.8	048.7921	0299.6	171.8	36.91
273.0	000.8000	0210.5	025.0		044.6	048.3021	0302.2	171.8	36.92
274.0	000.8000	0204.2	024.7		044.6	048.2795	0302.3	172.3	36.82
275.0	000.8000	0208.3	024.9		044.4	047.9435	0304.5	172.5	36.80
276.0	000.8000	0213.2	025.2		044.2	047.5810	0306.9	172.7	36.78
277.0	000.8000	0215.1	025.3		044.1	047.3184	0308.8	172.9	36.75
278.0	000.8000	0219.0	025.5		044.0	046.9952	0311.0	173.2	36.73
279.0	000.8000	0215.4	025.3		043.9	046.9227	0311.5	173.6	36.65
280.0	000.8000	0208.7	024.9		044.0	046.9608	0311.2	174.2	36.54
281.0	000.8000	0214.0	025.2		043.8	046.6058	0313.2	174.4	36.52
282.0	000.8000	0214.8	025.3		043.7	046.4038	0313.6	174.7	36.45
283.0	000.8000	0220.9	025.6		043.5	046.0288	0314.0	174.9	36.39
284.0	000.8000	0227.8	026.0		043.3	045.6328	0313.8	175.1	36.31
285.0	000.8000	0225.7	025.9		043.3	045.5447	0313.7	175.6	36.22
286.0	000.8000	0226.8	025.9		043.2	045.3537	0313.4	175.9	36.13
287.0	000.8000	0226.8	025.9		043.1	045.2048	0313.1	176.3	36.04
288.0	000.8000	0224.2	025.8		043.1	045.1514	0313.0	176.8	35.95
289.0	000.8000	0218.4	025.5		043.2	045.2215	0313.1	177.4	35.86
290.0	000.8000	0219.9	025.5		043.1	045.0366	0312.9	177.7	35.77
291.0	000.8000	0215.8	025.3		043.1	045.0613	0312.9	178.2	35.68

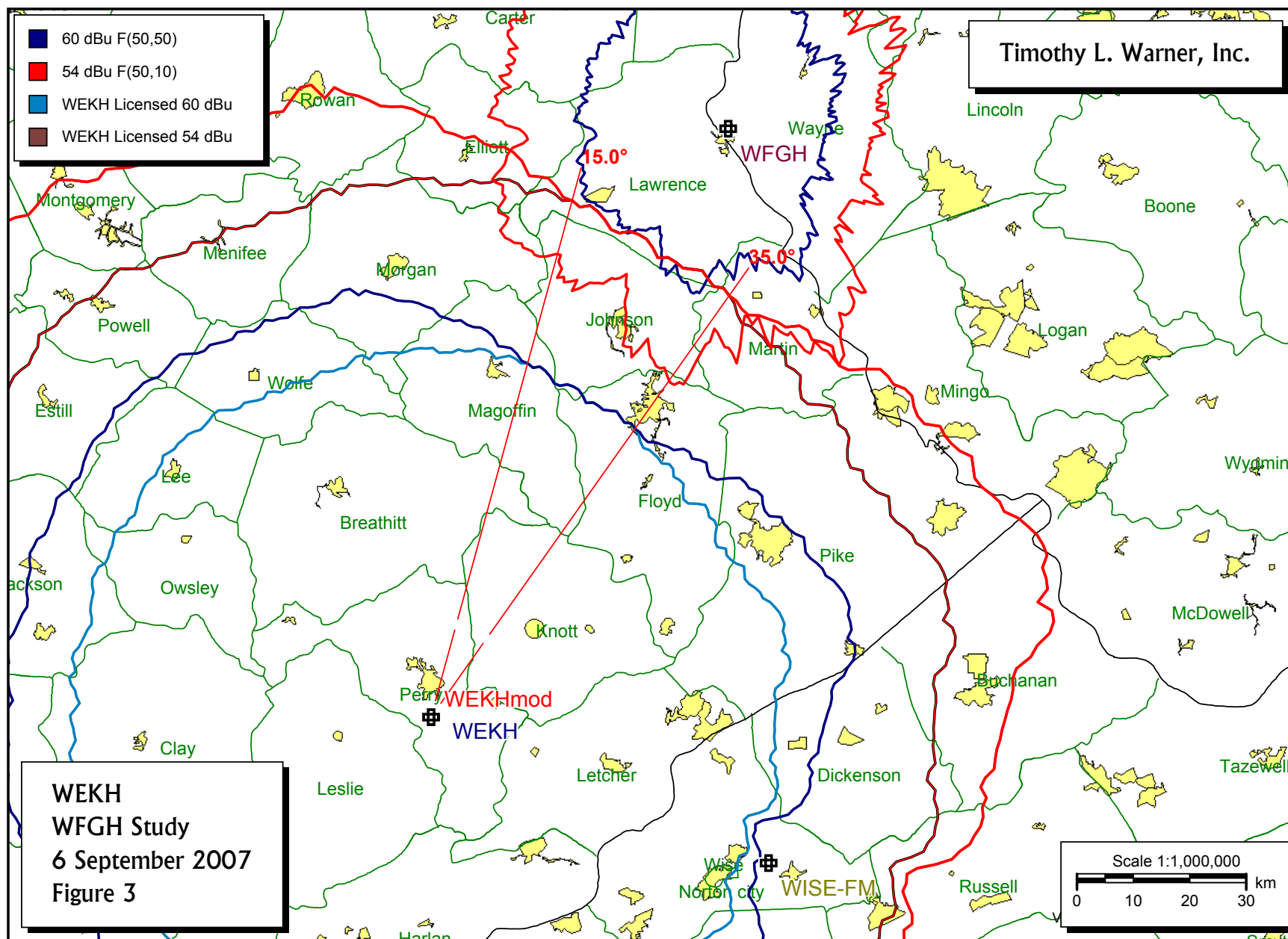
BLED20011206AAK
 Latitude: 37-11-35 N
 Longitude: 083-11-17 W
 ERP: 100.00 kW
 Channel: 215
 Frequency: 90.9 MHz
 AMSL Height: 725.0 m
 Elevation: 609.0 m
 Horiz. Pattern: Directional

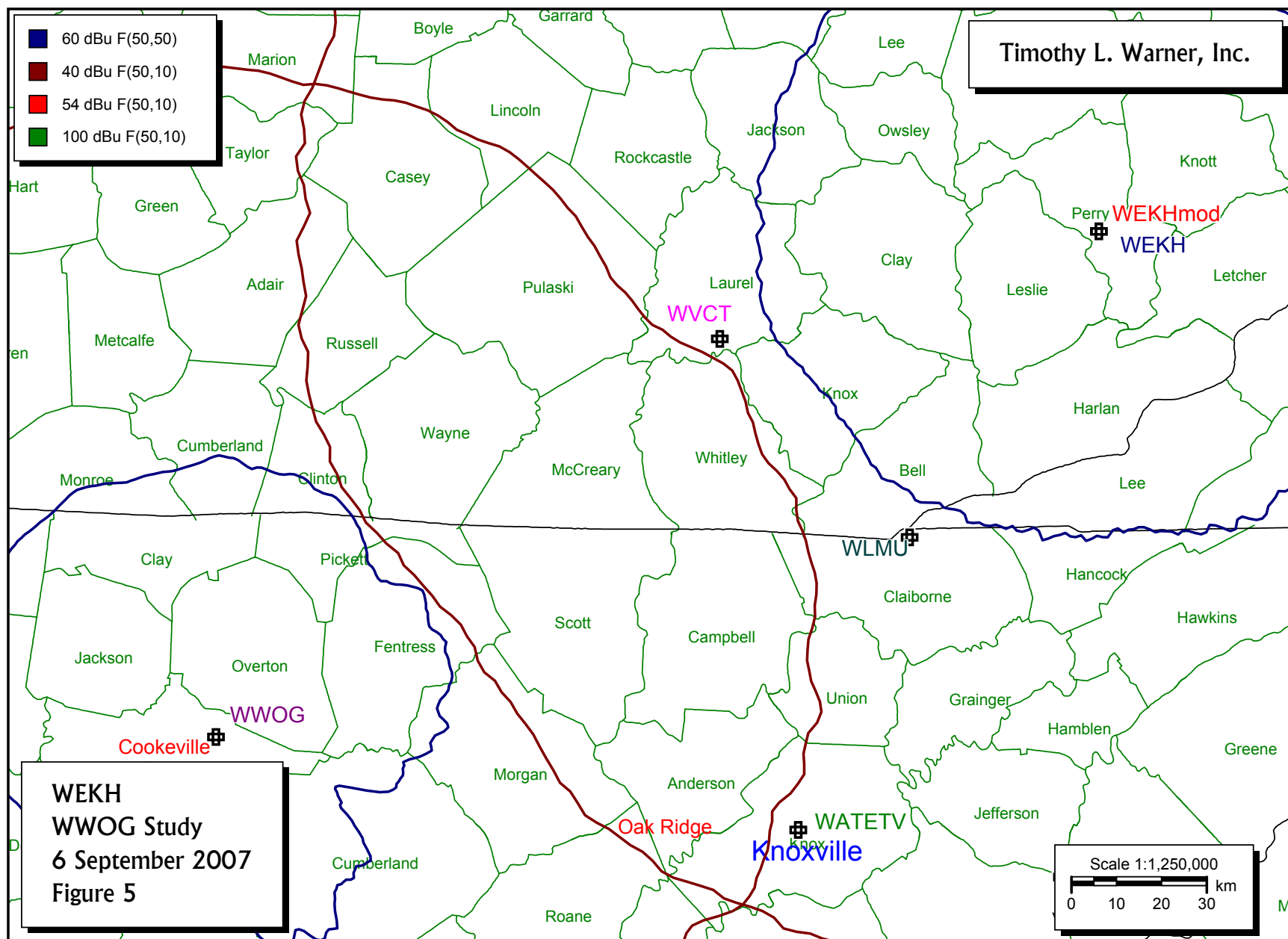
BLED20011206AAK
 Latitude: 37-11-35 N
 Longitude: 083-11-17 W
 ERP: 31.00 kW
 Channel: 215
 Frequency: 90.9 MHz
 AMSL Height: 725.0 m
 Elevation: 609.0 m
 Horiz. Pattern: Omni

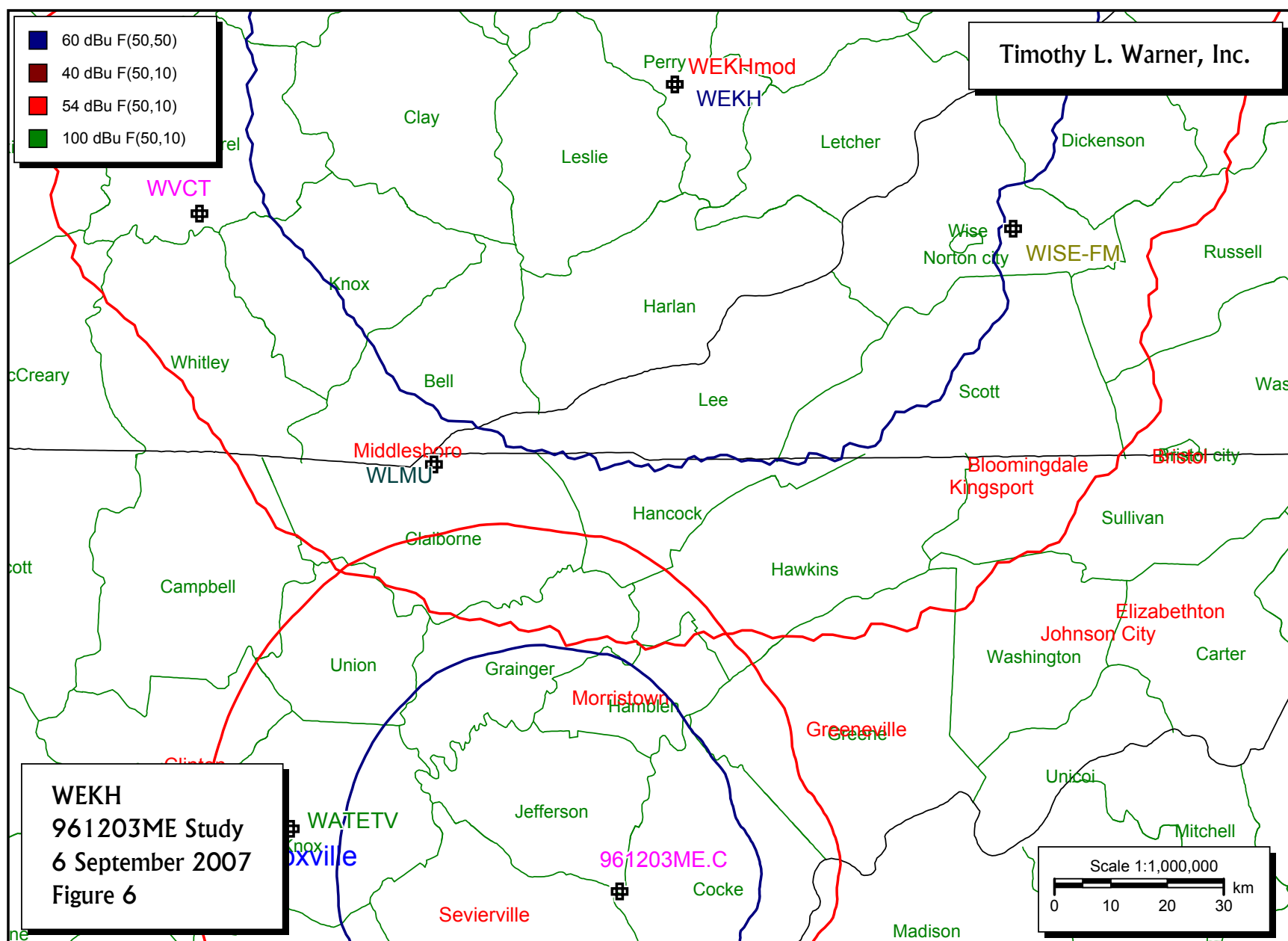
WEKH
Present and Proposed Contours
6 September 2007
Figure 1

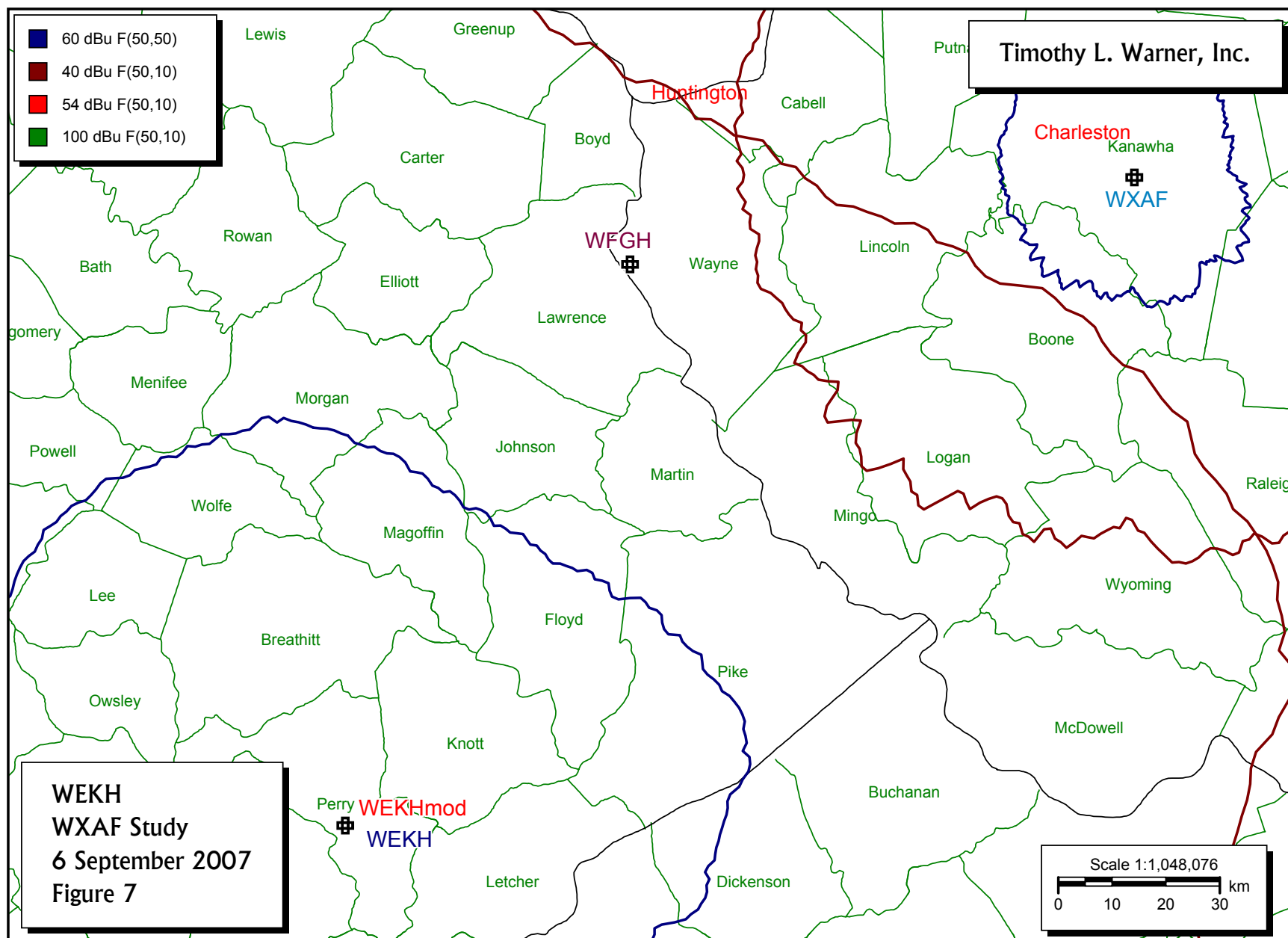


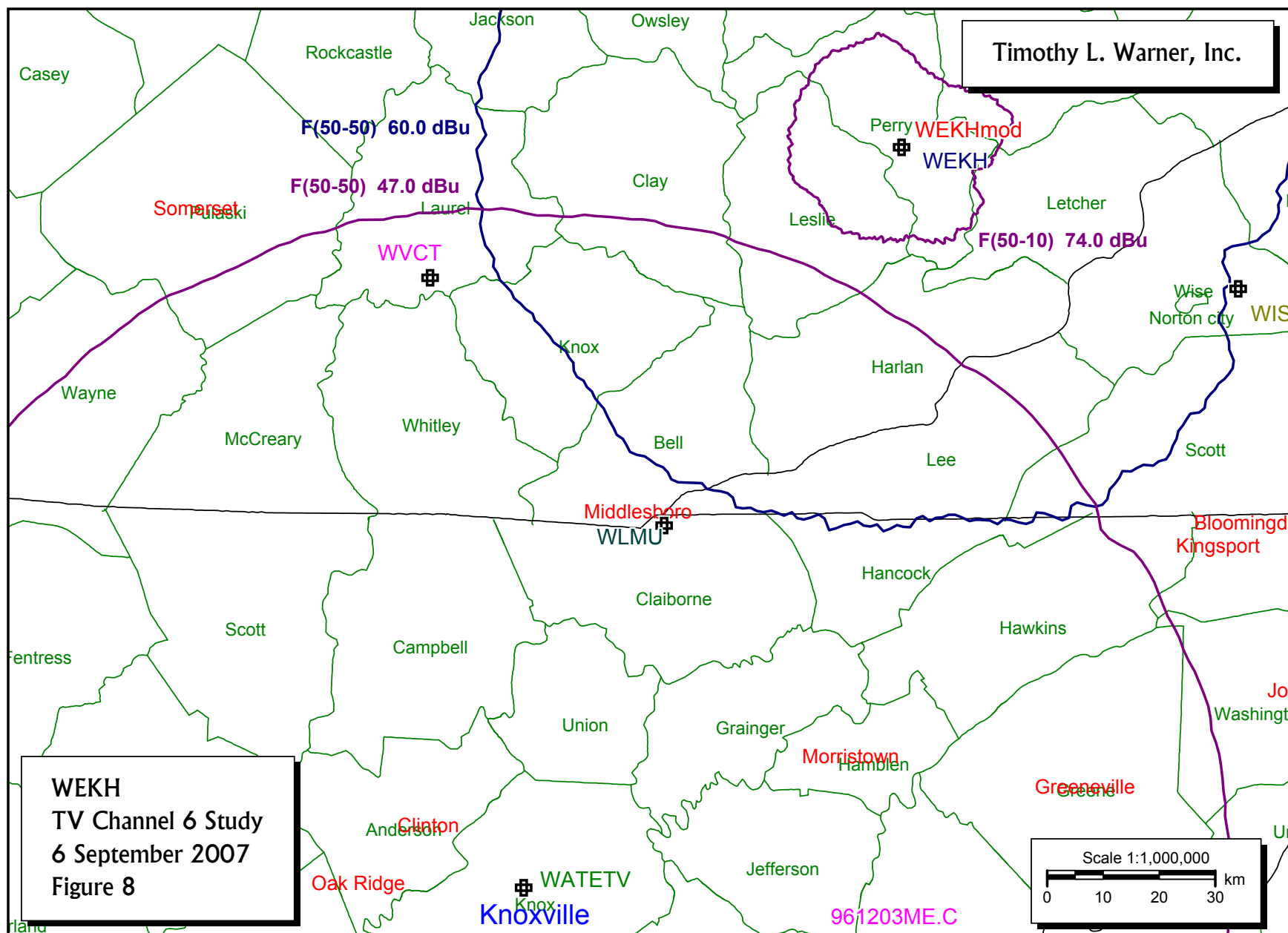










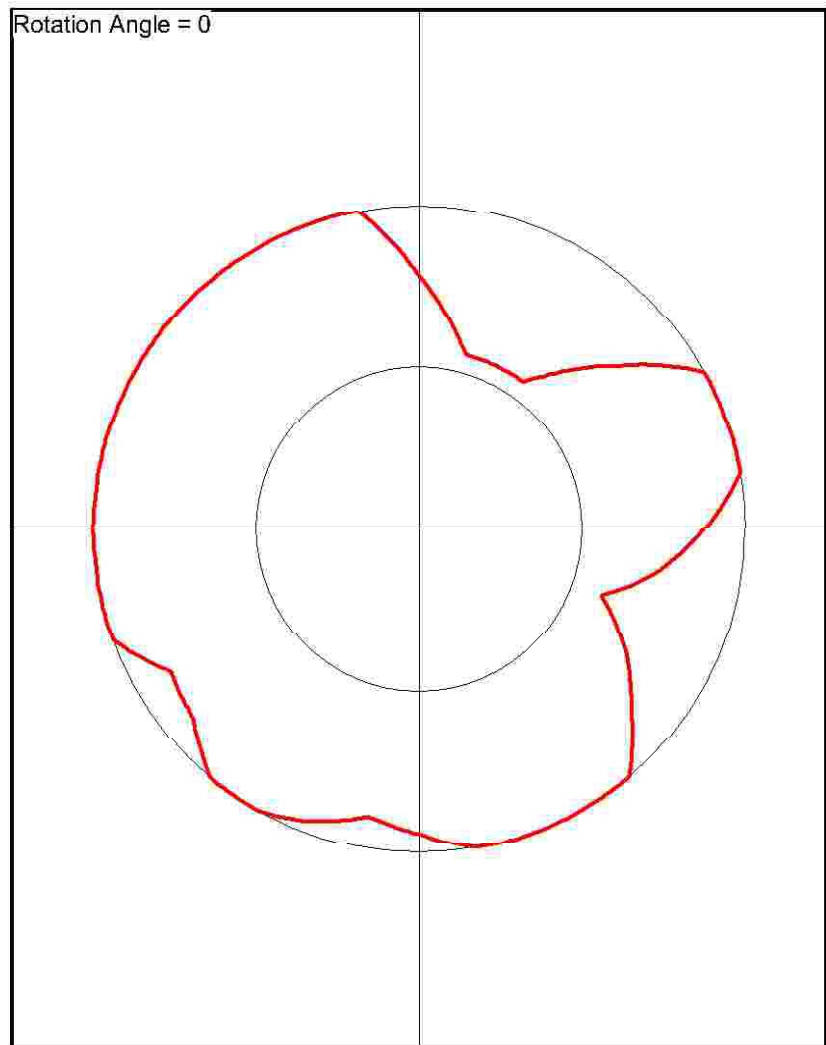


Antenna Pattern

Pre-Rotation Antenna Pattern....

Azimuth (deg)	Effective Field
0.0	0.782
10.0	0.622
15.0	0.556
20.0	0.556
30.0	0.556
35.0	0.556
40.0	0.622
50.0	0.782
60.0	0.982
61.0	1.000
70.0	1.000
80.0	1.000
90.0	0.875
100.0	0.748
110.0	0.595
120.0	0.727
130.0	0.850
140.0	1.000
150.0	1.000
160.0	1.000
170.0	1.000
180.0	0.940
190.0	0.900
200.0	0.960
210.0	1.000
220.0	1.000
230.0	0.905
240.0	0.880
250.0	1.000
260.0	1.000
270.0	1.000
280.0	1.000
290.0	1.000
300.0	1.000
310.0	1.000
320.0	1.000
330.0	1.000
340.0	1.000
349.0	1.000
350.0	0.982

Rotation Angle = 0



WEKH

Directional Antenna Pattern

6 September 2007

Figure 9