

**NEW**

**BNPED-20071019AGW**

**Pineville, Kentucky**

**Application for Modified Facilities for Noncommercial FM Station**

**On Channel 211 Class C2**

**by**

**Eastern Kentucky University**

**Exhibit 15**

**Allocations**

**November 2009**

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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 Exhibit 15, Allocations, 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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13 November 2009

### Narrative

This Exhibit provides details of the allocations for the proposed modified facilities of a new station to serve Pineville, Kentucky. The authorization file number is BNPED-20071019AGW. This proposal complies fully with the requirements of 47 C.F.R. 73.509.

The changes in this amendment include a site change, an increase of height above ground, a decrease in height above mean sea level and above average terrain, an increase in effective radiated power, a modification of the directional antenna pattern, and circular polarization.

### Allocations

This application proposes service to Pineville, Kentucky, on channel 211 as a Class C2 facility. The Allocations Table in this exhibit provides a list of the stations, construction permits, allocations, and applications studied. All are protected by this application.

An Allocations Study is included as Figure 1. Where there are facilities whose overlap is less than 10 kilometers (6 miles) additional figures are provided, along with the output tables from the computer program FMOVER. Those facilities are identified below.

Figure/Table	Facility ID	Community	Channel and Relationship
2	WJSO	Pikeville, Kentucky	211C2 co-channel
3	WDVX.C	Clinton, Tennessee	210C3 first adjacent

### Directional Antenna

This application proposes a directional antenna. The pattern is tabulated and plotted as a Figure in this Exhibit. 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. There are no other FM or TV broadcasting antennas within 60 meters of the proposed site. There are no AM broadcasting antennas within 3.2 kilometers of the proposed site.

#### Source of Data

Transmitter location, effective radiated power, directional antenna pattern, and elevation data are extracted from the Commission's CDBS. 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.

All population data is from 2000 U.S. Census SF1 data files. Population is counted by considering the location of the centroid of each census bloc. The data for each block is counted if it falls within the area being counted.

### Area and Population

The area within the proposed 60 dBu F(50,50) service contour is calculated by a computer program which sums the areas within the contours based on 360 radials. The area of any significant water is then measured and subtracted. The resulting area is shown on a Figure at the end of this Exhibit. The population is calculated by the centroid method and is also listed on the Figure.

Table 1: Allocations

Eastern Kentucky University Allocation Study											
REFERENCE	CH#	211C2-	90.1 MHz, Pwr= 5.5 kw, HAAT= 258.2 m, COR= 705 m	Average Protected F(50-50)= 42.1 km	Standard Directional	COR(M)	INT(km)	PRO(km)	*IN*	*OUT*	DISPLAY DATES
36 43 52.0 N.	DATA	11-13-09	SEARCH	11-13-09							
83 46 15.0 W.											
CH CITY	CALL	TYPE STATE	ANT AZI. -->	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(m)	INT(km) COR(M)	PRO(km) LICENSEE	*IN*	*OUT*	(Overlap in km)
211C2 1338945 Pineville	APP KY	DCX	249.5 69.5	0.3 BMPED20091023ALA	36 43 49.0 83 46 25.0	5.000 272	98.2 717	37.5 Eastern Kentucky Universit	-122.9*	-110.5*	
211C2 NEW Pineville	CP KY	DEX	249.5 69.5	0.3 BNPED20071019AGW	36 43 49.0 83 46 25.0	4.000 272	74.3 717	25.2 Eastern Kentucky Universit	-99.0*<	-98.1*<	
211C3 WJSO Pikeville	LIC KY	C	52.7 233.5	136.0 BMLED20031106AGD	37 27 52.0 82 32 45.0	3.800 139	74.2 480	22.0 The Moody Bible Institute	18.0	5.6	
210C3 WDVX Clinton	CP TN	CY	214.9 34.6	72.1 BPED20090626AAH	36 11 53.0 84 13 51.0	0.200 597	51.4 1089	33.2 Cumberland Communities Com	8.8	21.4	
210C3 WDVX Clinton	LIC TN	VN	214.9 34.6	72.1 BLED19961231KA	36 11 53.0 84 13 51.0	0.200 598	51.4 1089	33.2 Cumberland Communities Com	8.8	21.4	
Vertical Polarization Only											
211C WEPR Greenville	LIC SC	CN	148.0 328.8	233.6 BLED19870508KA	34 56 26.0 82 24 38.0	85.000 361	173.3 669	73.9 South Carolina Educational	20.1	57.2	
211C0 WEPR Greenville	CP SC	CX	148.0 328.8	233.5 BPED20080402ABT	34 56 29.0 82 24 38.0	68.000 391	171.5 697	73.7 South Carolina Educational	21.9	57.3	
212A WCSK Kingsport	LIC TN	CN	101.8 282.5	108.3 BLED19810803AJ	36 31 37.0 82 35 12.0	0.195 280	31.5 719	21.2 Kingsport City Schools Bd.	33.3	22.5	
213C1 WTHL Somerset	LIC KY	DC	302.8 122.3	82.7 BLED19990930AAI	37 07 52.0 84 33 15.0	50.000 180	6.4 485	54.7 Somerset Educational Broad	32.7	24.1	
211C1 WJCR-FM Upton	LIC KY	CN	291.9 110.6	215.5 BLED19920310KA	37 25 57.0 86 01 50.0	100.000 117	147.5 327	52.1 Fm 90.1, Inc.	25.8	58.0	
212C1 WMKY Morehead	LIC KY	DCX	11.3 191.5	163.7 BLED20031022ALF	38 10 38.0 83 24 17.0	37.000 276	86.5 571	58.8 Morehead State University	32.8	38.8	
214C2 WGSN Newport	LIC TN	DVX	155.0 335.3	101.0 BLED20080926ABP	35 54 20.0 83 17 48.0	1.000 700	2.0 1113	48.5 Bible Believers Network In	57.0	48.7	
208C WETS-FM Johnson City	LIC TN	C	102.3 283.2	150.0 BMLED20060802ATX	36 26 02.0 82 08 08.0	66.000 692	13.5 1318	95.7 East Tennessee State Unive	93.0	50.5	
264A WBGQ Bulls Gap	LIC TN	C	126.3 306.7	65.7 BLH20010122AAF	36 22 48.0 83 10 47.0	0.330 384	33.7 809	105.0 Cherokee Broadcasting	14.5R	51.2M	
212A WUTK-FM Knoxville	LIC TN	VN	189.2 9.1	87.5 BLED19950410KI	35 57 09.0 83 55 34.0	0.800 21	13.4 316	9.6 University Of Tennessee	58.8	55.1	
Vertical Polarization Only											
210C2 WKVO Georgetown	LIC KY	DC	337.5 157.1	177.3 BLED19980511KA	38 12 15.0 84 32 51.0	50.000 125	73.0 394	47.8 Educational Media Foundati	58.8	61.9	
209A WYLC Jackson	CP KY	DCX	25.1 205.4	102.9 BNPED20071015AFQ	37 34 08.0 83 16 28.0	0.400 106	0.9 423	11.8 Breathitt Listeners Choice	61.1	87.3	
212A WLNB Wartburg	CP TN	VX	226.4 45.9	101.9 BNPED20071012AEN	36 05 48.0 84 35 31.0	0.550 -14	12.3 438	8.7 Corporation For Radio Educ	68.4	61.6	

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)
264A Bulls Gap	ALLO	USE	TN	131.6 312.0	79.3	36 15 23.0 83 06 34.0	6.000 100	33.7 468	105.0	14.5R	64.8M
211A Crossville	1222261	APP	DVX	233.3 52.5	138.3 BNPED20071022AEL	35 58 52.0 85 00 07.0	0.100 30	20.3 570	6.1 Roane State Community Coll	97.3	68.9
209C1 Somerset	WDCL-FM	LIC	CN KY	291.4 110.6	132.8 BLED19850408KA	37 09 29.0 85 09 50.0	100.000 174	6.7 444	56.4 Western Kentucky Universit	84.2	73.1
213A Wise	WISE-FM	LIC	C VA	76.7 257.5	114.8 BLED20010328AAC	36 57 39.0 82 30 56.0	0.220 204	1.0 932	19.4 Virginia Tech Foundation,	73.5	91.7
211A Kingston	WKTS	LIC	V TN	214.2 33.7	129.3 BLED20010327AAK	35 45 57.0 84 34 33.0	0.055 193	41.6 462	12.5 Foothills Broadcasting, In	75.9	75.7

Terrain database is NED 03 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 = 2, Co to 3rd adjacent.  
 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 WJSO, Pikeville, Kentucky**

11-13-2009	NED 03 SEC Terrain Data	FMOver Analysis
1338945		WJSO BMLED20031106AGD
Channel = 211C2		Channel = 211C3
Max ERP = 5.5 kW		Max ERP = 3.8 kW
RCAMSL = 705 M		RCAMSL = 480 M
N. Lat. 36 43 52.0		N. Lat. 37 27 52.0
W. Lng. 83 46 15.0		W. Lng. 82 32 45.0
Protected		Interfering
60 dBu		40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
353.0	005.5000	0346.9	047.6	253.7	003.8000	0095.1	119.4	30.65	
354.0	005.5000	0344.9	047.5	253.6	003.8000	0095.0	118.6	30.78	
355.0	005.5000	0339.1	047.1	253.3	003.8000	0096.1	117.9	30.95	
356.0	005.5000	0345.4	047.5	253.4	003.8000	0095.5	117.0	31.08	
357.0	005.5000	0347.6	047.6	253.4	003.8000	0095.7	116.1	31.24	
358.0	005.5000	0345.7	047.5	253.2	003.8000	0097.0	115.3	31.41	
359.0	005.5000	0345.6	047.5	253.1	003.8000	0098.3	114.6	31.60	
000.0	005.5000	0343.5	047.4	252.9	003.8000	0100.4	113.8	31.80	
001.0	005.5000	0336.1	046.9	252.6	003.8000	0101.2	113.2	31.94	
002.0	005.5000	0321.6	046.0	252.0	003.8000	0098.3	112.7	31.93	
003.0	005.5000	0321.4	046.0	251.8	003.8000	0097.0	112.0	32.03	
004.0	005.5000	0323.4	046.1	251.7	003.8000	0096.4	111.2	32.16	
005.0	005.5000	0324.7	046.2	251.6	003.8000	0095.9	110.4	32.29	
006.0	005.5000	0313.2	045.5	251.1	003.8000	0095.8	110.0	32.37	
007.0	005.5000	0313.0	045.5	250.9	003.8000	0096.0	109.2	32.51	
008.0	005.5000	0310.0	045.3	250.6	003.8000	0096.8	108.6	32.66	
009.0	005.5000	0310.4	045.4	250.4	003.8000	0097.6	107.9	32.82	
010.0	005.5000	0306.4	045.1	250.1	003.8000	0101.3	107.3	33.06	
011.0	005.5000	0300.0	044.7	249.7	003.8000	0103.9	106.9	33.25	
012.0	005.5000	0288.3	044.0	249.2	003.8000	0096.6	106.6	33.05	
013.0	005.5000	0287.4	044.0	248.9	003.8000	0092.3	106.0	33.02	
014.0	005.5000	0285.1	043.8	248.6	003.8000	0087.8	105.5	32.98	
015.0	005.5000	0279.2	043.4	248.2	003.8000	0085.5	105.1	32.98	
016.0	005.5000	0273.3	043.1	247.8	003.8000	0087.2	104.7	33.11	
017.0	005.5000	0262.9	042.4	247.3	003.8000	0084.6	104.5	33.05	
018.0	005.5000	0255.4	042.0	246.8	003.8000	0082.3	104.3	33.02	
019.0	005.5000	0248.9	041.5	246.4	003.8000	0081.5	104.0	33.04	
020.0	005.5000	0256.0	042.0	246.3	003.8000	0081.3	103.2	33.20	
021.0	005.5000	0256.3	042.0	246.0	003.8000	0079.2	102.7	33.24	
022.0	005.5000	0245.5	041.3	245.4	003.8000	0071.7	102.6	32.96	
023.0	005.5000	0246.6	041.4	245.1	003.8000	0067.9	102.1	32.92	
024.0	005.5000	0247.0	041.4	244.8	003.8000	0064.1	101.6	32.88	
025.0	005.5000	0238.6	040.9	244.3	003.8000	0058.8	101.6	32.68	
026.0	005.5000	0241.1	041.1	244.1	003.8000	0058.0	101.0	32.76	
027.0	005.5000	0239.8	041.0	243.7	003.8000	0057.1	100.6	32.80	
028.0	005.5000	0242.9	041.2	243.5	003.8000	0056.8	100.1	32.90	
029.0	005.5000	0245.4	041.3	243.2	003.8000	0057.4	099.5	33.03	
030.0	005.5000	0247.4	041.5	242.9	003.8000	0056.5	099.0	33.10	
031.0	005.5000	0259.9	042.2	242.7	003.8000	0055.5	098.0	33.27	
032.0	005.5000	0264.5	042.5	242.4	003.8000	0053.2	097.3	33.31	
033.0	005.5000	0263.7	042.5	242.0	003.8000	0050.5	097.0	33.26	
034.0	005.5000	0256.5	042.0	241.5	003.8000	0047.3	097.1	33.11	
035.0	005.5000	0245.0	041.3	241.0	003.8000	0042.5	097.4	32.85	
036.0	005.5000	0234.6	040.6	240.4	003.8000	0042.8	097.7	32.80	
037.0	005.5000	0223.0	039.8	239.9	003.8000	0040.9	098.2	32.63	

038.0	005.5000	0217.4	039.4		239.4	003.8000	0039.1	098.3	32.52
039.0	005.5000	0233.0	040.5		239.2	003.8000	0039.1	097.0	32.78
040.0	005.5000	0240.3	041.0		238.9	003.8000	0040.1	096.3	32.96
041.0	005.5000	0231.6	040.4		238.4	003.8000	0043.9	096.6	33.06
042.0	005.5000	0235.2	040.7		238.0	003.8000	0047.4	096.2	33.29
043.0	005.5000	0229.2	040.3		237.6	003.8000	0049.3	096.4	33.33
044.0	005.5000	0234.7	040.6		237.2	003.8000	0048.0	095.9	33.39
045.0	005.5000	0234.3	040.6		236.8	003.8000	0045.9	095.8	33.32
046.0	005.5000	0234.5	040.6		236.4	003.8000	0044.2	095.6	33.28
047.0	005.5000	0228.6	040.2		235.9	003.8000	0043.1	095.9	33.17
048.0	005.5000	0229.2	040.3		235.5	003.8000	0047.2	095.8	33.38
049.0	005.5000	0236.3	040.7		235.1	003.8000	0052.2	095.2	33.71
050.0	005.5000	0244.3	041.3		234.7	003.8000	0059.7	094.6	34.17
051.0	005.5000	0248.9	041.5		234.3	003.8000	0068.2	094.3	34.62
052.0	005.5000	0262.2	042.4		233.9	003.8000	0072.3	093.5	34.99
053.0	005.5000	0288.7	044.0		233.4	003.8000	0073.3	091.8	35.45
054.0	005.5000	0273.8	043.1		232.9	003.8000	0080.1	092.7	35.52
055.0	005.5000	0259.2	042.2		232.5	003.8000	0082.9	093.7	35.41
056.0	005.5000	0236.6	040.8		232.1	003.8000	0081.2	095.1	34.98
057.0	005.5000	0220.9	039.7		231.8	003.8000	0075.2	096.3	34.46
058.0	005.5000	0213.6	039.2		231.4	003.8000	0066.7	096.9	33.97
059.0	005.5000	0232.8	040.5		230.9	003.8000	0052.7	095.6	33.65
060.0	005.5000	0243.8	041.2		230.4	003.8000	0047.3	095.0	33.54
061.0	005.5000	0259.7	042.2		229.8	003.8000	0050.2	094.2	33.85
062.0	005.5000	0264.7	042.5		229.3	003.8000	0055.6	094.0	34.13
063.0	005.5000	0256.0	042.0		229.0	003.8000	0055.8	094.7	33.98
064.0	005.5000	0246.8	041.4		228.7	003.8000	0054.3	095.5	33.75
065.0	005.5000	0235.7	040.7		228.4	003.8000	0053.9	096.4	33.54
066.0	005.5000	0230.9	040.4		228.0	003.8000	0055.9	096.9	33.51
067.0	005.5000	0224.6	039.9		227.7	003.8000	0057.6	097.5	33.45
068.0	005.5000	0212.7	039.1		227.5	003.8000	0057.7	098.6	33.23
069.0	005.5000	0207.1	038.7		227.2	003.8000	0056.4	099.2	33.05
070.0	005.5000	0178.5	036.3		227.4	003.8000	0057.4	101.6	32.61
071.0	005.5000	0140.1	032.3		228.0	003.8000	0056.1	105.6	31.80
072.0	005.5000	0107.8	028.7		228.5	003.8000	0053.8	109.1	31.07
073.0	005.5000	0113.8	029.4		228.1	003.8000	0055.3	108.7	31.21
074.0	005.5000	0144.7	032.8		227.0	003.8000	0054.5	105.9	31.69
075.0	005.5000	0178.1	036.3		225.8	003.8000	0036.4	103.1	31.46
076.0	005.5000	0206.3	038.6		224.9	003.8000	0045.9	101.4	32.19
077.0	005.5000	0236.6	040.8		223.9	003.8000	0043.2	100.0	32.36
078.0	005.5000	0256.1	042.0		223.1	003.8000	0038.2	099.3	32.27
079.0	005.5000	0279.5	043.5		222.3	003.8000	0027.6	098.6	32.07
080.0	005.5000	0303.2	044.9		221.4	003.8000	0027.3	097.9	32.20
081.0	005.5000	0310.0	045.3		220.9	003.8000	0029.7	098.1	32.17
082.0	005.5000	0313.8	045.6		220.4	003.8000	0033.0	098.5	32.23
083.0	005.5000	0309.0	045.3		220.2	003.8000	0033.1	099.2	32.08
084.0	005.5000	0297.9	044.6		220.2	003.8000	0032.9	100.2	31.87
085.0	005.5000	0294.6	044.4		219.9	003.8000	0031.6	100.9	31.67
086.0	005.5000	0291.0	044.2		219.7	003.8000	0028.5	101.6	31.46
087.0	005.5000	0291.8	044.2		219.4	003.8000	0023.9	102.2	31.35
088.0	005.5000	0301.8	044.8		218.9	003.8000	0014.8	102.4	31.31
089.0	005.5000	0306.3	045.1		218.5	003.8000	0008.8	102.8	31.23
090.0	005.5000	0310.7	045.4		218.1	003.8000	0005.0	103.2	31.14
091.0	005.5000	0313.3	045.5		217.7	003.8000	0006.7	103.8	31.03
092.0	005.5000	0317.6	045.8		217.4	003.8000	0012.1	104.3	30.93
093.0	005.5000	0321.8	046.0		217.0	003.8000	0016.8	104.8	30.83
094.0	005.5000	0318.8	045.9		216.9	003.8000	0019.7	105.6	30.67
095.0	005.5000	0314.3	045.6		216.8	003.8000	0021.8	106.4	30.51
096.0	005.5000	0313.5	045.5		216.6	003.8000	0026.7	107.1	30.37
097.0	005.5000	0306.2	045.1		216.6	003.8000	0026.8	108.0	30.19
098.0	005.5000	0296.7	044.5		216.6	003.8000	0025.0	109.0	30.00
099.0	005.5000	0288.6	044.0		216.7	003.8000	0023.9	109.9	29.82
100.0	005.5000	0288.3	044.0		216.5	003.8000	0028.2	110.6	29.68

101.0	005.5000	0280.6	043.5		216.5	003.8000	0026.9	111.5	29.50
102.0	005.5000	0280.4	043.5		216.4	003.8000	0030.3	112.2	29.38
103.0	005.5000	0281.3	043.6		216.2	003.8000	0033.5	112.9	29.42
104.0	005.5000	0281.3	043.6		216.1	003.8000	0036.2	113.6	29.42
105.0	005.5000	0274.3	043.1		216.1	003.8000	0035.0	114.4	29.19
106.0	005.5000	0276.1	043.3		216.0	003.8000	0037.9	115.1	29.21
107.0	005.5000	0272.9	043.1		215.9	003.8000	0038.1	115.9	29.08
108.0	005.5000	0270.2	042.9		215.9	003.8000	0038.4	116.6	28.95
109.0	005.5000	0266.4	042.6		215.9	003.8000	0038.3	117.4	28.80
110.0	005.5000	0262.1	042.4		215.9	003.8000	0038.2	118.2	28.64
111.0	005.5000	0256.4	042.0		216.0	003.8000	0037.2	119.0	28.43
112.0	005.5000	0242.3	041.1		216.3	003.8000	0031.3	120.0	27.93
113.0	005.5000	0322.4	046.1		213.9	003.8000	0041.4	119.6	28.55

11-13-2009 NED 03 SEC Terrain Data

WJSO	BMLED20031106AGD	1338945
Channel	= 211C3	Channel = 211C2
Max ERP	= 3.8 kW	Max ERP = 5.5 kW
RCAMSL	= 480 M	RCAMSL = 705 M
N. Lat.	37 27 52.0	N. Lat. 36 43 52.0
W. Lng.	82 32 45.0	W. Lng. 83 46 15.0
Protected		Interfering
60	dBu	40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)		Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
173.0	003.8000	0086.5	023.8		062.2	005.5000	0262.5	126.0	35.39	
174.0	003.8000	0100.5	025.6		062.9	005.5000	0256.5	125.0	35.45	
175.0	003.8000	0106.2	026.3		063.2	005.5000	0254.8	124.3	35.55	
176.0	003.8000	0094.0	024.8		062.4	005.5000	0261.0	124.4	35.67	
177.0	003.8000	0092.1	024.6		062.3	005.5000	0262.4	124.1	35.76	
178.0	003.8000	0108.6	026.5		063.0	005.5000	0255.9	122.9	35.85	
179.0	003.8000	0119.7	027.7		063.4	005.5000	0252.4	122.0	35.96	
180.0	003.8000	0110.8	026.8		062.9	005.5000	0256.5	122.0	36.07	
181.0	003.8000	0120.2	027.7		063.2	005.5000	0254.0	121.1	36.18	
182.0	003.8000	0121.4	027.8		063.2	005.5000	0254.6	120.7	36.30	
183.0	003.8000	0126.6	028.3		063.3	005.5000	0253.8	120.0	36.42	
184.0	003.8000	0137.3	029.3		063.6	005.5000	0251.2	119.1	36.55	
185.0	003.8000	0138.1	029.4		063.5	005.5000	0251.9	118.6	36.67	
186.0	003.8000	0115.0	027.2		062.5	005.5000	0260.9	119.3	36.74	
187.0	003.8000	0096.3	025.1		061.5	005.5000	0265.2	120.1	36.67	
188.0	003.8000	0085.5	023.7		060.8	005.5000	0257.6	120.6	36.39	
189.0	003.8000	0089.2	024.2		060.9	005.5000	0258.5	119.9	36.54	
190.0	003.8000	0106.7	026.3		061.6	005.5000	0265.5	118.3	37.07	
191.0	003.8000	0104.2	026.0		061.3	005.5000	0264.2	118.1	37.08	
192.0	003.8000	0100.2	025.6		061.0	005.5000	0260.1	118.1	36.99	
193.0	003.8000	0104.8	026.1		061.1	005.5000	0260.8	117.4	37.16	
194.0	003.8000	0122.8	028.0		061.6	005.5000	0265.5	115.8	37.63	
195.0	003.8000	0132.3	028.8		061.8	005.5000	0265.7	114.9	37.86	
196.0	003.8000	0119.3	027.6		061.2	005.5000	0261.9	115.3	37.65	
197.0	003.8000	0133.4	028.9		061.5	005.5000	0265.0	114.1	38.02	
198.0	003.8000	0139.5	029.5		061.5	005.5000	0265.1	113.3	38.21	
199.0	003.8000	0128.4	028.5		060.9	005.5000	0258.8	113.7	37.95	
200.0	003.8000	0115.4	027.3		060.3	005.5000	0248.6	114.3	37.55	
201.0	003.8000	0108.6	026.5		059.9	005.5000	0242.9	114.5	37.35	
202.0	003.8000	0100.8	025.6		059.5	005.5000	0237.8	114.9	37.13	
203.0	003.8000	0086.3	023.8		058.8	005.5000	0229.5	116.1	36.65	

204.0	003.8000	0086.9	023.9		058.6	005.5000	0227.1	115.8	36.66
205.0	003.8000	0083.8	023.5		058.3	005.5000	0220.8	115.9	36.48
206.0	003.8000	0084.0	023.5		058.2	005.5000	0217.0	115.7	36.44
207.0	003.8000	0068.6	021.4		057.4	005.5000	0213.8	117.3	36.03
208.0	003.8000	0058.6	019.9		056.9	005.5000	0222.0	118.3	36.00
209.0	003.8000	0057.2	019.7		056.7	005.5000	0225.1	118.4	36.06
210.0	003.8000	0056.3	019.5		056.5	005.5000	0227.4	118.3	36.13
211.0	003.8000	0053.6	019.1		056.3	005.5000	0231.3	118.6	36.16
212.0	003.8000	0053.8	019.1		056.2	005.5000	0233.9	118.5	36.26
213.0	003.8000	0052.5	018.9		056.0	005.5000	0237.2	118.5	36.32
214.0	003.8000	0040.2	016.2		055.3	005.5000	0251.1	120.9	36.17
215.0	003.8000	0033.6	014.7		055.0	005.5000	0260.3	122.1	36.13
216.0	003.8000	0037.3	015.5		055.0	005.5000	0260.0	121.3	36.29
217.0	003.8000	0016.9	014.0		054.6	005.5000	0266.0	122.6	36.16
218.0	003.8000	0004.7	014.0		054.5	005.5000	0267.1	122.6	36.20
219.0	003.8000	0017.7	014.0		054.4	005.5000	0268.2	122.5	36.24
220.0	003.8000	0032.2	014.4		054.3	005.5000	0268.8	122.0	36.36
221.0	003.8000	0028.4	014.0		054.2	005.5000	0270.8	122.4	36.33
222.0	003.8000	0028.3	014.0		054.1	005.5000	0272.6	122.3	36.39
223.0	003.8000	0035.7	015.2		054.1	005.5000	0272.5	121.1	36.64
224.0	003.8000	0043.3	016.9		054.1	005.5000	0272.0	119.4	37.00
225.0	003.8000	0044.2	017.1		054.0	005.5000	0274.1	119.1	37.11
226.0	003.8000	0038.6	015.8		053.8	005.5000	0279.1	120.3	36.97
227.0	003.8000	0053.9	019.1		053.8	005.5000	0277.4	117.0	37.65
228.0	003.8000	0056.1	019.5		053.7	005.5000	0280.5	116.6	37.83
229.0	003.8000	0055.8	019.5		053.5	005.5000	0284.3	116.6	37.92
230.0	003.8000	0048.5	018.0		053.3	005.5000	0288.0	118.0	37.70
231.0	003.8000	0055.5	019.4		053.2	005.5000	0289.0	116.6	38.04
232.0	003.8000	0079.4	022.9		053.1	005.5000	0289.2	113.1	38.87
233.0	003.8000	0079.4	022.9		052.9	005.5000	0287.3	113.1	38.82
234.0	003.8000	0071.7	021.8		052.7	005.5000	0282.7	114.2	38.45
235.0	003.8000	0053.8	019.1		052.5	005.5000	0278.4	116.9	37.71
236.0	003.8000	0042.8	016.8		052.4	005.5000	0275.2	119.2	37.11
237.0	003.8000	0046.9	017.7		052.2	005.5000	0269.9	118.3	37.17
238.0	003.8000	0047.8	017.9		052.1	005.5000	0264.8	118.2	37.08
239.0	003.8000	0039.6	016.0		052.0	005.5000	0263.2	120.1	36.64
240.0	003.8000	0041.7	016.5		051.9	005.5000	0258.6	119.6	36.63
241.0	003.8000	0042.6	016.7		051.7	005.5000	0255.0	119.4	36.57
242.0	003.8000	0050.1	018.4		051.4	005.5000	0250.8	117.9	36.80
243.0	003.8000	0057.2	019.7		051.2	005.5000	0249.2	116.6	37.03
244.0	003.8000	0057.8	019.8		051.0	005.5000	0248.9	116.6	37.03
245.0	003.8000	0066.2	021.0		050.7	005.5000	0249.2	115.5	37.29
246.0	003.8000	0079.5	022.9		050.3	005.5000	0246.7	113.8	37.62
247.0	003.8000	0083.0	023.4		050.0	005.5000	0244.5	113.4	37.64
248.0	003.8000	0086.4	023.8		049.8	005.5000	0242.5	113.1	37.66
249.0	003.8000	0093.4	024.7		049.4	005.5000	0239.4	112.4	37.75
250.0	003.8000	0102.5	025.8		049.0	005.5000	0236.3	111.5	37.88
251.0	003.8000	0095.9	025.0		048.9	005.5000	0236.0	112.4	37.66
252.0	003.8000	0098.3	025.3		048.7	005.5000	0234.5	112.3	37.64
253.0	003.8000	0099.5	025.5		048.4	005.5000	0232.6	112.3	37.58
254.0	003.8000	0095.1	024.9		048.3	005.5000	0231.7	113.0	37.40
255.0	003.8000	0103.5	026.0		047.9	005.5000	0229.0	112.3	37.50
256.0	003.8000	0105.2	026.2		047.7	005.5000	0228.6	112.3	37.48
257.0	003.8000	0129.3	028.5		046.9	005.5000	0230.2	110.5	37.96
258.0	003.8000	0123.5	028.0		046.8	005.5000	0231.1	111.2	37.82
259.0	003.8000	0098.2	025.3		047.3	005.5000	0227.6	113.7	37.14
260.0	003.8000	0092.6	024.6		047.3	005.5000	0227.5	114.5	36.96
261.0	003.8000	0113.4	027.0		046.4	005.5000	0233.9	112.7	37.52
262.0	003.8000	0123.9	028.0		045.9	005.5000	0234.4	112.2	37.66
263.0	003.8000	0137.4	029.3		045.3	005.5000	0235.1	111.5	37.85
264.0	003.8000	0137.8	029.3		045.1	005.5000	0234.9	111.8	37.77
265.0	003.8000	0135.4	029.1		045.0	005.5000	0234.3	112.3	37.64
266.0	003.8000	0129.8	028.6		045.0	005.5000	0234.1	113.0	37.47

267.0	003.8000	0135.4	029.1		044.6	005.5000	0233.1	112.9	37.46
268.0	003.8000	0128.4	028.5		044.6	005.5000	0233.1	113.7	37.27
269.0	003.8000	0128.7	028.5		044.4	005.5000	0233.1	114.1	37.20
270.0	003.8000	0135.7	029.1		044.0	005.5000	0234.6	114.0	37.26
271.0	003.8000	0131.1	028.7		044.0	005.5000	0234.7	114.6	37.12
272.0	003.8000	0137.5	029.3		043.6	005.5000	0234.5	114.6	37.12
273.0	003.8000	0137.6	029.3		043.4	005.5000	0233.3	115.0	37.01
274.0	003.8000	0139.4	029.5		043.2	005.5000	0231.4	115.2	36.90
275.0	003.8000	0146.8	030.2		042.8	005.5000	0227.5	115.2	36.81
276.0	003.8000	0142.8	029.8		042.8	005.5000	0227.5	115.8	36.67
277.0	003.8000	0149.3	030.4		042.4	005.5000	0229.6	115.9	36.71
278.0	003.8000	0152.8	030.8		042.1	005.5000	0234.1	116.1	36.77
279.0	003.8000	0149.5	030.5		042.1	005.5000	0234.4	116.7	36.64
280.0	003.8000	0139.5	029.5		042.3	005.5000	0230.5	117.7	36.34
281.0	003.8000	0136.4	029.2		042.3	005.5000	0230.8	118.3	36.22
282.0	003.8000	0138.3	029.4		042.1	005.5000	0233.9	118.6	36.22
283.0	003.8000	0139.2	029.5		041.9	005.5000	0236.0	119.0	36.19
284.0	003.8000	0137.5	029.3		041.9	005.5000	0236.4	119.6	36.09
285.0	003.8000	0138.4	029.4		041.7	005.5000	0236.8	120.0	36.01
286.0	003.8000	0137.2	029.3		041.7	005.5000	0236.5	120.5	35.89
287.0	003.8000	0143.1	029.8		041.3	005.5000	0232.3	120.7	35.75
288.0	003.8000	0143.3	029.9		041.2	005.5000	0231.4	121.2	35.63
289.0	003.8000	0139.7	029.5		041.3	005.5000	0231.8	121.8	35.52
290.0	003.8000	0151.6	030.7		040.7	005.5000	0235.5	121.8	35.59
291.0	003.8000	0148.6	030.4		040.7	005.5000	0235.0	122.4	35.46
292.0	003.8000	0141.7	029.7		040.9	005.5000	0232.3	123.2	35.25
293.0	003.8000	0097.4	025.2		042.8	005.5000	0227.4	125.1	34.74

**Table 3: FMOVER protection of WDVX.C, Clinton, Tennessee**

11-13-2009	NED 03 SEC Terrain Data	FMOver Analysis
1338945		WDVX-C BPED20090626AAH
Channel = 211C2		Channel = 210C3
Max ERP = 5.5 kW		Max ERP = 0.2 kW
RCAMSL = 705 M		RCAMSL = 1089 M
N. Lat. 36 43 52.0		N. Lat. 36 11 53.0
W. Lng. 83 46 15.0		W. Lng. 84 13 51.0
Protected		Interfering
60 dBu		54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
155.0	005.5000	0257.0	042.1	070.1	000.2000	0710.3	062.8	50.06	
156.0	005.5000	0263.6	042.5	070.6	000.2000	0711.3	062.0	50.32	
157.0	005.5000	0267.4	042.7	070.9	000.2000	0710.3	061.3	50.55	
158.0	005.5000	0267.3	042.7	070.9	000.2000	0710.2	060.6	50.81	
159.0	005.5000	0262.6	042.4	070.6	000.2000	0711.1	059.8	51.08	
160.0	005.5000	0250.0	041.6	069.9	000.2000	0709.4	059.1	51.32	
161.0	005.2800	0239.2	040.6	068.9	000.2000	0703.9	058.4	51.50	
162.0	005.0646	0243.1	040.5	068.8	000.2000	0703.4	057.7	51.75	
163.0	004.8536	0251.2	040.7	068.9	000.2000	0704.0	056.9	52.01	
164.0	004.6471	0259.7	040.9	069.0	000.2000	0704.7	056.2	52.28	
165.0	004.4451	0259.8	040.5	068.6	000.2000	0702.2	055.5	52.50	
166.0	004.2476	0256.2	039.9	067.9	000.2000	0695.3	054.9	52.64	
167.0	004.0546	0249.9	039.2	067.0	000.2000	0688.5	054.3	52.76	
168.0	003.8660	0238.6	038.1	065.8	000.2000	0691.1	053.9	52.96	
169.0	003.6820	0228.8	037.1	064.5	000.2000	0690.6	053.5	53.10	
170.0	003.5024	0219.3	036.0	063.2	000.2000	0685.5	053.1	53.16	
171.0	003.3599	0209.7	034.9	061.9	000.2000	0684.4	052.9	53.24	
172.0	003.2204	0198.2	033.6	060.4	000.2000	0681.9	052.8	53.25	
173.0	003.0839	0181.4	031.9	058.4	000.2000	0699.5	052.9	53.42	
174.0	002.9503	0162.3	029.9	056.2	000.2000	0696.1	053.3	53.24	
175.0	002.8196	0147.7	028.3	054.4	000.2000	0699.1	053.6	53.16	
176.0	002.6919	0140.7	027.4	053.4	000.2000	0704.6	053.7	53.21	
177.0	002.5672	0143.0	027.3	053.0	000.2000	0706.4	053.3	53.37	
178.0	002.4454	0155.2	028.0	053.4	000.2000	0704.6	052.5	53.64	
179.0	002.3266	0165.8	028.6	053.5	000.2000	0703.7	051.8	53.89	
180.0	002.2108	0160.0	027.8	052.5	000.2000	0708.0	051.9	53.92	
181.0	002.1210	0150.0	026.7	051.3	000.2000	0706.9	052.1	53.80	
182.0	002.0332	0140.1	025.7	050.1	000.2000	0710.9	052.5	53.74	
183.0	001.9471	0140.1	025.4	049.6	000.2000	0713.7	052.3	53.83	
184.0	001.8630	0143.1	025.4	049.2	000.2000	0714.2	052.0	53.95	
185.0	001.7807	0124.9	023.8	047.6	000.2000	0715.1	052.9	53.63	
186.0	001.7002	0105.4	021.8	045.9	000.2000	0717.4	054.1	53.22	
187.0	001.6217	0084.6	019.2	043.9	000.2000	0717.1	055.9	52.57	
188.0	001.5449	0061.3	016.0	041.8	000.2000	0727.2	058.3	51.82	
189.0	001.4701	0057.3	015.3	041.2	000.2000	0731.6	058.8	51.71	
190.0	001.3971	0067.1	016.3	041.5	000.2000	0729.2	057.7	52.05	
191.0	001.3482	0076.1	017.3	041.8	000.2000	0727.4	056.7	52.38	
192.0	001.3001	0081.4	017.8	041.7	000.2000	0727.5	056.2	52.59	
193.0	001.2530	0073.8	016.7	040.9	000.2000	0733.2	057.0	52.36	
194.0	001.2067	0062.1	015.1	039.9	000.2000	0741.6	058.3	52.00	
195.0	001.1613	0058.8	014.6	039.5	000.2000	0743.8	058.6	51.90	
196.0	001.1167	0042.7	012.3	038.4	000.2000	0734.4	060.6	51.10	
197.0	001.0730	0041.1	012.0	038.1	000.2000	0732.6	060.9	50.99	
198.0	001.0302	0030.6	010.3	037.4	000.2000	0728.3	062.3	50.44	

199.0	000.9883	0013.6	010.1		037.2	000.2000	0727.0	062.4	50.39
200.0	000.9472	0012.5	010.0		037.0	000.2000	0726.1	062.5	50.36
201.0	000.9088	0020.6	009.9		036.8	000.2000	0724.9	062.5	50.33
202.0	000.8712	0025.1	009.8		036.7	000.2000	0723.9	062.6	50.30
203.0	000.8344	0025.4	009.7		036.5	000.2000	0722.4	062.6	50.26
204.0	000.7984	0020.3	009.6		036.3	000.2000	0720.9	062.7	50.21
205.0	000.7632	0014.0	009.5		036.1	000.2000	0719.1	062.8	50.17
206.0	000.7287	0005.1	009.4		036.0	000.2000	0717.1	062.9	50.12
207.0	000.6951	-0000.4	009.3		035.8	000.2000	0715.1	062.9	50.06
208.0	000.6622	0004.6	009.2		035.6	000.2000	0713.1	063.0	50.01
209.0	000.6302	0014.0	009.0		035.5	000.2000	0711.1	063.1	49.95
210.0	000.5990	0011.6	008.9		035.3	000.2000	0709.1	063.2	49.89
211.0	000.5749	-0001.8	008.8		035.2	000.2000	0706.9	063.3	49.84
212.0	000.5513	0012.7	008.7		035.0	000.2000	0704.7	063.4	49.78
213.0	000.5282	0039.5	009.9		035.0	000.2000	0703.4	062.3	50.14
214.0	000.5056	0056.0	011.7		034.8	000.2000	0702.2	060.4	50.74
215.0	000.4835	0060.5	012.0		034.6	000.2000	0700.9	060.2	50.83
216.0	000.4619	0070.4	012.6		034.4	000.2000	0700.7	059.5	51.06
217.0	000.4408	0086.7	013.8		034.2	000.2000	0701.6	058.4	51.47
218.0	000.4202	0103.6	014.9		033.9	000.2000	0701.1	057.2	51.88
219.0	000.4001	0121.3	016.1		033.5	000.2000	0699.2	056.1	52.25
220.0	000.3804	0137.1	017.0		033.1	000.2000	0695.9	055.2	52.52
221.0	000.3695	0143.6	017.3		032.8	000.2000	0693.4	055.0	52.59
222.0	000.3588	0140.3	016.9		032.5	000.2000	0690.7	055.4	52.41
223.0	000.3482	0162.6	018.2		032.0	000.2000	0685.5	054.1	52.80
224.0	000.3377	0192.6	019.6		031.3	000.2000	0689.5	052.8	53.32
225.0	000.3274	0218.7	020.7		030.7	000.2000	0695.5	051.9	53.75
226.0	000.3173	0232.8	021.2		030.2	000.2000	0699.0	051.5	53.93
227.0	000.3074	0234.8	021.1		029.8	000.2000	0699.8	051.7	53.88
228.0	000.2976	0228.9	020.7		029.6	000.2000	0698.8	052.2	53.68
229.0	000.2879	0226.4	020.4		029.3	000.2000	0696.8	052.6	53.51
230.0	000.2784	0229.8	020.4		028.9	000.2000	0694.4	052.7	53.43
231.0	000.2904	0235.7	020.8		028.4	000.2000	0691.1	052.4	53.50
232.0	000.3027	0229.0	020.8		028.1	000.2000	0688.1	052.6	53.38
233.0	000.3152	0223.6	020.7		027.7	000.2000	0685.3	052.8	53.27
234.0	000.3280	0214.4	020.5		027.5	000.2000	0683.8	053.2	53.12
235.0	000.3410	0202.5	020.1		027.3	000.2000	0682.8	053.7	52.94
236.0	000.3543	0177.6	019.1		027.5	000.2000	0683.8	054.7	52.57
237.0	000.3678	0153.0	017.9		027.8	000.2000	0686.0	056.0	52.14
238.0	000.3816	0130.8	016.5		028.2	000.2000	0689.3	057.3	51.70
239.0	000.3956	0114.7	015.5		028.4	000.2000	0691.6	058.3	51.37
240.0	000.4099	0142.2	017.7		027.1	000.2000	0682.3	056.6	51.85
241.0	000.4190	0221.5	022.1		024.2	000.2000	0664.8	053.2	52.87
242.0	000.4281	0276.7	024.6		022.1	000.2000	0663.6	051.4	53.50
243.0	000.4374	0317.6	026.4		020.4	000.2000	0662.8	050.4	53.88
244.0	000.4467	0324.5	026.9		019.7	000.2000	0663.2	050.4	53.88
245.0	000.4562	0312.7	026.5		019.6	000.2000	0663.0	051.0	53.67
246.0	000.4657	0316.1	026.8		019.1	000.2000	0659.9	051.1	53.57
247.0	000.4754	0312.5	026.8		018.7	000.2000	0657.2	051.5	53.40
248.0	000.4851	0299.9	026.3		018.7	000.2000	0657.2	052.1	53.18
249.0	000.4950	0275.8	025.4		019.1	000.2000	0660.7	053.0	52.88
250.0	000.5049	0256.9	024.7		019.4	000.2000	0662.3	053.8	52.61
251.0	000.5313	0264.1	025.3		018.6	000.2000	0656.3	053.8	52.55
252.0	000.5583	0282.4	026.5		017.4	000.2000	0647.8	053.5	52.55
253.0	000.5860	0293.5	027.2		016.4	000.2000	0646.0	053.4	52.55
254.0	000.6143	0283.0	027.1		016.3	000.2000	0645.9	053.9	52.36
255.0	000.6433	0276.2	027.1		016.1	000.2000	0645.2	054.3	52.20
256.0	000.6730	0270.5	027.1		015.8	000.2000	0644.3	054.7	52.05
257.0	000.7033	0259.6	026.8		015.8	000.2000	0644.2	055.2	51.85
258.0	000.7343	0241.7	026.2		016.1	000.2000	0645.3	055.9	51.61
259.0	000.7660	0223.4	025.5		016.5	000.2000	0645.9	056.7	51.36
260.0	000.7984	0220.2	025.6		016.3	000.2000	0645.8	057.0	51.22
261.0	000.8400	0231.4	026.5		015.2	000.2000	0640.4	057.0	51.15

262.0	000.8826	0246.4	027.6		014.0	000.2000	0630.8	057.0	51.02
263.0	000.9264	0266.9	029.0		012.6	000.2000	0618.5	057.0	50.87
264.0	000.9711	0280.2	030.0		011.4	000.2000	0606.9	057.2	50.66
265.0	001.0170	0279.8	030.3		011.0	000.2000	0602.9	057.6	50.46
266.0	001.0638	0274.5	030.3		010.8	000.2000	0601.2	058.1	50.26
267.0	001.1118	0267.4	030.3		010.8	000.2000	0600.5	058.6	50.06
268.0	001.1608	0256.3	029.9		010.9	000.2000	0602.4	059.2	49.88
269.0	001.2108	0241.5	029.4		011.3	000.2000	0606.0	059.8	49.71
270.0	001.2619	0228.5	028.9		011.7	000.2000	0608.7	060.4	49.53
271.0	001.3281	0229.0	029.3		011.2	000.2000	0605.3	060.8	49.35
272.0	001.3960	0235.9	030.1		010.4	000.2000	0596.5	061.2	49.11
273.0	001.4655	0243.2	030.9		009.6	000.2000	0589.5	061.7	48.88
274.0	001.5368	0254.8	031.9		008.6	000.2000	0583.3	062.1	48.66
275.0	001.6097	0322.4	036.1		004.8	000.2000	0530.5	062.5	47.57

11-13-2009 NED 03 SEC Terrain Data

WDVX-C	BPED20090626AAH	1338945
Channel =	210C3	Channel = 211C2
Max ERP =	0.2 kW	Max ERP = 5.5 kW
RCAMSL =	1089 M	RCAMSL = 705 M
N. Lat.	36 11 53.0	N. Lat. 36 43 52.0
W. Lng.	84 13 51.0	W. Lng. 83 46 15.0
Protected		Interfering
60 dBu		54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)		Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
335.0	000.2000	0353.8	023.1		233.2	000.3177	0222.9	063.7	39.89	
336.0	000.2000	0343.4	022.8		232.8	000.3132	0223.7	063.4	39.97	
337.0	000.2000	0343.4	022.8		232.8	000.3121	0223.7	063.0	40.10	
338.0	000.2000	0341.0	022.7		232.6	000.3101	0224.1	062.6	40.21	
339.0	000.2000	0352.0	023.1		232.8	000.3126	0223.7	062.1	40.41	
340.0	000.2000	0363.4	023.4		233.0	000.3151	0223.6	061.6	40.62	
341.0	000.2000	0372.0	023.7		233.1	000.3165	0223.4	061.2	40.80	
342.0	000.2000	0368.8	023.6		232.9	000.3138	0223.6	060.8	40.91	
343.0	000.2000	0360.2	023.3		232.5	000.3093	0224.2	060.5	40.98	
344.0	000.2000	0342.6	022.8		231.9	000.3016	0230.3	060.3	41.17	
345.0	000.2000	0328.5	022.3		231.4	000.2951	0235.9	060.1	41.36	
346.0	000.2000	0334.8	022.5		231.4	000.2953	0235.8	059.7	41.53	
347.0	000.2000	0351.4	023.1		231.7	000.2988	0233.4	059.1	41.71	
348.0	000.2000	0369.7	023.6		232.0	000.3026	0229.1	058.5	41.84	
349.0	000.2000	0377.2	023.8		232.0	000.3028	0229.0	058.0	42.01	
350.0	000.2000	0388.7	024.2		232.1	000.3040	0227.6	057.5	42.18	
351.0	000.2000	0397.0	024.4		232.1	000.3040	0227.6	057.0	42.37	
352.0	000.2000	0413.1	024.8		232.3	000.3063	0225.7	056.4	42.56	
353.0	000.2000	0426.8	025.2		232.4	000.3077	0224.8	055.9	42.77	
354.0	000.2000	0435.0	025.5		232.4	000.3072	0225.0	055.4	42.98	
355.0	000.2000	0432.7	025.4		232.1	000.3034	0228.2	055.0	43.19	
356.0	000.2000	0426.3	025.2		231.6	000.2983	0233.8	054.8	43.44	
357.0	000.2000	0425.5	025.2		231.4	000.2948	0236.0	054.4	43.61	
358.0	000.2000	0425.2	025.2		231.1	000.2914	0236.1	054.1	43.71	
359.0	000.2000	0431.4	025.4		230.9	000.2897	0235.3	053.6	43.84	
000.0	000.2000	0452.6	026.0		231.1	000.2922	0236.3	052.9	44.21	
001.0	000.2000	0470.4	026.5		231.3	000.2939	0236.3	052.2	44.52	
002.0	000.2000	0483.6	026.9		231.3	000.2942	0236.2	051.5	44.77	
003.0	000.2000	0498.1	027.4		231.3	000.2947	0236.0	050.9	45.04	
004.0	000.2000	0516.1	028.0		231.5	000.2962	0235.3	050.1	45.34	

005.0	000.2000	0535.0	028.6		231.6	000.2978	0234.2	049.3	45.64
006.0	000.2000	0551.8	029.1		231.6	000.2981	0234.0	048.6	45.93
007.0	000.2000	0566.4	029.5		231.6	000.2972	0234.6	048.0	46.21
008.0	000.2000	0578.9	029.9		231.4	000.2952	0235.8	047.4	46.47
009.0	000.2000	0585.3	030.1		231.1	000.2912	0236.0	046.9	46.62
010.0	000.2000	0591.3	030.2		230.7	000.2869	0233.8	046.4	46.66
011.0	000.2000	0603.0	030.5		230.4	000.2837	0232.6	045.8	46.80
012.0	000.2000	0612.0	030.8		230.1	000.2797	0230.8	045.3	46.88
013.0	000.2000	0622.6	031.1		229.8	000.2806	0227.7	044.8	47.00
014.0	000.2000	0630.5	031.3		229.4	000.2844	0226.8	044.3	47.23
015.0	000.2000	0638.7	031.5		228.9	000.2885	0226.4	043.8	47.49
016.0	000.2000	0645.0	031.7		228.5	000.2931	0227.2	043.3	47.79
017.0	000.2000	0646.6	031.7		227.9	000.2989	0229.8	043.0	48.13
018.0	000.2000	0651.0	031.8		227.3	000.3044	0233.2	042.6	48.52
019.0	000.2000	0659.5	032.1		226.8	000.3094	0235.4	042.1	48.89
020.0	000.2000	0663.5	032.2		226.2	000.3155	0234.1	041.8	49.08
021.0	000.2000	0662.5	032.2		225.5	000.3227	0227.0	041.6	48.98
022.0	000.2000	0663.2	032.2		224.8	000.3299	0213.1	041.3	48.56
023.0	000.2000	0661.7	032.1		224.0	000.3376	0193.1	041.1	47.79
024.0	000.2000	0664.1	032.2		223.3	000.3449	0171.6	040.9	47.00
025.0	000.2000	0667.9	032.3		222.6	000.3523	0152.0	040.6	46.21
026.0	000.2000	0674.3	032.5		221.9	000.3597	0139.8	040.3	45.80
027.0	000.2000	0682.2	032.7		221.2	000.3672	0142.7	039.9	46.22
028.0	000.2000	0687.6	032.9		220.5	000.3754	0141.8	039.6	46.39
029.0	000.2000	0694.8	033.1		219.7	000.3863	0133.5	039.3	46.19
030.0	000.2000	0699.7	033.2		218.9	000.4020	0119.6	039.1	45.65
031.0	000.2000	0692.5	033.0		218.0	000.4198	0104.1	039.2	44.67
032.0	000.2000	0685.6	032.8		217.2	000.4375	0089.6	039.3	43.52
033.0	000.2000	0695.1	033.1		216.3	000.4545	0076.5	039.0	42.49
034.0	000.2000	0701.5	033.3		215.5	000.4725	0063.9	038.8	41.33
035.0	000.2000	0704.0	033.3		214.7	000.4912	0060.1	038.7	41.09
036.0	000.2000	0717.4	033.7		213.8	000.5108	0053.1	038.4	40.44
037.0	000.2000	0726.1	034.0		212.9	000.5313	0036.4	038.2	37.71
038.0	000.2000	0731.9	034.1		212.0	000.5524	0011.5	038.0	36.59
039.0	000.2000	0738.9	034.3		211.0	000.5743	-0001.8	037.9	36.80
040.0	000.2000	0741.1	034.4		210.1	000.5961	0009.5	038.0	36.95
041.0	000.2000	0732.7	034.1		209.3	000.6207	0017.0	038.3	37.01
042.0	000.2000	0726.1	034.0		208.5	000.6462	0007.5	038.6	37.08
043.0	000.2000	0720.3	033.8		207.7	000.6715	0003.2	038.9	37.15
044.0	000.2000	0717.1	033.7		206.9	000.6976	-0000.5	039.2	37.23
045.0	000.2000	0718.3	033.7		206.1	000.7256	0004.2	039.3	37.36
046.0	000.2000	0717.4	033.7		205.3	000.7527	0012.5	039.5	37.44
047.0	000.2000	0714.4	033.6		204.6	000.7785	0015.9	039.8	37.50
048.0	000.2000	0715.0	033.6		203.8	000.8063	0021.8	040.0	37.58
049.0	000.2000	0714.2	033.6		203.0	000.8331	0025.3	040.3	37.64
050.0	000.2000	0711.3	033.5		202.4	000.8582	0027.0	040.7	37.66
051.0	000.2000	0707.8	033.4		201.7	000.8825	0023.6	041.0	37.67
052.0	000.2000	0706.2	033.4		201.0	000.9077	0020.9	041.4	37.69
053.0	000.2000	0706.5	033.4		200.3	000.9340	0015.5	041.7	37.73
054.0	000.2000	0700.8	033.2		199.8	000.9552	0011.4	042.1	37.69
055.0	000.2000	0695.7	033.1		199.3	000.9769	0011.7	042.6	37.66
056.0	000.2000	0696.1	033.1		198.6	001.0031	0018.7	042.9	37.68
057.0	000.2000	0694.7	033.1		198.1	001.0270	0029.1	043.3	37.67
058.0	000.2000	0697.1	033.1		197.4	001.0543	0039.9	043.6	39.57
059.0	000.2000	0694.7	033.1		196.9	001.0762	0040.9	044.0	39.70
060.0	000.2000	0683.6	032.8		196.7	001.0877	0039.7	044.7	39.35
061.0	000.2000	0682.5	032.7		196.2	001.1094	0040.1	045.1	39.39
062.0	000.2000	0684.4	032.8		195.6	001.1338	0049.7	045.4	40.93
063.0	000.2000	0686.0	032.8		195.1	001.1574	0057.7	045.8	41.96
064.0	000.2000	0688.1	032.9		194.6	001.1810	0061.0	046.2	42.30
065.0	000.2000	0692.4	033.0		194.0	001.2070	0062.1	046.6	42.38
066.0	000.2000	0691.2	033.0		193.6	001.2254	0065.7	047.1	42.66
067.0	000.2000	0688.5	032.9		193.2	001.2414	0070.1	047.6	43.00

068.0	000.2000	0696.0	033.1		192.6	001.2697	0076.5	047.9	43.60
069.0	000.2000	0704.5	033.3		192.0	001.2990	0081.2	048.3	44.02
070.0	000.2000	0709.8	033.5		191.5	001.3238	0080.7	048.7	43.91
071.0	000.2000	0709.8	033.5		191.2	001.3406	0077.0	049.2	43.45
072.0	000.2000	0706.7	033.4		190.9	001.3523	0075.9	049.7	43.20
073.0	000.2000	0710.7	033.5		190.5	001.3733	0075.0	050.2	43.02
074.0	000.2000	0714.1	033.6		190.1	001.3927	0068.8	050.7	42.35
075.0	000.2000	0722.4	033.9		189.6	001.4282	0059.9	051.1	41.44
076.0	000.2000	0731.7	034.1		189.0	001.4670	0057.4	051.5	41.16
077.0	000.2000	0729.9	034.1		188.8	001.4817	0056.7	052.1	40.95
078.0	000.2000	0726.6	034.0		188.7	001.4920	0056.3	052.7	40.76
079.0	000.2000	0728.4	034.0		188.4	001.5122	0057.0	053.2	40.73
080.0	000.2000	0730.7	034.1		188.2	001.5324	0059.2	053.8	40.84
081.0	000.2000	0733.5	034.2		187.9	001.5526	0062.8	054.3	41.05
082.0	000.2000	0738.0	034.3		187.6	001.5755	0068.2	054.9	41.43
083.0	000.2000	0747.3	034.5		187.2	001.6076	0079.3	055.4	42.27
084.0	000.2000	0754.9	034.8		186.8	001.6349	0089.4	055.9	42.94
085.0	000.2000	0755.3	034.8		186.7	001.6459	0092.9	056.5	43.01
086.0	000.2000	0761.1	034.9		186.4	001.6674	0099.2	057.1	43.31
087.0	000.2000	0761.5	034.9		186.3	001.6763	0101.5	057.7	43.26
088.0	000.2000	0761.1	034.9		186.2	001.6826	0102.9	058.3	43.15
089.0	000.2000	0756.8	034.8		186.3	001.6797	0102.3	058.9	42.88
090.0	000.2000	0755.7	034.8		186.2	001.6828	0102.9	059.5	42.71
091.0	000.2000	0756.1	034.8		186.2	001.6881	0103.9	060.1	42.57
092.0	000.2000	0760.2	034.9		186.0	001.6999	0105.4	060.7	42.48
093.0	000.2000	0764.5	035.0		185.9	001.7113	0106.7	061.3	42.39
094.0	000.2000	0767.7	035.1		185.8	001.7196	0107.8	061.9	42.27
095.0	000.2000	0706.4	033.4		187.3	001.5982	0075.8	062.6	39.62

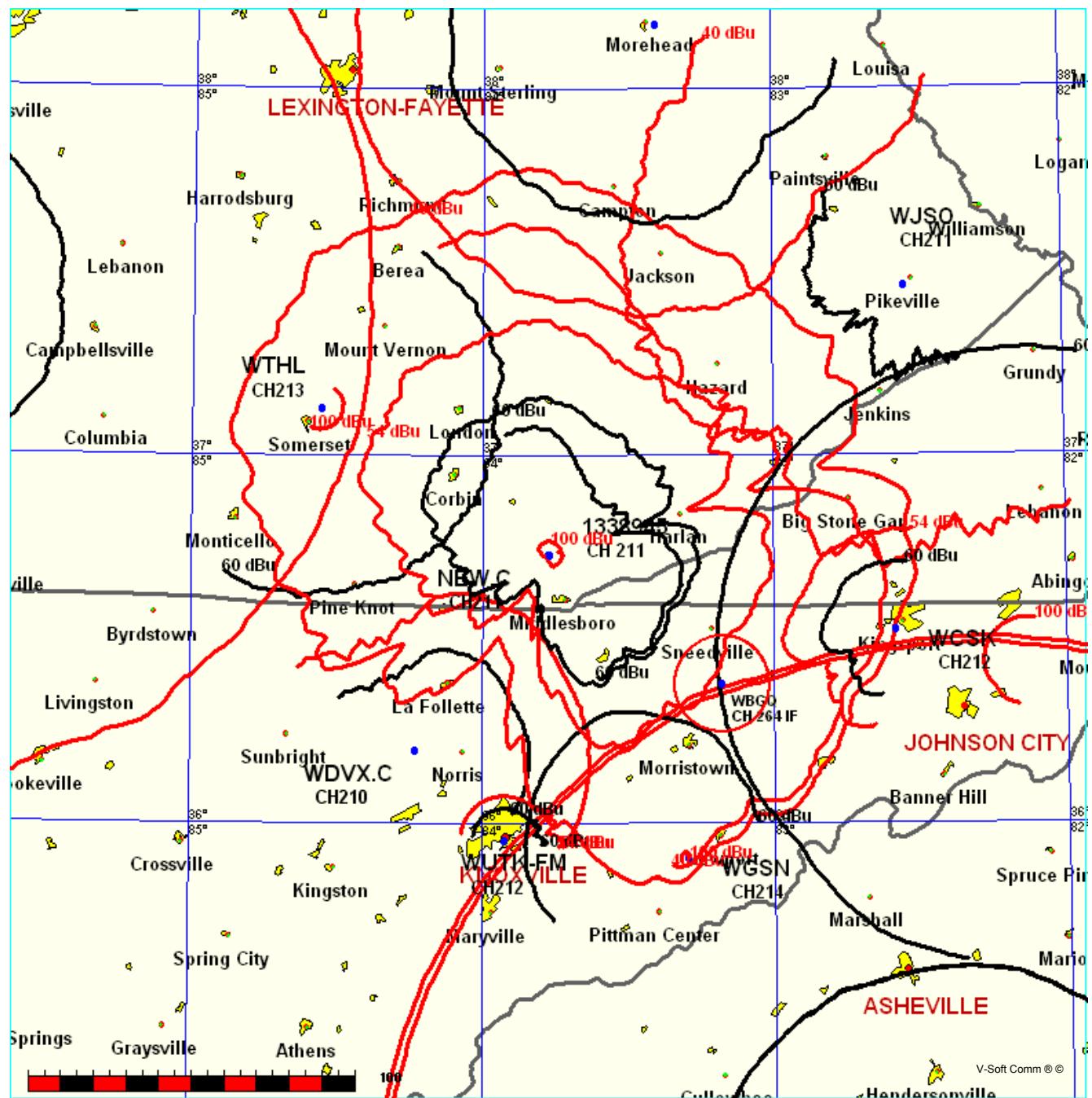
Eastern Kentucky University  
Figure 1: Allocation Study

FMCommander Full Allocation Study - NED 03 SEC

11-13-2009

1338945 CH 211 C2 DA

Lat= 36 43 52.0, Lng= 83 46 15.0  
5.5 kW 258.2 M HAAT, 705 M COR

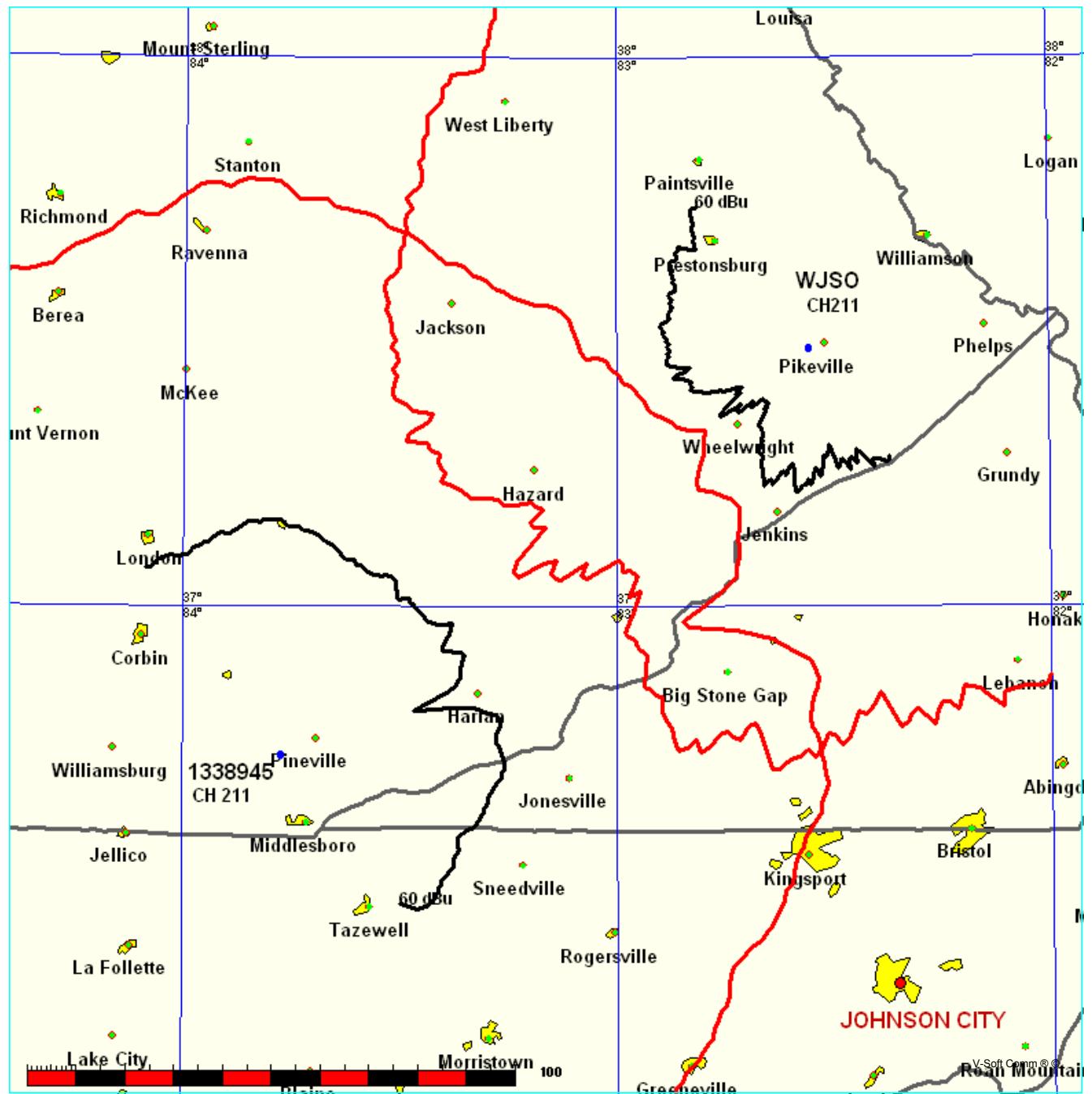


Eastern Kentucky University  
Figure 2: Allocation Study: WJSO

FMCommander Single Allocation Study - 11-13-2009 - NED 03 SEC  
1338945's Overlaps (In= 18.03 km, Out= 5.62 km)

1338945 CH 211 C2 DA  
Lat= 36 43 52.0, Lng= 83 46 15.0  
5.5 kW 258.2 M HAAT, 705 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

WJSO CH 211 C3 BMLED20031106AGD  
Lat= 37 27 52.0, Lng= 82 32 45.0  
3.8 kW 139 M HAAT, 480 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

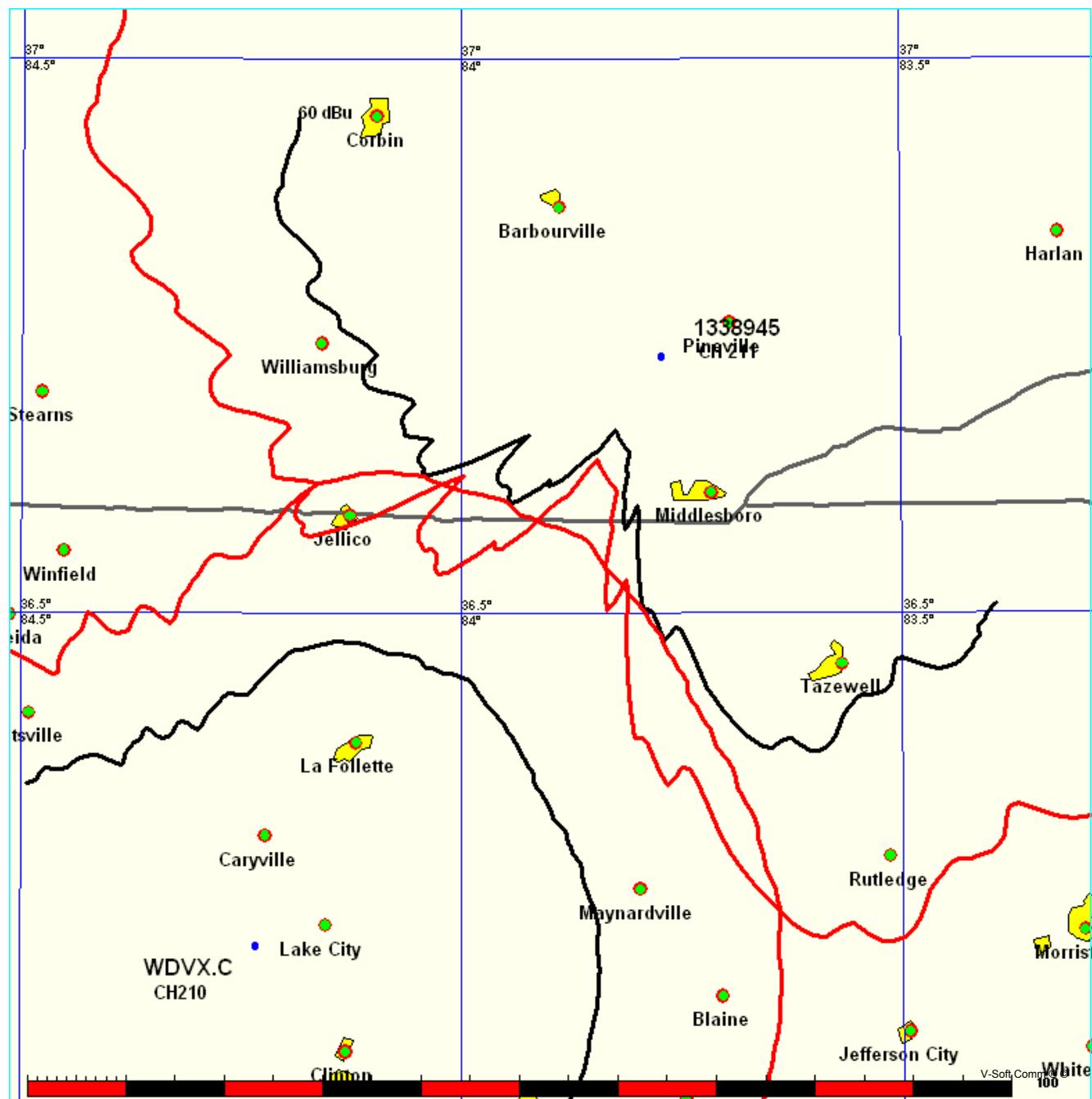


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Figure 3: Allocation Study: WDVX.C

FMCommander Single Allocation Study - 11-13-2009 - NED 03 SEC  
1338945's Overlaps (In= 8.76 km, Out= 21.42 km)

1338945 CH 211 C2 DA  
Lat= 36 43 52.0, Lng= 83 46 15.0  
5.5 kW 258.2 M HAAT, 705 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

WDVX-C CH 210 C3 BPED20090626AAH  
Lat= 36 11 53.0, Lng= 84 13 51.0  
0.2 kW 597 M HAAT, 1089 M COR  
Prot.= 60 dBu, Intef.= 54 dBu



Eastern Kentucky University

Figure 3A: Allocation Study: WDVX.C Detail

FMCommander Single Allocation Study - 11-13-2009 - NED 03 SEC

1338945's Overlaps (In= 8.76 km, Out= 21.42 km)

1338945 CH 211 C2 DA  
Lat= 36 43 52.0, Lng= 83 46 15.0  
5.5 kW 258.2 M HAAT, 705 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

WDVX-C CH 210 C3 BPED20090626AAH  
Lat= 36 11 53.0, Lng= 84 13 51.0  
0.2 kW 597 M HAAT, 1089 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

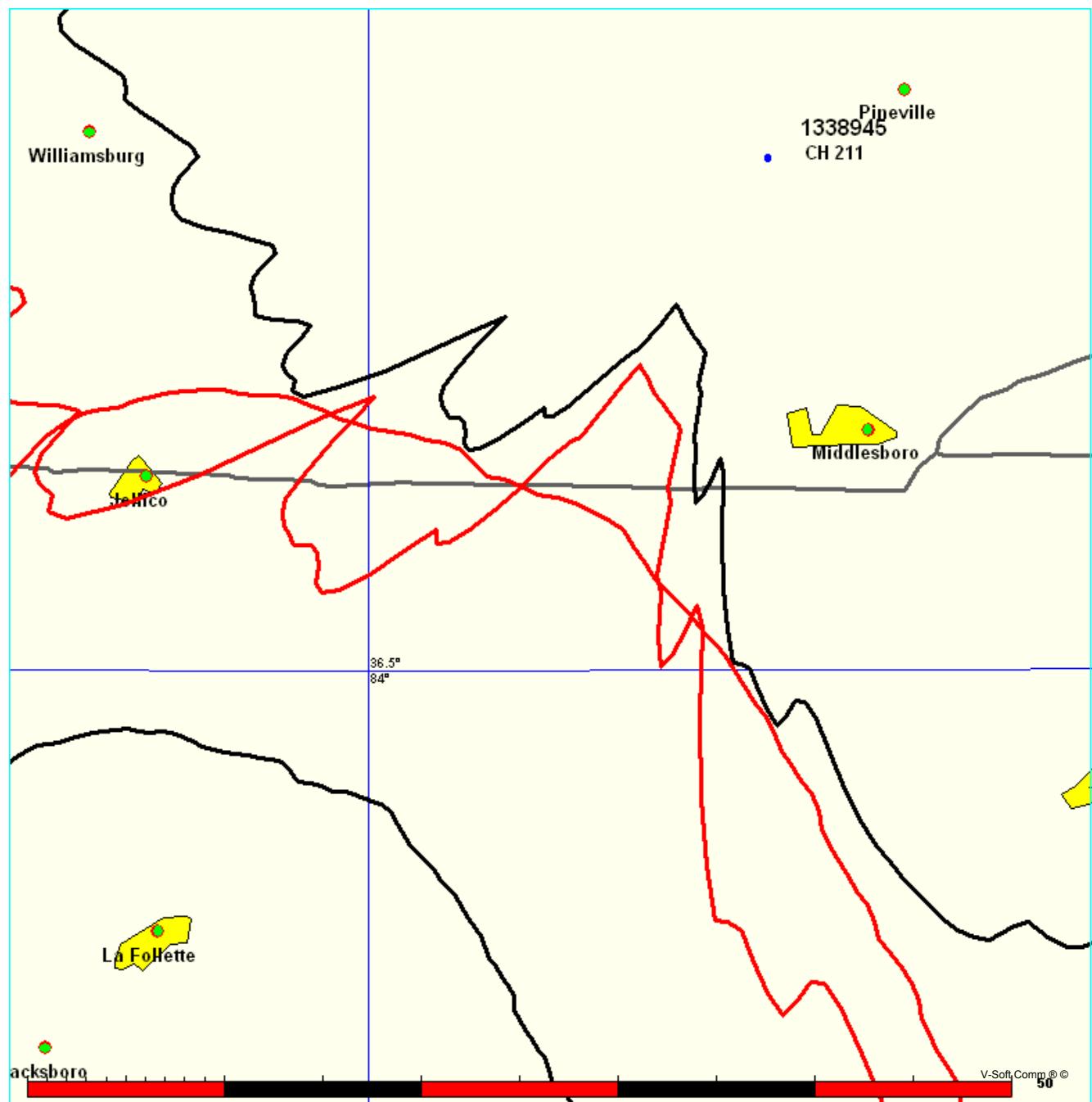


Figure 4: Pineville Modification Antenna Pattern

Pre-Rotation Antenna Pattern....

Azimuth (deg)	Effective Field
0.0	1.000
10.0	1.000
20.0	1.000
30.0	1.000
40.0	1.000
50.0	1.000
60.0	1.000
70.0	1.000
80.0	1.000
90.0	1.000
100.0	1.000
110.0	1.000
120.0	1.000
130.0	1.000
140.0	1.000
150.0	1.000
160.0	1.000
170.0	0.798
180.0	0.634
190.0	0.504
200.0	0.415
210.0	0.330
220.0	0.263
230.0	0.225
240.0	0.273
250.0	0.303
260.0	0.381
270.0	0.479
280.0	0.603
290.0	0.759
300.0	0.955
302.0	1.000
310.0	1.000
320.0	1.000
330.0	1.000
340.0	1.000
350.0	1.000

