

Minnesota Public Radio											
Minor Amendment to Ely Application											
REFERENCE	CH#	207C3	-	89.3	MHz,	Pwr= 19 kW,	HAAT= 102.5 M,	COR= 540.5 M	DISPLAY DATES		
47 53 39.9 N.									DATA 05-28-08		
91 51 50.0 W.									SEARCH 05-28-08		
Average Protected F(50-50)= 37.32 km											
73.215 Omni-directional											
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)	
207C3	1243932	APP	_CX	0.0	0.00	47 53 39.9	24.000	112.6	38.7	-149.42*	-146.00 *
Ely		MN		0.0	BNPED20071016AHI	91 51 50.0	103	541	Minnesota Public Radio		
06+2C	KBJRTV	LI	_HY	188.8	124.33	46 47 21.0	100.000	26.7	93.1	195.5R	4.6M
Superior		WI		8.6	BLCT20000517AEX	92 06 51.0	302	604	Kbjr License, Inc.		
207B	CBON-FM-2	OP	_HN	68.6	209.27	48 33 02.0	27.400	121.7	62.6	48.92	6.96 **
Thunder Bay		ON		250.5	2351	89 13 25.0	173	554	Cbon-fm-20		
206A	NEW	CP	_CX	75.7	84.93	48 04 40.0	1.000	24.2	20.3	22.02	9.59
Gunflint Lake		MN		256.5	BNPED20071019AVI	90 45 34.0	79	613	Cook County Community Radi		
207C2	1212730	APP	_CX	139.9	204.14	46 28 45.0	80.000	154.6	60.6	11.76	36.06
Ironwood		MI		321.1	BNPED20071017AJP	90 08 52.0	121	544	Korkee Inc.		
206B	CKSB-9-FM«	OP	_HN	301.8	160.81	48 38 22.0	50.000	77.2	64.2	148.5R	12.3M
Fort Frances		ON		120.4	2106	93 43 15.0	142	494	Cksb-9-fm		
209C3	1203043	APP	_EX	235.9	62.13	47 34 47.0	9.000	3.2	32.6	27.88	26.11
Virginia		MN		55.4	BNPED20071012ADE	92 32 54.0	99	551	Vcy America Inc.		
206C2	1202504	APP	DEX	208.5	133.60	46 50 10.7	25.000	65.2	43.7	31.01	32.81
Clouquet		MN		27.9	BNPED20071017ADS	92 42 08.1	134	537	Fond Du Lac Band Of Lake S		
205A	ATI KOKAN«	AL	_HN	11.4	94.17	48 43 28.0	6.000	2.7	38.0	63.5R	30.7M
Ati kokan		ON		191.6	0	91 36 39.0	100	529	Ati kokan 46		
205A	LRRP-228«	LR	_HN	10.7	99.47	48 46 23.0	6.000	2.6	36.6	63.5R	36.0M
Ati kokan		ON		190.9		91 36 39.0	100	529	Lrrp-228		

Terrain database is USGS 03 SEC Distance + R = 73.215 or FCC Spacings in KM, Distance + M = Margin in KM
In & Out distances between contours are shown at closest points. Reference zone = 2. With 3rd Adj Channels.
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.
"«" = Station meets FCC minimum distance spacing for its class.
Reference station has protected zone issue: Canada- AM tower

* Application being amended herein.

** See Exhibit #21.

HOW TO READ THE FM COMPUTER PRINT-OUT

The computer printout should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. The 60 dBu protected contour is predicted from the Commission's F(50-50) table, while the 40, 54, 80 and 100 dBu contours are interference contours derived from the Commission's F(50-10) table. Contour distances are in kilometers and are predicted using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

The column listed `"* IN *`" is the sum of the reference station's 60 dBu protected contour and the data file station's interference contour subtracted from the distance between the stations. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, the column is a measure of incoming interference. Negative distances in this column indicate the presence of contour overlap. Listed antenna heights and power are the specific antenna heights and the DA power, if applicable, along the straight line azimuths between the reference station and the database station is used and vice versa. The column labeled `"* OUT *`" shows the distance in kilometers of overlap or clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing contour overlap.

Under the "AZIMUTH" column, the first row of numbers indicate the True North bearings from the reference station toward the database stations, while the numbers in the second row indicate the reverse bearings from the database stations to the reference station.

The columns labeled "INT" and "PRO" contain the distance in kilometers of the appropriate interference contour and the protected contour of a data base station.

For I.F. relationships and relationships with commercial channel stations the minimum spacings the "IN" and "OUT" columns change their significance. The letter "R" stands for the minimum **required** distance in kilometers, while the letter "M" in the next column follows the **available clear space** separation in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended. Canadian and Mexican separation distances, U/D ratios and protected contour values are from the "US/Mexican Working Agreement and the US/Canada Working Agreement".

The call letters of stations meeting the minimum separation distances will be flagged by the characters "<<" appended to the end of the call letters. The "^" character appended to the call letters means the station has been "max-classed" according to the provisions of section 73.525 of the Rules.

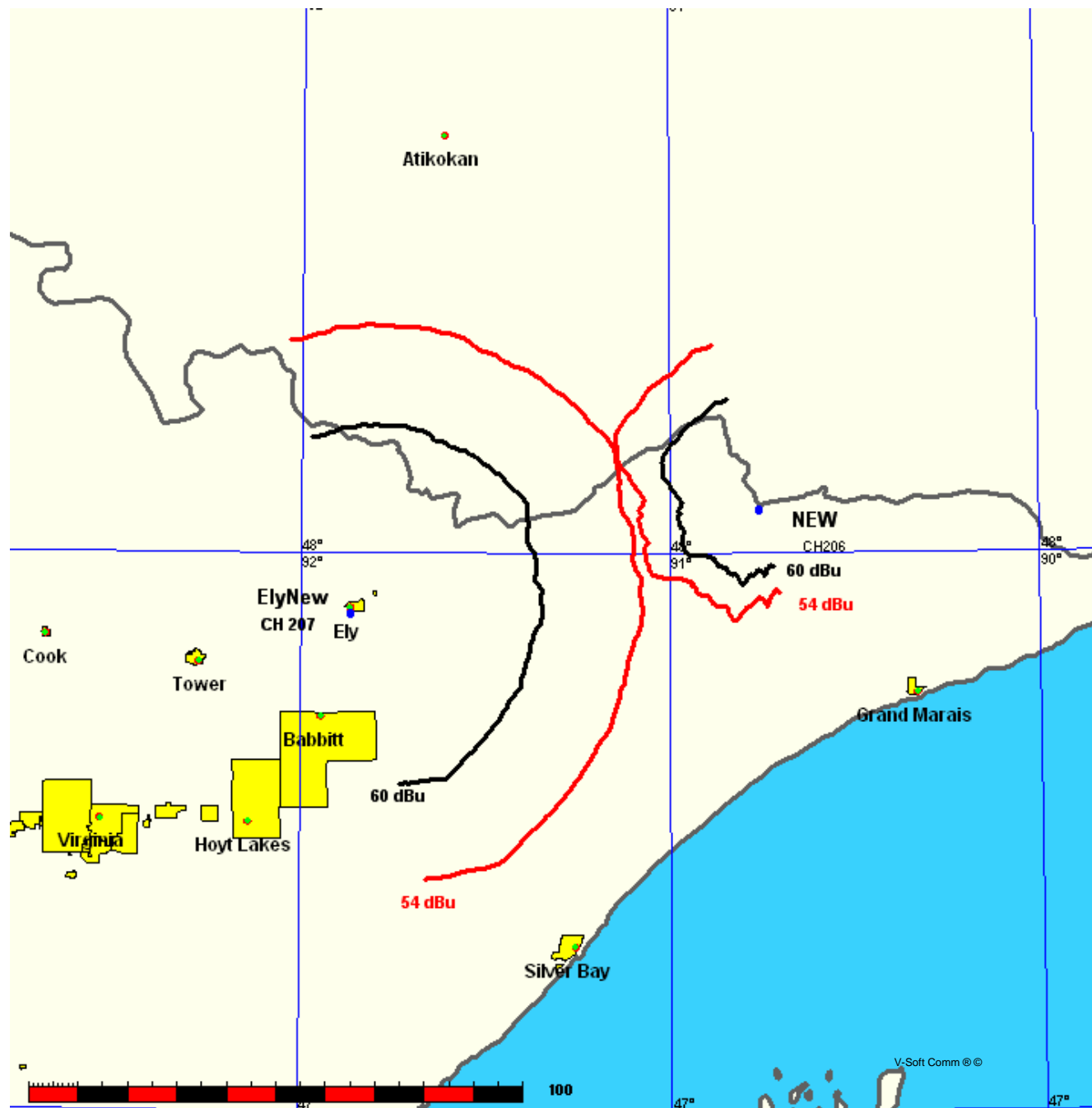
The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. "Z" indicates a 73.215 directional. An "N" indicates it is a 73.215 station that operates with an omni-directional antenna. The fifth letter will be an E, H or V depending on the type of antenna polarization. The sixth letter will be a "Y" if the antenna uses beam tilt or an "X" if the Commission is not sure, otherwise it will be an "N" or left blank.

Minnesota Public Radio
ElyNew v. New Gunflint Lake

FMCommander Single Allocation Study
05-28-2008

ElyNew CH 207 C3
19.0 kW 540.5 M COR
Prot. = 60 dBu
Intef. = 54 dBu

NEW CH 206 A BNPED20071019AVI
1.0 kW, 613 M COR
Prot. = 60 dBu
Intef. = 54 dBu



05-28-2008

USGS 03 SEC Terrain Data

FMOver Analysis

ElyNew

Channel = 207C3

Max ERP = 19 kW

RCAMSL = 540.5 M

N. Lat. 47 53 39.9

W. Lng. 91 51 50.0

Protected

60 dBu

NEW

BNPED20071019AVI

Channel = 206A

Max ERP = 1 kW

RCAMSL = 613 M

N. Lat. 48 04 40.0

W. Lng. 90 45 34.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
016.0	019.0000	0111.1	038.6	283.5	001.0000	0096.7	073.4	35.76
017.0	019.0000	0110.3	038.5	283.4	001.0000	0096.4	072.8	35.94
018.0	019.0000	0111.1	038.6	283.4	001.0000	0096.5	072.1	36.14
019.0	019.0000	0111.5	038.7	283.4	001.0000	0096.4	071.4	36.33
020.0	019.0000	0112.5	038.8	283.5	001.0000	0096.6	070.7	36.54
021.0	019.0000	0112.4	038.8	283.4	001.0000	0096.3	070.0	36.72
022.0	019.0000	0112.9	038.9	283.4	001.0000	0096.3	069.4	36.92
023.0	019.0000	0112.7	038.8	283.2	001.0000	0095.8	068.7	37.09
024.0	019.0000	0111.5	038.7	283.0	001.0000	0094.8	068.1	37.21
025.0	019.0000	0109.8	038.4	282.7	001.0000	0093.1	067.5	37.29
026.0	019.0000	0108.2	038.2	282.3	001.0000	0091.1	066.9	37.34
027.0	019.0000	0109.3	038.3	282.3	001.0000	0091.0	066.2	37.54
028.0	019.0000	0110.9	038.6	282.4	001.0000	0091.3	065.5	37.76
029.0	019.0000	0112.5	038.8	282.4	001.0000	0091.4	064.8	37.98
030.0	019.0000	0112.3	038.8	282.2	001.0000	0089.9	064.1	38.08
031.0	019.0000	0111.5	038.7	281.9	001.0000	0088.1	063.5	38.14
032.0	019.0000	0112.3	038.8	281.7	001.0000	0087.6	062.8	38.32
033.0	019.0000	0113.1	038.9	281.6	001.0000	0087.2	062.2	38.50
034.0	019.0000	0114.1	039.0	281.5	001.0000	0086.8	061.5	38.69
035.0	019.0000	0116.9	039.4	281.5	001.0000	0087.0	060.7	38.96
036.0	019.0000	0117.6	039.5	281.3	001.0000	0086.6	060.0	39.15
037.0	019.0000	0118.2	039.6	281.1	001.0000	0086.2	059.4	39.35
038.0	019.0000	0119.9	039.8	281.0	001.0000	0086.0	058.7	39.58
039.0	019.0000	0121.0	039.9	280.8	001.0000	0085.8	058.0	39.80
040.0	019.0000	0120.8	039.9	280.4	001.0000	0085.7	057.4	40.00
041.0	019.0000	0120.5	039.9	280.0	001.0000	0085.2	056.8	40.17
042.0	019.0000	0120.2	039.8	279.6	001.0000	0084.4	056.3	40.30
043.0	019.0000	0121.2	039.9	279.3	001.0000	0083.3	055.6	40.45
044.0	019.0000	0123.4	040.2	279.1	001.0000	0082.8	054.9	40.66
045.0	019.0000	0124.4	040.3	278.8	001.0000	0081.5	054.2	40.79
046.0	019.0000	0123.8	040.3	278.3	001.0000	0079.9	053.7	40.84
047.0	019.0000	0126.5	040.6	278.1	001.0000	0079.3	053.0	41.06
048.0	019.0000	0127.3	040.7	277.7	001.0000	0078.4	052.4	41.20
049.0	019.0000	0127.2	040.7	277.1	001.0000	0077.3	051.8	41.28
050.0	019.0000	0126.9	040.7	276.6	001.0000	0076.6	051.4	41.39
051.0	019.0000	0127.0	040.7	276.0	001.0000	0075.7	050.8	41.48
052.0	019.0000	0126.6	040.6	275.4	001.0000	0073.8	050.4	41.47

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
053.0	019.0000	0129.3	041.0	275.0	001.0000	0072.8	049.7	41.62
054.0	019.0000	0131.0	041.2	274.6	001.0000	0073.2	049.0	41.87
055.0	019.0000	0132.6	041.4	274.1	001.0000	0074.7	048.4	42.22
056.0	019.0000	0133.2	041.5	273.4	001.0000	0074.9	047.9	42.41
057.0	019.0000	0133.7	041.5	272.8	001.0000	0073.8	047.4	42.46
058.0	019.0000	0133.7	041.5	272.0	001.0000	0074.4	047.0	42.67
059.0	019.0000	0131.6	041.2	271.1	001.0000	0077.3	046.9	43.00
060.0	019.0000	0128.5	040.9	270.1	001.0000	0079.5	046.9	43.22
061.0	019.0000	0125.8	040.5	269.2	001.0000	0079.1	046.8	43.20
062.0	019.0000	0123.4	040.2	268.2	001.0000	0076.3	046.8	42.95
063.0	019.0000	0121.6	040.0	267.3	001.0000	0076.2	046.7	42.96
064.0	019.0000	0118.8	039.6	266.4	001.0000	0078.4	046.7	43.15
065.0	019.0000	0115.3	039.2	265.4	001.0000	0081.0	046.9	43.33
066.0	019.0000	0113.1	038.9	264.5	001.0000	0079.6	047.0	43.18
067.0	019.0000	0111.1	038.6	263.6	001.0000	0079.9	047.1	43.18
068.0	019.0000	0109.0	038.3	262.7	001.0000	0079.5	047.2	43.11
069.0	019.0000	0107.9	038.1	261.9	001.0000	0079.2	047.2	43.08
070.0	019.0000	0108.4	038.2	261.1	001.0000	0078.0	047.0	43.03
071.0	019.0000	0111.4	038.7	260.4	001.0000	0078.1	046.4	43.23
072.0	019.0000	0112.4	038.8	259.6	001.0000	0079.2	046.2	43.42
073.0	019.0000	0112.6	038.8	258.7	001.0000	0078.4	046.1	43.37
074.0	019.0000	0112.6	038.8	257.9	001.0000	0076.9	046.1	43.25
075.0	019.0000	0111.9	038.7	257.0	001.0000	0076.4	046.2	43.17
076.0	019.0000	0110.8	038.6	256.2	001.0000	0076.2	046.3	43.10
077.0	019.0000	0109.1	038.3	255.4	001.0000	0074.1	046.6	42.80
078.0	019.0000	0107.4	038.1	254.6	001.0000	0073.2	046.9	42.61
079.0	019.0000	0105.5	037.8	253.8	001.0000	0073.4	047.2	42.51
080.0	019.0000	0104.9	037.7	253.0	001.0000	0075.4	047.4	42.65
081.0	019.0000	0106.8	038.0	252.2	001.0000	0078.7	047.2	43.03
082.0	019.0000	0109.5	038.4	251.3	001.0000	0080.5	046.9	43.30
083.0	019.0000	0111.8	038.7	250.4	001.0000	0081.0	046.7	43.40
084.0	019.0000	0111.6	038.7	249.6	001.0000	0081.4	046.9	43.37
085.0	019.0000	0109.4	038.4	248.9	001.0000	0082.1	047.4	43.26
086.0	019.0000	0108.4	038.2	248.2	001.0000	0082.7	047.8	43.20
087.0	019.0000	0109.7	038.4	247.4	001.0000	0083.5	047.8	43.26
088.0	019.0000	0110.8	038.6	246.6	001.0000	0084.3	047.9	43.30
089.0	019.0000	0110.8	038.6	245.8	001.0000	0084.3	048.2	43.20
090.0	019.0000	0110.9	038.6	245.1	001.0000	0083.8	048.4	43.07
091.0	019.0000	0110.5	038.5	244.4	001.0000	0083.7	048.8	42.93
092.0	019.0000	0109.7	038.4	243.8	001.0000	0083.9	049.2	42.80
093.0	019.0000	0108.5	038.2	243.2	001.0000	0084.4	049.7	42.67
094.0	019.0000	0106.7	038.0	242.7	001.0000	0084.9	050.3	42.50
095.0	019.0000	0104.7	037.6	242.3	001.0000	0085.3	050.9	42.32
096.0	019.0000	0102.4	037.3	241.9	001.0000	0085.5	051.5	42.10
097.0	019.0000	0101.2	037.1	241.4	001.0000	0085.8	052.1	41.93
098.0	019.0000	0100.7	037.0	240.9	001.0000	0086.0	052.5	41.78
099.0	019.0000	0100.4	037.0	240.4	001.0000	0085.5	053.0	41.58
100.0	019.0000	0099.7	036.9	240.0	001.0000	0084.9	053.5	41.34
101.0	019.0000	0099.8	036.9	239.4	001.0000	0084.5	053.9	41.16
102.0	019.0000	0099.9	036.9	238.9	001.0000	0084.0	054.3	40.97
103.0	019.0000	0100.1	036.9	238.4	001.0000	0083.4	054.7	40.77

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
104.0	019.0000	0100.0	036.9	238.0	001.0000	0082.5	055.2	40.53
105.0	019.0000	0099.6	036.8	237.6	001.0000	0081.7	055.7	40.28
106.0	019.0000	0099.4	036.8	237.2	001.0000	0081.0	056.2	40.04
107.0	019.0000	0099.4	036.8	236.7	001.0000	0079.9	056.7	39.79
108.0	019.0000	0099.8	036.9	236.3	001.0000	0078.5	057.2	39.51
109.0	019.0000	0100.1	036.9	235.9	001.0000	0077.2	057.7	39.25
110.0	019.0000	0100.2	036.9	235.5	001.0000	0076.2	058.2	39.00
111.0	019.0000	0100.4	037.0	235.1	001.0000	0075.2	058.7	38.75
112.0	019.0000	0101.1	037.1	234.7	001.0000	0074.0	059.2	38.50
113.0	019.0000	0102.2	037.3	234.2	001.0000	0072.8	059.7	38.26
114.0	019.0000	0102.2	037.3	233.9	001.0000	0071.8	060.2	38.00
115.0	019.0000	0101.2	037.1	233.7	001.0000	0071.2	060.9	37.76
116.0	019.0000	0099.5	036.8	233.7	001.0000	0071.0	061.6	37.53
117.0	019.0000	0098.9	036.7	233.5	001.0000	0070.3	062.2	37.29
118.0	019.0000	0098.6	036.7	233.3	001.0000	0069.5	062.8	37.06
119.0	019.0000	0098.4	036.6	233.1	001.0000	0068.9	063.4	36.84
120.0	019.0000	0098.6	036.7	232.8	001.0000	0068.2	064.0	36.63
121.0	019.0000	0099.0	036.7	232.6	001.0000	0067.4	064.5	36.42
122.0	019.0000	0099.0	036.7	232.4	001.0000	0066.9	065.1	36.22
123.0	019.0000	0098.8	036.7	232.2	001.0000	0066.4	065.8	36.02
124.0	019.0000	0098.9	036.7	232.0	001.0000	0065.9	066.4	35.83
125.0	019.0000	0099.3	036.8	231.8	001.0000	0065.3	067.0	35.63
126.0	019.0000	0099.4	036.8	231.7	001.0000	0064.9	067.6	35.44
127.0	019.0000	0099.2	036.8	231.6	001.0000	0064.6	068.2	35.25
128.0	019.0000	0099.1	036.8	231.5	001.0000	0064.3	068.8	35.07
129.0	019.0000	0099.3	036.8	231.3	001.0000	0063.9	069.5	34.88
130.0	019.0000	0099.5	036.8	231.2	001.0000	0063.5	070.1	34.69
131.0	019.0000	0099.8	036.9	231.1	001.0000	0063.1	070.7	34.50
132.0	019.0000	0099.9	036.9	231.0	001.0000	0062.9	071.3	34.32
133.0	019.0000	0099.8	036.9	230.9	001.0000	0062.7	072.0	34.15
134.0	019.0000	0099.8	036.9	230.8	001.0000	0062.5	072.6	33.97
135.0	019.0000	0099.8	036.9	230.8	001.0000	0062.4	073.3	33.80
136.0	019.0000	0100.2	036.9	230.7	001.0000	0062.1	073.9	33.62

05-28-2008 USGS 03 SEC Terrain Data

NEW BNPED20071019AVI
 Channel = 206A
 Max ERP = 1 kW
 RCAMSL = 613 M
 N. Lat. 48 04 40.0
 W. Lng. 90 45 34.0
 Protected
 60 dBu

ElyNew
 Channel = 207C3
 Max ERP = 19 kW
 RCAMSL = 540.5 M
 N. Lat. 47 53 39.9
 W. Lng. 91 51 50.0
 Interfering
 54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
196.0	001.0000	0063.2	014.5	084.9	019.0000	0109.7	078.8	47.68
197.0	001.0000	0060.9	014.3	084.7	019.0000	0110.2	078.7	47.75
198.0	001.0000	0058.3	014.0	084.4	019.0000	0110.7	078.5	47.81
199.0	001.0000	0056.0	013.7	084.2	019.0000	0111.2	078.4	47.87
200.0	001.0000	0055.9	013.7	084.1	019.0000	0111.4	078.2	47.94
201.0	001.0000	0056.3	013.8	084.0	019.0000	0111.5	078.0	48.01
202.0	001.0000	0057.9	013.9	084.1	019.0000	0111.4	077.7	48.10
203.0	001.0000	0058.5	014.0	084.0	019.0000	0111.5	077.4	48.17
204.0	001.0000	0058.8	014.0	084.0	019.0000	0111.7	077.2	48.24
205.0	001.0000	0058.7	014.0	083.9	019.0000	0111.9	077.0	48.32
206.0	001.0000	0057.2	013.9	083.7	019.0000	0112.2	076.9	48.37
207.0	001.0000	0057.2	013.9	083.6	019.0000	0112.2	076.7	48.43
208.0	001.0000	0056.5	013.8	083.4	019.0000	0112.2	076.5	48.47
209.0	001.0000	0055.3	013.6	083.2	019.0000	0112.0	076.4	48.50
210.0	001.0000	0053.6	013.4	083.0	019.0000	0111.8	076.3	48.51
211.0	001.0000	0053.7	013.4	082.9	019.0000	0111.7	076.1	48.56
212.0	001.0000	0054.0	013.5	082.8	019.0000	0111.6	075.9	48.61
213.0	001.0000	0054.5	013.5	082.7	019.0000	0111.4	075.7	48.67
214.0	001.0000	0055.7	013.7	082.7	019.0000	0111.4	075.4	48.75
215.0	001.0000	0056.6	013.8	082.7	019.0000	0111.3	075.1	48.82
216.0	001.0000	0057.6	013.9	082.6	019.0000	0111.2	074.9	48.89
217.0	001.0000	0058.7	014.0	082.5	019.0000	0111.1	074.6	48.96
218.0	001.0000	0056.7	013.8	082.3	019.0000	0110.5	074.6	48.94
219.0	001.0000	0054.2	013.5	082.0	019.0000	0109.4	074.7	48.87
220.0	001.0000	0053.8	013.5	081.8	019.0000	0108.8	074.5	48.87
221.0	001.0000	0055.1	013.6	081.8	019.0000	0108.6	074.3	48.94
222.0	001.0000	0055.0	013.6	081.6	019.0000	0108.1	074.1	48.96
223.0	001.0000	0052.4	013.3	081.3	019.0000	0107.4	074.2	48.90
224.0	001.0000	0052.3	013.3	081.2	019.0000	0107.1	074.1	48.92
225.0	001.0000	0053.9	013.5	081.1	019.0000	0107.0	073.8	49.00
226.0	001.0000	0054.1	013.5	081.0	019.0000	0106.8	073.6	49.04
227.0	001.0000	0054.8	013.6	080.9	019.0000	0106.5	073.4	49.08
228.0	001.0000	0056.9	013.8	080.8	019.0000	0106.4	073.1	49.18
229.0	001.0000	0058.3	014.0	080.7	019.0000	0106.2	072.8	49.24

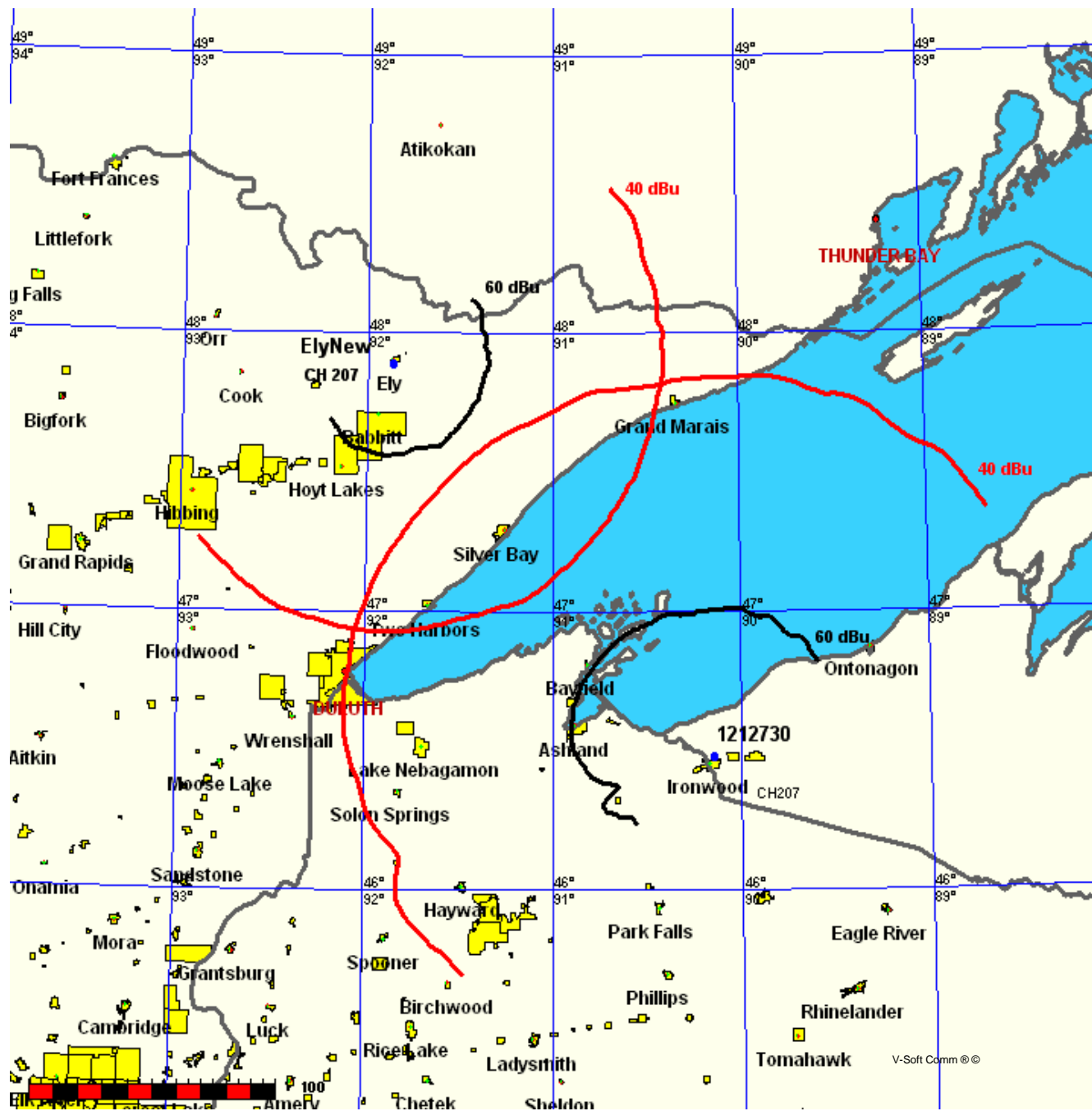
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
230.0	001.0000	0060.3	014.2	080.7	019.0000	0106.1	072.5	49.33
231.0	001.0000	0063.0	014.5	080.6	019.0000	0105.9	072.1	49.43
232.0	001.0000	0065.7	014.8	080.6	019.0000	0105.8	071.7	49.53
233.0	001.0000	0068.6	015.1	080.5	019.0000	0105.6	071.3	49.64
234.0	001.0000	0072.1	015.5	080.4	019.0000	0105.5	070.9	49.78
235.0	001.0000	0074.9	015.8	080.4	019.0000	0105.4	070.5	49.89
236.0	001.0000	0077.6	016.1	080.3	019.0000	0105.2	070.1	50.00
237.0	001.0000	0080.6	016.4	080.2	019.0000	0105.1	069.6	50.13
238.0	001.0000	0082.6	016.7	080.0	019.0000	0105.0	069.3	50.22
239.0	001.0000	0084.1	016.9	079.9	019.0000	0104.9	069.0	50.30
240.0	001.0000	0084.9	017.0	079.7	019.0000	0104.9	068.8	50.36
241.0	001.0000	0086.0	017.1	079.5	019.0000	0105.0	068.6	50.43
242.0	001.0000	0085.5	017.0	079.2	019.0000	0105.2	068.6	50.45
243.0	001.0000	0084.6	016.9	079.0	019.0000	0105.5	068.6	50.47
244.0	001.0000	0083.8	016.8	078.7	019.0000	0105.9	068.6	50.48
245.0	001.0000	0083.8	016.8	078.5	019.0000	0106.3	068.5	50.53
246.0	001.0000	0084.4	016.9	078.2	019.0000	0106.9	068.4	50.60
247.0	001.0000	0083.9	016.8	078.0	019.0000	0107.4	068.4	50.64
248.0	001.0000	0082.9	016.7	077.7	019.0000	0107.9	068.4	50.65
249.0	001.0000	0082.0	016.6	077.5	019.0000	0108.3	068.5	50.65
250.0	001.0000	0081.1	016.5	077.2	019.0000	0108.7	068.5	50.65
251.0	001.0000	0080.8	016.5	077.0	019.0000	0109.1	068.5	50.68
252.0	001.0000	0079.3	016.3	076.7	019.0000	0109.8	068.7	50.67
253.0	001.0000	0075.5	015.8	076.5	019.0000	0110.3	069.1	50.57
254.0	001.0000	0073.3	015.6	076.2	019.0000	0110.6	069.3	50.52
255.0	001.0000	0073.6	015.6	076.0	019.0000	0110.8	069.3	50.54
256.0	001.0000	0075.8	015.9	075.8	019.0000	0111.0	069.0	50.63
257.0	001.0000	0076.5	016.0	075.5	019.0000	0111.2	068.9	50.67
258.0	001.0000	0077.1	016.0	075.3	019.0000	0111.5	068.9	50.70
259.0	001.0000	0078.8	016.2	075.1	019.0000	0111.8	068.7	50.78
260.0	001.0000	0078.8	016.2	074.8	019.0000	0112.1	068.7	50.79
261.0	001.0000	0077.9	016.1	074.6	019.0000	0112.3	068.8	50.76
262.0	001.0000	0079.4	016.3	074.3	019.0000	0112.5	068.7	50.81
263.0	001.0000	0079.7	016.3	074.1	019.0000	0112.6	068.7	50.82
264.0	001.0000	0079.7	016.3	073.9	019.0000	0112.6	068.7	50.81
265.0	001.0000	0080.6	016.5	073.6	019.0000	0112.7	068.7	50.84
266.0	001.0000	0079.7	016.3	073.4	019.0000	0112.8	068.8	50.79
267.0	001.0000	0076.6	016.0	073.2	019.0000	0112.7	069.3	50.65
268.0	001.0000	0075.8	015.9	073.0	019.0000	0112.6	069.4	50.60
269.0	001.0000	0078.7	016.2	072.7	019.0000	0112.5	069.1	50.68
270.0	001.0000	0079.7	016.3	072.5	019.0000	0112.5	069.1	50.69
271.0	001.0000	0077.7	016.1	072.3	019.0000	0112.5	069.4	50.59
272.0	001.0000	0074.5	015.7	072.2	019.0000	0112.4	069.9	50.45
273.0	001.0000	0074.3	015.7	072.0	019.0000	0112.4	070.0	50.41
274.0	001.0000	0074.8	015.8	071.8	019.0000	0112.3	070.0	50.40
275.0	001.0000	0072.8	015.5	071.6	019.0000	0112.2	070.4	50.30
276.0	001.0000	0075.6	015.9	071.3	019.0000	0112.0	070.1	50.35
277.0	001.0000	0077.1	016.0	071.1	019.0000	0111.6	070.1	50.33
278.0	001.0000	0079.1	016.3	070.8	019.0000	0110.7	070.0	50.32
279.0	001.0000	0082.3	016.6	070.4	019.0000	0109.7	069.8	50.32
280.0	001.0000	0085.2	017.0	070.1	019.0000	0108.6	069.6	50.31

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
281.0	001.0000	0086.1	017.1	069.8	019.0000	0108.0	069.7	50.26
282.0	001.0000	0088.9	017.4	069.5	019.0000	0107.7	069.6	50.28
283.0	001.0000	0094.8	018.1	069.0	019.0000	0108.0	069.2	50.41
284.0	001.0000	0097.1	018.3	068.6	019.0000	0108.4	069.2	50.44
285.0	001.0000	0097.8	018.4	068.4	019.0000	0108.6	069.3	50.42
286.0	001.0000	0102.5	018.8	067.9	019.0000	0109.1	069.1	50.50
287.0	001.0000	0107.2	019.3	067.5	019.0000	0110.0	069.0	50.60
288.0	001.0000	0114.3	019.9	066.9	019.0000	0111.4	068.7	50.76
289.0	001.0000	0119.3	020.3	066.5	019.0000	0112.3	068.6	50.84
290.0	001.0000	0121.2	020.5	066.2	019.0000	0112.9	068.7	50.82
291.0	001.0000	0123.4	020.7	065.9	019.0000	0113.4	068.9	50.81
292.0	001.0000	0126.4	020.9	065.5	019.0000	0114.1	069.0	50.82
293.0	001.0000	0128.1	021.0	065.2	019.0000	0114.8	069.1	50.80
294.0	001.0000	0130.7	021.2	064.9	019.0000	0115.6	069.3	50.81
295.0	001.0000	0134.2	021.5	064.5	019.0000	0116.8	069.4	50.83
296.0	001.0000	0137.0	021.7	064.2	019.0000	0118.0	069.5	50.85
297.0	001.0000	0138.9	021.8	063.9	019.0000	0119.1	069.8	50.84
298.0	001.0000	0140.2	021.9	063.7	019.0000	0119.9	070.0	50.81
299.0	001.0000	0140.1	021.9	063.5	019.0000	0120.4	070.3	50.74
300.0	001.0000	0139.6	021.9	063.3	019.0000	0120.8	070.6	50.66
301.0	001.0000	0139.3	021.8	063.2	019.0000	0121.2	071.0	50.58
302.0	001.0000	0139.7	021.9	063.0	019.0000	0121.6	071.3	50.50
303.0	001.0000	0140.3	021.9	062.8	019.0000	0121.9	071.6	50.43
304.0	001.0000	0140.4	021.9	062.7	019.0000	0122.2	071.9	50.34
305.0	001.0000	0140.3	021.9	062.5	019.0000	0122.5	072.3	50.25
306.0	001.0000	0139.9	021.9	062.4	019.0000	0122.7	072.6	50.16
307.0	001.0000	0138.6	021.8	062.3	019.0000	0122.8	073.0	50.05
308.0	001.0000	0137.1	021.7	062.3	019.0000	0122.9	073.4	49.93
309.0	001.0000	0135.2	021.5	062.3	019.0000	0123.0	073.8	49.82
310.0	001.0000	0135.6	021.6	062.1	019.0000	0123.2	074.1	49.73
311.0	001.0000	0136.9	021.7	061.9	019.0000	0123.6	074.4	49.65
312.0	001.0000	0137.1	021.7	061.8	019.0000	0123.7	074.8	49.56
313.0	001.0000	0137.8	021.7	061.7	019.0000	0124.0	075.1	49.47
314.0	001.0000	0138.9	021.8	061.5	019.0000	0124.3	075.4	49.38
315.0	001.0000	0139.9	021.9	061.4	019.0000	0124.6	075.8	49.29
316.0	001.0000	0140.7	021.9	061.3	019.0000	0124.9	076.1	49.21

Minnesota Public Radio
ElyNew v. 1212730

FMCommander Single Allocation Study
05-28-2008

ElyNew	CH 207 C3	1212730	CH 207 C2	BNPED20071017AJP
19.0 kW	540.5 M COR	80.0 kW	544 M COR	
Prot. = 60 dBu		Prot. = 60 dBu		
Intef. = 40 dBu		Intef. = 40 dBu		



05-28-2008

USGS 03 SEC Terrain Data

FMOver Analysis

ElyNew

Channel = 207C3

Max ERP = 19 kW

RCAMSL = 540.5 M

N. Lat. 47 53 39.9

W. Lng. 91 51 50.0

Protected

60 dBu

1212730

BNPED20071017AJP

Channel = 207C2

Max ERP = 80 kW

RCAMSL = 544 M

N. Lat. 46 28 45.0

W. Lng. 90 08 52.0

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
080.0	019.0000	0104.9	037.7	331.1	080.0000	0176.3	188.0	33.75
081.0	019.0000	0106.8	038.0	331.1	080.0000	0176.3	187.3	33.88
082.0	019.0000	0109.5	038.4	331.2	080.0000	0176.2	186.5	34.02
083.0	019.0000	0111.8	038.7	331.2	080.0000	0176.2	185.7	34.16
084.0	019.0000	0111.6	038.7	331.1	080.0000	0176.4	185.1	34.27
085.0	019.0000	0109.4	038.4	330.9	080.0000	0176.6	184.7	34.37
086.0	019.0000	0108.4	038.2	330.8	080.0000	0176.8	184.1	34.47
087.0	019.0000	0109.7	038.4	330.7	080.0000	0176.8	183.4	34.60
088.0	019.0000	0110.8	038.6	330.7	080.0000	0176.9	182.8	34.73
089.0	019.0000	0110.8	038.6	330.6	080.0000	0177.1	182.2	34.84
090.0	019.0000	0110.9	038.6	330.5	080.0000	0177.3	181.6	34.95
091.0	019.0000	0110.5	038.5	330.4	080.0000	0177.4	181.1	35.06
092.0	019.0000	0109.7	038.4	330.2	080.0000	0177.7	180.6	35.16
093.0	019.0000	0108.5	038.2	330.0	080.0000	0178.0	180.1	35.25
094.0	019.0000	0106.7	038.0	329.9	080.0000	0178.4	179.7	35.33
095.0	019.0000	0104.7	037.6	329.6	080.0000	0179.0	179.4	35.41
096.0	019.0000	0102.4	037.3	329.4	080.0000	0179.6	179.1	35.48
097.0	019.0000	0101.2	037.1	329.3	080.0000	0180.0	178.7	35.56
098.0	019.0000	0100.7	037.0	329.1	080.0000	0180.4	178.2	35.65
099.0	019.0000	0100.4	037.0	329.0	080.0000	0180.7	177.8	35.74
100.0	019.0000	0099.7	036.9	328.8	080.0000	0181.0	177.4	35.83
101.0	019.0000	0099.8	036.9	328.7	080.0000	0181.3	176.9	35.92
102.0	019.0000	0099.9	036.9	328.5	080.0000	0181.5	176.4	36.01
103.0	019.0000	0100.1	036.9	328.4	080.0000	0181.8	175.9	36.11
104.0	019.0000	0100.0	036.9	328.2	080.0000	0182.2	175.5	36.20
105.0	019.0000	0099.6	036.8	328.0	080.0000	0182.5	175.1	36.27
106.0	019.0000	0099.4	036.8	327.9	080.0000	0182.8	174.7	36.35
107.0	019.0000	0099.4	036.8	327.7	080.0000	0183.1	174.3	36.43
108.0	019.0000	0099.8	036.9	327.6	080.0000	0183.4	173.9	36.52
109.0	019.0000	0100.1	036.9	327.4	080.0000	0183.7	173.4	36.61
110.0	019.0000	0100.2	036.9	327.2	080.0000	0184.0	173.0	36.69
111.0	019.0000	0100.4	037.0	327.1	080.0000	0184.3	172.6	36.77
112.0	019.0000	0101.1	037.1	326.9	080.0000	0184.6	172.2	36.86
113.0	019.0000	0102.2	037.3	326.8	080.0000	0184.8	171.7	36.95
114.0	019.0000	0102.2	037.3	326.6	080.0000	0185.1	171.3	37.02
115.0	019.0000	0101.2	037.1	326.4	080.0000	0185.4	171.1	37.06
116.0	019.0000	0099.5	036.8	326.1	080.0000	0185.8	171.1	37.08

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
117.0	019.0000	0098.9	036.7	325.9	080.0000	0186.1	170.9	37.13
118.0	019.0000	0098.6	036.7	325.7	080.0000	0186.3	170.6	37.18
119.0	019.0000	0098.4	036.6	325.5	080.0000	0186.6	170.4	37.23
120.0	019.0000	0098.6	036.7	325.3	080.0000	0186.8	170.1	37.29
121.0	019.0000	0099.0	036.7	325.1	080.0000	0187.0	169.8	37.35
122.0	019.0000	0099.0	036.7	324.9	080.0000	0187.2	169.5	37.40
123.0	019.0000	0098.8	036.7	324.7	080.0000	0187.4	169.3	37.44
124.0	019.0000	0098.9	036.7	324.5	080.0000	0187.6	169.1	37.48
125.0	019.0000	0099.3	036.8	324.3	080.0000	0187.8	168.8	37.53
126.0	019.0000	0099.4	036.8	324.1	080.0000	0187.9	168.6	37.57
127.0	019.0000	0099.2	036.8	323.9	080.0000	0187.9	168.5	37.60
128.0	019.0000	0099.1	036.8	323.7	080.0000	0187.8	168.3	37.62
129.0	019.0000	0099.3	036.8	323.5	080.0000	0187.7	168.1	37.65
130.0	019.0000	0099.5	036.8	323.3	080.0000	0187.6	168.0	37.68
131.0	019.0000	0099.8	036.9	323.1	080.0000	0187.6	167.8	37.71
132.0	019.0000	0099.9	036.9	322.9	080.0000	0187.5	167.7	37.74
133.0	019.0000	0099.8	036.9	322.6	080.0000	0187.5	167.6	37.75
134.0	019.0000	0099.8	036.9	322.4	080.0000	0187.7	167.5	37.77
135.0	019.0000	0099.8	036.9	322.2	080.0000	0187.9	167.4	37.79
136.0	019.0000	0100.2	036.9	322.0	080.0000	0188.1	167.3	37.81
137.0	019.0000	0100.6	037.0	321.8	080.0000	0188.2	167.2	37.83
138.0	019.0000	0101.0	037.1	321.6	080.0000	0188.4	167.1	37.85
139.0	019.0000	0101.0	037.1	321.3	080.0000	0188.4	167.1	37.86
140.0	019.0000	0100.4	037.0	321.1	080.0000	0188.5	167.2	37.84
141.0	019.0000	0100.7	037.0	320.9	080.0000	0188.5	167.1	37.85
142.0	019.0000	0101.6	037.2	320.7	080.0000	0188.4	167.0	37.87
143.0	019.0000	0103.1	037.4	320.4	080.0000	0188.3	166.8	37.90
144.0	019.0000	0104.8	037.7	320.2	080.0000	0188.1	166.6	37.94
145.0	019.0000	0105.7	037.8	320.0	080.0000	0188.0	166.5	37.95
146.0	019.0000	0106.8	038.0	319.7	080.0000	0188.0	166.4	37.96
147.0	019.0000	0107.7	038.1	319.5	080.0000	0188.0	166.4	37.97
148.0	019.0000	0108.1	038.2	319.3	080.0000	0188.1	166.4	37.96
149.0	019.0000	0108.7	038.3	319.0	080.0000	0188.1	166.5	37.95
150.0	019.0000	0108.4	038.2	318.8	080.0000	0188.1	166.7	37.92
151.0	019.0000	0107.4	038.1	318.6	080.0000	0188.0	167.0	37.87
152.0	019.0000	0105.6	037.8	318.4	080.0000	0187.8	167.4	37.79
153.0	019.0000	0103.4	037.4	318.2	080.0000	0187.5	167.9	37.69
154.0	019.0000	0101.6	037.2	318.0	080.0000	0187.3	168.4	37.60
155.0	019.0000	0100.1	036.9	317.9	080.0000	0187.1	168.8	37.52
156.0	019.0000	0098.9	036.7	317.7	080.0000	0186.8	169.2	37.44
157.0	019.0000	0097.9	036.6	317.5	080.0000	0186.6	169.6	37.37
158.0	019.0000	0097.1	036.4	317.3	080.0000	0186.5	169.9	37.31
159.0	019.0000	0096.7	036.3	317.1	080.0000	0186.4	170.2	37.25
160.0	019.0000	0095.9	036.2	316.9	080.0000	0186.4	170.6	37.18
161.0	019.0000	0094.9	036.0	316.8	080.0000	0186.3	171.1	37.10
162.0	019.0000	0093.4	035.8	316.6	080.0000	0186.3	171.6	37.01
163.0	019.0000	0092.7	035.7	316.5	080.0000	0186.4	172.0	36.94
164.0	019.0000	0092.4	035.6	316.3	080.0000	0186.4	172.3	36.87
165.0	019.0000	0092.1	035.5	316.1	080.0000	0186.4	172.7	36.81
166.0	019.0000	0091.8	035.5	316.0	080.0000	0186.4	173.0	36.74
167.0	019.0000	0092.0	035.5	315.8	080.0000	0186.3	173.3	36.69

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
168.0	019.0000	0092.9	035.7	315.6	080.0000	0186.2	173.5	36.65
169.0	019.0000	0094.1	035.9	315.4	080.0000	0185.9	173.7	36.61
170.0	019.0000	0095.2	036.1	315.2	080.0000	0185.7	173.9	36.57
171.0	019.0000	0096.2	036.3	315.0	080.0000	0185.4	174.2	36.52
172.0	019.0000	0097.2	036.4	314.8	080.0000	0185.3	174.4	36.46
173.0	019.0000	0097.9	036.6	314.6	080.0000	0185.2	174.7	36.40
174.0	019.0000	0098.6	036.7	314.4	080.0000	0185.1	175.1	36.34
175.0	019.0000	0099.3	036.8	314.2	080.0000	0185.0	175.4	36.28
176.0	019.0000	0100.0	036.9	314.0	080.0000	0185.0	175.8	36.22
177.0	019.0000	0100.1	036.9	313.9	080.0000	0185.1	176.2	36.14
178.0	019.0000	0100.0	036.9	313.7	080.0000	0185.1	176.7	36.05
179.0	019.0000	0099.8	036.9	313.6	080.0000	0185.1	177.1	35.96
180.0	019.0000	0100.2	036.9	313.4	080.0000	0185.1	177.6	35.88
181.0	019.0000	0100.8	037.0	313.3	080.0000	0185.1	178.0	35.80
182.0	019.0000	0101.3	037.1	313.1	080.0000	0185.1	178.4	35.72
183.0	019.0000	0101.5	037.1	313.0	080.0000	0185.0	178.9	35.63
184.0	019.0000	0101.6	037.2	312.8	080.0000	0185.0	179.4	35.54
185.0	019.0000	0101.5	037.1	312.7	080.0000	0184.9	179.9	35.44
186.0	019.0000	0101.3	037.1	312.6	080.0000	0184.8	180.5	35.33
187.0	019.0000	0100.9	037.1	312.5	080.0000	0184.8	181.1	35.23
188.0	019.0000	0100.8	037.0	312.4	080.0000	0184.8	181.6	35.12
189.0	019.0000	0100.5	037.0	312.3	080.0000	0184.9	182.2	35.02
190.0	019.0000	0100.7	037.0	312.2	080.0000	0184.9	182.7	34.92
191.0	019.0000	0100.6	037.0	312.1	080.0000	0185.0	183.3	34.81
192.0	019.0000	0100.2	036.9	312.0	080.0000	0185.0	183.9	34.70
193.0	019.0000	0099.8	036.9	311.9	080.0000	0185.0	184.5	34.59
194.0	019.0000	0099.8	036.9	311.8	080.0000	0185.1	185.1	34.48
195.0	019.0000	0099.7	036.9	311.8	080.0000	0185.1	185.6	34.37
196.0	019.0000	0099.0	036.7	311.7	080.0000	0185.1	186.3	34.25
197.0	019.0000	0098.5	036.7	311.6	080.0000	0185.1	186.9	34.14
198.0	019.0000	0098.7	036.7	311.6	080.0000	0185.2	187.5	34.03
199.0	019.0000	0099.0	036.7	311.5	080.0000	0185.2	188.0	33.92
200.0	019.0000	0099.4	036.8	311.4	080.0000	0185.2	188.6	33.81

05-28-2008 USGS 03 SEC Terrain Data

1212730 BNPED20071017AJP
 Channel = 207C2
 Max ERP = 80 kW
 RCAMSL = 544 M
 N. Lat. 46 28 45.0
 W. Lng. 90 08 52.0
 Protected
 60 dBu

ElyNew
 Channel = 207C3
 Max ERP = 19 kW
 RCAMSL = 540.5 M
 N. Lat. 47 53 39.9
 W. Lng. 91 51 50.0
 Interfering
 40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
261.0	080.0000	0109.1	050.5	153.6	019.0000	0102.2	184.1	26.19
262.0	080.0000	0112.3	051.0	153.7	019.0000	0102.1	183.1	26.36
263.0	080.0000	0114.8	051.4	153.7	019.0000	0102.1	182.2	26.54
264.0	080.0000	0117.3	051.8	153.8	019.0000	0102.0	181.2	26.71
265.0	080.0000	0120.0	052.2	153.8	019.0000	0102.0	180.2	26.89
266.0	080.0000	0122.6	052.6	153.8	019.0000	0102.0	179.2	27.07
267.0	080.0000	0126.1	053.1	153.8	019.0000	0101.9	178.2	27.25
268.0	080.0000	0132.5	054.0	154.0	019.0000	0101.6	177.0	27.46
269.0	080.0000	0139.0	054.9	154.2	019.0000	0101.4	175.7	27.68
270.0	080.0000	0144.2	055.6	154.2	019.0000	0101.2	174.6	27.89
271.0	080.0000	0148.1	056.2	154.3	019.0000	0101.2	173.4	28.09
272.0	080.0000	0152.1	056.7	154.3	019.0000	0101.2	172.3	28.29
273.0	080.0000	0156.3	057.2	154.3	019.0000	0101.2	171.2	28.49
274.0	080.0000	0159.0	057.6	154.2	019.0000	0101.3	170.2	28.68
275.0	080.0000	0161.5	057.9	154.1	019.0000	0101.4	169.1	28.87
276.0	080.0000	0163.7	058.1	154.0	019.0000	0101.5	168.1	29.06
277.0	080.0000	0165.2	058.3	153.9	019.0000	0101.7	167.2	29.24
278.0	080.0000	0166.9	058.5	153.8	019.0000	0102.0	166.2	29.42
279.0	080.0000	0168.6	058.7	153.6	019.0000	0102.2	165.3	29.60
280.0	080.0000	0170.4	058.9	153.5	019.0000	0102.5	164.3	29.78
281.0	080.0000	0171.9	059.0	153.3	019.0000	0102.8	163.4	29.96
282.0	080.0000	0172.1	059.1	153.1	019.0000	0103.2	162.6	30.12
283.0	080.0000	0173.1	059.2	152.9	019.0000	0103.5	161.7	30.29
284.0	080.0000	0172.6	059.1	152.7	019.0000	0104.0	160.9	30.45
285.0	080.0000	0173.3	059.2	152.5	019.0000	0104.5	160.1	30.61
286.0	080.0000	0175.5	059.4	152.3	019.0000	0105.0	159.2	30.79
287.0	080.0000	0178.8	059.7	152.1	019.0000	0105.4	158.2	30.97
288.0	080.0000	0182.4	060.1	151.9	019.0000	0105.7	157.2	31.15
289.0	080.0000	0184.9	060.3	151.7	019.0000	0106.1	156.3	31.31
290.0	080.0000	0185.6	060.4	151.4	019.0000	0106.7	155.5	31.46
291.0	080.0000	0185.4	060.3	151.2	019.0000	0107.2	154.9	31.59
292.0	080.0000	0185.6	060.4	150.9	019.0000	0107.6	154.2	31.72
293.0	080.0000	0185.7	060.4	150.6	019.0000	0108.0	153.5	31.84
294.0	080.0000	0185.8	060.4	150.3	019.0000	0108.2	152.8	31.95

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
295.0	080.0000	0186.5	060.4	149.9	019.0000	0108.4	152.1	32.07
296.0	080.0000	0188.0	060.6	149.7	019.0000	0108.6	151.4	32.19
297.0	080.0000	0189.5	060.7	149.4	019.0000	0108.7	150.7	32.31
298.0	080.0000	0190.2	060.8	149.0	019.0000	0108.7	150.1	32.42
299.0	080.0000	0191.1	060.9	148.7	019.0000	0108.5	149.5	32.52
300.0	080.0000	0191.3	060.9	148.4	019.0000	0108.3	148.9	32.60
301.0	080.0000	0190.7	060.8	148.0	019.0000	0108.1	148.4	32.67
302.0	080.0000	0190.2	060.8	147.6	019.0000	0108.0	148.0	32.75
303.0	080.0000	0189.5	060.7	147.2	019.0000	0107.8	147.6	32.81
304.0	080.0000	0188.6	060.6	146.8	019.0000	0107.7	147.2	32.87
305.0	080.0000	0187.6	060.5	146.5	019.0000	0107.4	146.9	32.92
306.0	080.0000	0187.4	060.5	146.1	019.0000	0106.9	146.5	32.97
307.0	080.0000	0187.7	060.6	145.7	019.0000	0106.5	146.1	33.03
308.0	080.0000	0187.7	060.5	145.3	019.0000	0106.0	145.8	33.07
309.0	080.0000	0187.1	060.5	144.9	019.0000	0105.6	145.5	33.11
310.0	080.0000	0186.3	060.4	144.5	019.0000	0105.2	145.3	33.14
311.0	080.0000	0185.5	060.3	144.1	019.0000	0104.9	145.1	33.16
312.0	080.0000	0185.0	060.3	143.7	019.0000	0104.3	144.9	33.18
313.0	080.0000	0185.0	060.3	143.3	019.0000	0103.6	144.7	33.20
314.0	080.0000	0185.0	060.3	142.8	019.0000	0102.8	144.5	33.21
315.0	080.0000	0185.5	060.3	142.4	019.0000	0102.2	144.3	33.23
316.0	080.0000	0186.4	060.4	142.0	019.0000	0101.7	144.0	33.26
317.0	080.0000	0186.4	060.4	141.6	019.0000	0101.2	143.9	33.27
318.0	080.0000	0187.3	060.5	141.2	019.0000	0100.9	143.7	33.29
319.0	080.0000	0188.1	060.6	140.8	019.0000	0100.6	143.6	33.31
320.0	080.0000	0188.0	060.6	140.4	019.0000	0100.5	143.6	33.31
321.0	080.0000	0188.5	060.6	139.9	019.0000	0100.4	143.5	33.32
322.0	080.0000	0188.1	060.6	139.5	019.0000	0100.6	143.6	33.31
323.0	080.0000	0187.6	060.5	139.1	019.0000	0100.9	143.7	33.31
324.0	080.0000	0187.9	060.6	138.7	019.0000	0101.1	143.7	33.30
325.0	080.0000	0187.2	060.5	138.3	019.0000	0101.0	143.8	33.28
326.0	080.0000	0186.0	060.4	137.8	019.0000	0101.0	144.1	33.23
327.0	080.0000	0184.4	060.2	137.4	019.0000	0100.8	144.4	33.17
328.0	080.0000	0182.6	060.1	137.0	019.0000	0100.6	144.7	33.11
329.0	080.0000	0180.6	059.9	136.6	019.0000	0100.4	145.1	33.04
330.0	080.0000	0178.1	059.7	136.3	019.0000	0100.2	145.5	32.95
331.0	080.0000	0176.5	059.5	135.9	019.0000	0100.2	145.9	32.88
332.0	080.0000	0175.4	059.4	135.5	019.0000	0100.0	146.3	32.81
333.0	080.0000	0174.3	059.3	135.1	019.0000	0099.9	146.7	32.73
334.0	080.0000	0173.6	059.2	134.7	019.0000	0099.8	147.1	32.67
335.0	080.0000	0173.7	059.2	134.3	019.0000	0099.8	147.4	32.61
336.0	080.0000	0174.6	059.3	134.0	019.0000	0099.8	147.6	32.56
337.0	080.0000	0175.5	059.4	133.6	019.0000	0099.9	147.9	32.51
338.0	080.0000	0177.4	059.6	133.2	019.0000	0099.9	148.2	32.47
339.0	080.0000	0179.8	059.8	132.8	019.0000	0099.9	148.4	32.44
340.0	080.0000	0182.3	060.1	132.4	019.0000	0099.9	148.6	32.40
341.0	080.0000	0183.0	060.1	132.0	019.0000	0099.9	149.1	32.32
342.0	080.0000	0181.2	060.0	131.7	019.0000	0099.9	149.7	32.21
343.0	080.0000	0178.0	059.7	131.4	019.0000	0099.9	150.5	32.08
344.0	080.0000	0173.6	059.2	131.1	019.0000	0099.8	151.4	31.93
345.0	080.0000	0170.2	058.9	130.9	019.0000	0099.8	152.3	31.79

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
346.0	080.0000	0167.5	058.6	130.6	019.0000	0099.7	153.1	31.65
347.0	080.0000	0164.5	058.2	130.4	019.0000	0099.6	153.9	31.50
348.0	080.0000	0163.3	058.1	130.1	019.0000	0099.5	154.7	31.38
349.0	080.0000	0162.6	058.0	129.8	019.0000	0099.4	155.3	31.27
350.0	080.0000	0161.2	057.8	129.6	019.0000	0099.4	156.1	31.14
351.0	080.0000	0160.6	057.8	129.3	019.0000	0099.3	156.8	31.01
352.0	080.0000	0161.3	057.8	129.0	019.0000	0099.3	157.4	30.91
353.0	080.0000	0163.3	058.1	128.7	019.0000	0099.2	157.9	30.82
354.0	080.0000	0165.4	058.3	128.3	019.0000	0099.2	158.4	30.73
355.0	080.0000	0166.0	058.4	128.1	019.0000	0099.1	159.1	30.61
356.0	080.0000	0165.8	058.4	127.8	019.0000	0099.1	159.9	30.48
357.0	080.0000	0165.9	058.4	127.6	019.0000	0099.1	160.6	30.34
358.0	080.0000	0167.0	058.5	127.3	019.0000	0099.2	161.3	30.22
359.0	080.0000	0168.0	058.6	127.0	019.0000	0099.2	162.0	30.09
000.0	080.0000	0169.2	058.7	126.8	019.0000	0099.3	162.7	29.96
001.0	080.0000	0169.8	058.8	126.5	019.0000	0099.3	163.5	29.82
002.0	080.0000	0169.1	058.7	126.3	019.0000	0099.3	164.4	29.66
003.0	080.0000	0169.6	058.8	126.1	019.0000	0099.4	165.2	29.52
004.0	080.0000	0171.2	059.0	125.9	019.0000	0099.4	166.0	29.38
005.0	080.0000	0174.7	059.3	125.6	019.0000	0099.3	166.7	29.25
006.0	080.0000	0178.4	059.7	125.3	019.0000	0099.4	167.4	29.13
007.0	080.0000	0180.3	059.9	125.1	019.0000	0099.3	168.2	28.98
008.0	080.0000	0182.0	060.0	124.8	019.0000	0099.3	169.0	28.82
009.0	080.0000	0182.9	060.1	124.7	019.0000	0099.2	169.9	28.66
010.0	080.0000	0183.1	060.1	124.5	019.0000	0099.1	170.8	28.49
011.0	080.0000	0182.6	060.1	124.4	019.0000	0099.0	171.8	28.31
012.0	080.0000	0180.8	059.9	124.3	019.0000	0098.9	172.8	28.12
013.0	080.0000	0178.5	059.7	124.2	019.0000	0098.9	173.9	27.93
014.0	080.0000	0175.4	059.4	124.2	019.0000	0098.9	175.0	27.73
015.0	080.0000	0172.2	059.1	124.1	019.0000	0098.9	176.1	27.53
016.0	080.0000	0169.9	058.8	124.1	019.0000	0098.9	177.1	27.34
017.0	080.0000	0167.7	058.6	124.1	019.0000	0098.9	178.2	27.15
018.0	080.0000	0170.0	058.8	123.9	019.0000	0098.8	179.1	26.99
019.0	080.0000	0176.6	059.5	123.6	019.0000	0098.8	179.9	26.84
020.0	080.0000	0180.8	059.9	123.4	019.0000	0098.8	180.8	26.68
021.0	080.0000	0184.6	060.3	123.2	019.0000	0098.8	181.7	26.51