Doug Vernier, Telecommunications Consultants
721 W. First St., Suite A, Cedar Falls, IA 50613

Allocation Study Exhibit #15
Rochester, Minnesota, Minnesota Public Radio - NGDC 30 arc-second

REFERENCE — CH# 204A - 88.7 MHz, Pwr= 0.2 kW, HAAT=191.9 M, COR= 543 — DISPLAY DATES
44 02 28 N. — Average Protected F(50-50)= 17.13 km — DATA 12-16-05
92 20 25 W. — Ave. F(50-10) 40 dBu= 54.5 54 dBu= 25.6 80 dBu= 5.2 100 dBu= 1.0 — SEARCH 12-16-05

CH CALL / CITY	TYPE / STATE	AZI. <-- / DIST FILE #	LAT. / LNG.	Pwr(kW) HAAT(M)	COR(M) INT(km)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT* (Overlap in km)
204A KMSE Rochester	LIC EN MN	349.9 0.13 169.9 BLED19980729KB	44 02 32 92 20 26	0.250 151	518 51.9	15.9 Minnesota Public Radio	-68.89*	-70.36*
203C1 KBDC.C Mason City Vertical Polarization Only	CP VN IA	225.3 105.28 44.7 BPED19981230ME	43 22 21 93 15 57	66.000 152	522 82.4	55.0 American Family Associatio	5.08	23.73
205C2 WLSU La Crosse	LIC DCX WI	108.3 82.36 289.0 BLED20030624ABF	43 48 17 91 22 06	1.414 213	546 43.2	28.6 Board.of Regents, Univ.of	23.55	30.31
204A KLNI Decorah	LIC CN IA	152.1 91.89 332.4 BLED19931202KA	43 18 35 91 48 30	0.100 20	324 18.6	5.6 Minnesota Public Radio	57.02	33.88
204A WRFW River Falls	LIC CN WI	345.2 97.13 165.0 BLED1630	44 53 08 92 39 20	3.000 46	351 62.2	16.4 Board Of Regents, Universi	17.85	26.41
201A AP201 Byron	APP V MN	286.8 29.19 106.6 BNPED20000118AES	44 06 59 92 41 22	0.170 172	507 0.9	15.5 Pensacola Christian Colleg	10.26	12.70
207C1 KCMP Northfield	LIC CY MN	321.3 92.66 140.8 BLED19911203KB	44 41 19 93 04 22	100.000 223	516 8.7	65.9 Minnesota Public Radio	66.58	25.75
207C1 KCMP.A Northfield	APP CY MN	321.3 92.70 140.8 BPED20051117ADL	44 41 21 93 04 21	100.000 224	517 8.7	66.0 Minnesota Public Radio	66.60	25.68
257C3 KWNOFM Rushford	LIC ZCN MN	102.3 51.02 282.7 BLH19950130KC	43 56 32 91 43 09	7.889 124	481 36.5	33.3 Kage, Inc	12.0R	39.0M
202C1 WHWC Menomonie	LIC DCY WI	18.5 118.03 198.9 BLED19980904KB	45 02 49 91 51 47	31.943 338	625 7.7	63.6 State Of Wisconsin - Educa	93.02	53.41
201A KRLX Northfield	LIC CN MN	306.0 80.11 125.4 BLED19851024KG	44 27 39 93 09 21	0.100 -4	309 0.7	5.6 Carleton College	61.42	73.48
205C3 KWVI.A Waverly	APP DVX IA	176.6 139.33 356.7 BMPED20050629ACB	42 47 21 92 14 22	20.000 91	400 55.7	35.7 American Family Associatio	66.93	78.60
06+2C KBJRTV Superior	LI HY WI	3.2 305.93 183.4 BLCT20000517AEX	46 47 21 92 06 51	100.000 407	603 23.0	112.0 Kbjr License, Inc.	235.0R	70.9M
06-2C KAAL Austin	LI HN MN	235.1 79.87 54.6 BLCT2236	43 37 42 93 09 12	100.000 318	696 23.7	105.0 Kaal-tv, Llc	235.0R	-155.1M
06Z1C WITI Milwaukee	LI N WI	104.9 374.17 288.0 BLCT19990129KT	43 05 26 87 53 50	100.000 295	511 21.1	103.1 Witi License,inc.	235.0R	139.2M
06+2C KWQCTV Davenport	LI HY IA	150.6 316.26 331.9 BLCT19821108KN	41 32 49 90 28 35	100.000 385	611 21.6	110.0 Young Broadcasting Of Dave	235.0R	81.3M

ERP and HAAT are on direct line to and from reference station.
• affixed to TV6 Margin= no direct-line contour overlap.
"*"affixed to 'IN' or 'Out' values = site inside protected contour (Note: KMSE is the applicant station)

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 predicted from the F(50-50) table except when 10 miles or greater the contours are predicted from the Commission's F(50-10) table. Contour distances are in kilometers and are calculated using the Commission's TVFMINT FORTRAN subroutine (converted to C). 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. For these allocation studies the N.G.D.C. 30 arc-second terrain elevation database was 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 are the average heights of eight standard radials as found in the Commission's records, unless otherwise noted in which case the specific antenna heights and the DA power, if applicable, along the straight line azimuths between the reference station and the database station are used and visa 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 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".

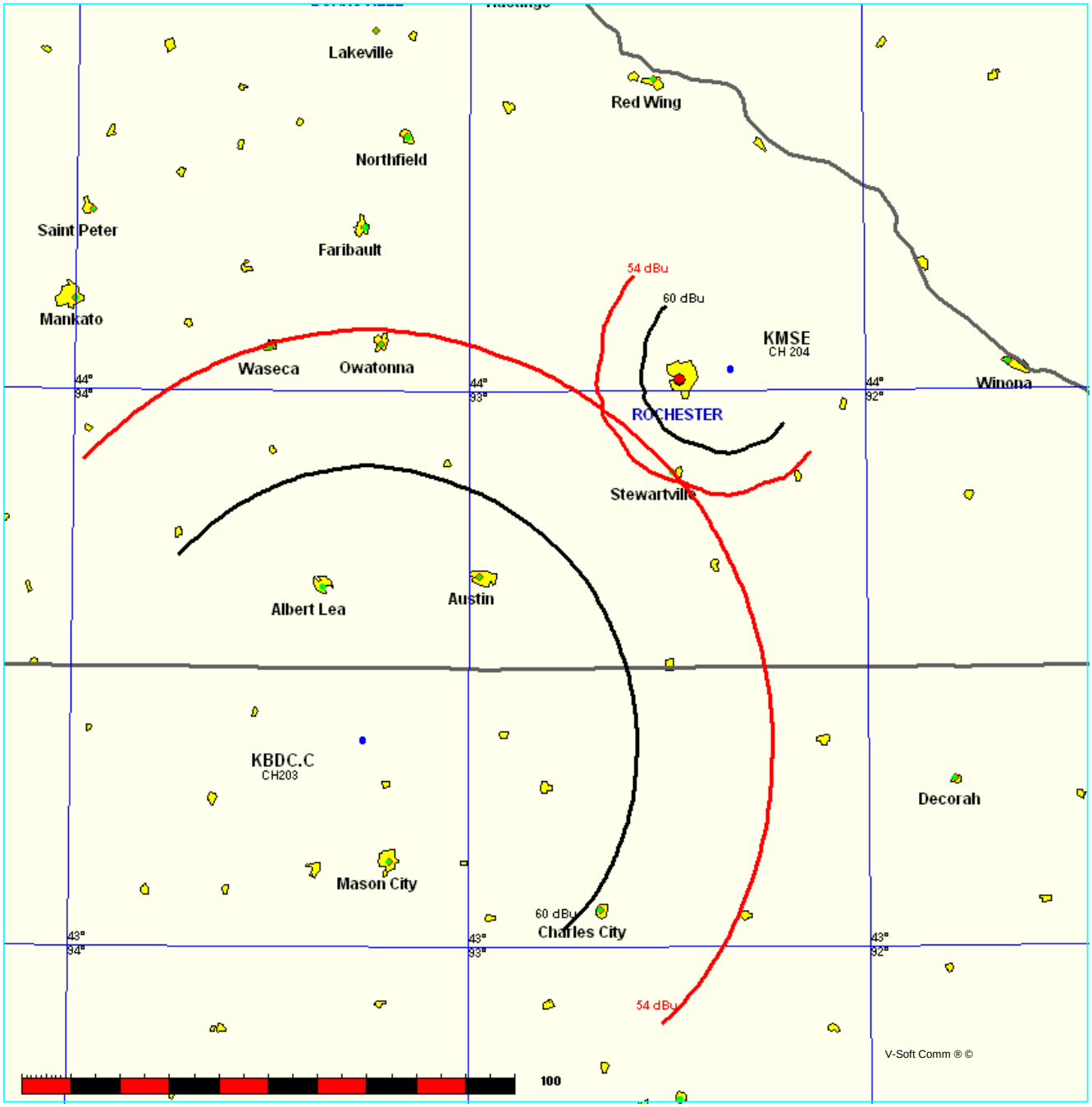
The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. “Z” indicates a 73.215 directional. An “N” indicates it is a 73.215 station that operates with an omni-directional antenna. The fifth letter will 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”.

FMCommander Allocation Study
12-17-2005

KMSE CH 204 A
.2 kW 543 M COR
Prot. = 60 dBu
Intef. = 54 dBu

KBDC.C CH 203 C1 BPED19981230ME
66 kW, 522 M COR
Prot. = 60 dBu
Intef. = 54 dBu

Scale = 1:2,000,000



KMSE
Channel = 204A
Max ERP = 0.2 kW
RCAMSL = 543 M
N. Lat = 44 02 28
W. Lng = 92 20 25
Protected
60 dBu

KBDC.C BPED19981230ME
Channel = 203C1
Max ERP = 66 kW
RCAMSL = 522 M
N. Lat = 43 22 21
W. Lng = 93 15 57
Interfering
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
165.0	000.2000	0168.6	016.0	052.8	066.0000	0154.7	098.4	49.48
166.0	000.2000	0169.4	016.1	052.8	066.0000	0154.7	098.1	49.55
167.0	000.2000	0170.5	016.1	052.8	066.0000	0154.7	097.8	49.63
168.0	000.2000	0172.3	016.2	052.8	066.0000	0154.7	097.5	49.71
169.0	000.2000	0174.2	016.3	052.7	066.0000	0154.7	097.2	49.79
170.0	000.2000	0176.2	016.4	052.7	066.0000	0154.7	096.9	49.87
171.0	000.2000	0177.5	016.5	052.7	066.0000	0154.7	096.6	49.95
172.0	000.2000	0178.5	016.5	052.6	066.0000	0154.7	096.3	50.02
173.0	000.2000	0179.9	016.6	052.6	066.0000	0154.7	096.1	50.10
174.0	000.2000	0181.1	016.7	052.5	066.0000	0154.7	095.8	50.18
175.0	000.2000	0182.1	016.7	052.4	066.0000	0154.5	095.5	50.24
176.0	000.2000	0182.7	016.7	052.4	066.0000	0154.5	095.3	50.32
177.0	000.2000	0183.5	016.8	052.3	066.0000	0154.5	095.0	50.39
178.0	000.2000	0184.4	016.8	052.2	066.0000	0154.5	094.7	50.46
179.0	000.2000	0185.8	016.9	052.1	066.0000	0154.5	094.5	50.54
180.0	000.2000	0187.2	016.9	052.1	066.0000	0154.5	094.2	50.62
181.0	000.2000	0187.8	017.0	052.0	066.0000	0154.5	093.9	50.69
182.0	000.2000	0187.4	016.9	051.8	066.0000	0154.5	093.7	50.75
183.0	000.2000	0186.7	016.9	051.7	066.0000	0154.5	093.5	50.81
184.0	000.2000	0186.1	016.9	051.6	066.0000	0154.5	093.3	50.86
185.0	000.2000	0185.1	016.8	051.4	066.0000	0154.2	093.1	50.91
186.0	000.2000	0185.0	016.8	051.3	066.0000	0154.2	092.9	50.97
187.0	000.2000	0186.5	016.9	051.2	066.0000	0154.2	092.7	51.04
188.0	000.2000	0187.6	016.9	051.1	066.0000	0154.2	092.4	51.11
189.0	000.2000	0188.4	017.0	051.0	066.0000	0154.2	092.2	51.17
190.0	000.2000	0188.1	017.0	050.8	066.0000	0154.2	092.0	51.23
191.0	000.2000	0186.8	016.9	050.7	066.0000	0154.2	091.8	51.27
192.0	000.2000	0184.5	016.8	050.5	066.0000	0154.2	091.7	51.30
193.0	000.2000	0182.1	016.7	050.3	066.0000	0153.9	091.6	51.32
194.0	000.2000	0181.1	016.7	050.2	066.0000	0153.9	091.5	51.36
195.0	000.2000	0180.9	016.6	050.0	066.0000	0153.9	091.3	51.40
196.0	000.2000	0180.7	016.6	049.9	066.0000	0153.9	091.2	51.45
197.0	000.2000	0180.4	016.6	049.7	066.0000	0153.9	091.0	51.49
198.0	000.2000	0179.9	016.6	049.5	066.0000	0153.9	090.9	51.53
199.0	000.2000	0179.5	016.6	049.4	066.0000	0153.5	090.8	51.56
200.0	000.2000	0179.2	016.6	049.2	066.0000	0153.5	090.6	51.60
201.0	000.2000	0179.2	016.6	049.1	066.0000	0153.5	090.5	51.64

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
202.0	000.2000	0179.4	016.6	048.9	066.0000	0153.5	090.3	51.68
203.0	000.2000	0179.7	016.6	048.7	066.0000	0153.5	090.2	51.72
204.0	000.2000	0180.2	016.6	048.6	066.0000	0153.5	090.0	51.76
205.0	000.2000	0181.4	016.7	048.4	066.0000	0153.2	089.9	51.80
206.0	000.2000	0183.5	016.8	048.3	066.0000	0153.2	089.7	51.86
207.0	000.2000	0185.9	016.9	048.1	066.0000	0153.2	089.5	51.92
208.0	000.2000	0187.9	017.0	048.0	066.0000	0153.2	089.3	51.98
209.0	000.2000	0189.4	017.0	047.8	066.0000	0153.2	089.1	52.02
210.0	000.2000	0190.7	017.1	047.6	066.0000	0153.2	089.0	52.07
211.0	000.2000	0191.8	017.1	047.5	066.0000	0153.0	088.8	52.10
212.0	000.2000	0193.0	017.2	047.3	066.0000	0153.0	088.7	52.14
213.0	000.2000	0194.3	017.2	047.1	066.0000	0153.0	088.6	52.18
214.0	000.2000	0195.8	017.3	046.9	066.0000	0153.0	088.4	52.22
215.0	000.2000	0197.6	017.4	046.8	066.0000	0153.0	088.3	52.26
216.0	000.2000	0199.2	017.5	046.6	066.0000	0153.0	088.1	52.30
217.0	000.2000	0200.5	017.5	046.4	066.0000	0152.8	088.0	52.32
218.0	000.2000	0201.3	017.5	046.2	066.0000	0152.8	088.0	52.35
219.0	000.2000	0201.7	017.6	046.0	066.0000	0152.8	087.9	52.36
220.0	000.2000	0202.2	017.6	045.8	066.0000	0152.8	087.8	52.38
221.0	000.2000	0203.1	017.6	045.6	066.0000	0152.8	087.8	52.40
222.0	000.2000	0204.1	017.7	045.4	066.0000	0152.5	087.7	52.41
223.0	000.2000	0204.8	017.7	045.2	066.0000	0152.5	087.6	52.43
224.0	000.2000	0205.3	017.7	045.0	066.0000	0152.5	087.6	52.44
225.0	000.2000	0206.6	017.8	044.8	066.0000	0152.5	087.6	52.45
226.0	000.2000	0208.7	017.9	044.6	066.0000	0152.5	087.5	52.48
227.0	000.2000	0210.6	018.0	044.4	066.0000	0152.2	087.4	52.49
228.0	000.2000	0211.9	018.0	044.2	066.0000	0152.2	087.3	52.50
229.0	000.2000	0212.4	018.0	044.0	066.0000	0152.2	087.3	52.50
230.0	000.2000	0212.2	018.0	043.8	066.0000	0152.2	087.4	52.49
231.0	000.2000	0211.2	018.0	043.6	066.0000	0152.2	087.5	52.47
232.0	000.2000	0209.8	017.9	043.4	066.0000	0152.0	087.6	52.43
233.0	000.2000	0208.5	017.9	043.2	066.0000	0152.0	087.7	52.40
234.0	000.2000	0207.5	017.8	043.0	066.0000	0152.0	087.8	52.37
235.0	000.2000	0206.7	017.8	042.8	066.0000	0152.0	087.9	52.34
236.0	000.2000	0205.9	017.7	042.6	066.0000	0152.0	088.0	52.31
237.0	000.2000	0205.1	017.7	042.4	066.0000	0151.8	088.1	52.28
238.0	000.2000	0204.8	017.7	042.2	066.0000	0151.8	088.2	52.25
239.0	000.2000	0205.1	017.7	042.0	066.0000	0151.8	088.2	52.23
240.0	000.2000	0206.1	017.8	041.8	066.0000	0151.8	088.3	52.22
241.0	000.2000	0207.5	017.8	041.6	066.0000	0151.8	088.3	52.20
242.0	000.2000	0209.2	017.9	041.4	066.0000	0151.7	088.3	52.19
243.0	000.2000	0211.0	018.0	041.2	066.0000	0151.7	088.4	52.18
244.0	000.2000	0213.0	018.1	041.0	066.0000	0151.7	088.4	52.16
245.0	000.2000	0215.0	018.1	040.8	066.0000	0151.7	088.5	52.15
246.0	000.2000	0216.8	018.2	040.6	066.0000	0151.7	088.5	52.13
247.0	000.2000	0219.0	018.3	040.4	066.0000	0151.4	088.6	52.11
248.0	000.2000	0221.0	018.4	040.2	066.0000	0151.4	088.6	52.09
249.0	000.2000	0222.6	018.5	040.0	066.0000	0151.4	088.7	52.06
250.0	000.2000	0223.1	018.5	039.8	066.0000	0151.4	088.9	52.02
251.0	000.2000	0222.2	018.4	039.6	066.0000	0151.4	089.1	51.96
252.0	000.2000	0220.3	018.4	039.5	066.0000	0151.2	089.3	51.88

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
253.0	000.2000	0217.6	018.3	039.3	066.0000	0151.2	089.6	51.81
254.0	000.2000	0214.7	018.1	039.2	066.0000	0151.2	089.9	51.72
255.0	000.2000	0212.6	018.0	039.1	066.0000	0151.2	090.1	51.65
256.0	000.2000	0211.3	018.0	038.9	066.0000	0151.2	090.3	51.58
257.0	000.2000	0212.0	018.0	038.8	066.0000	0151.2	090.5	51.54
258.0	000.2000	0214.2	018.1	038.6	066.0000	0151.2	090.6	51.50
259.0	000.2000	0216.8	018.2	038.4	066.0000	0150.9	090.7	51.46
260.0	000.2000	0219.5	018.3	038.2	066.0000	0150.9	090.9	51.42
261.0	000.2000	0220.7	018.4	038.0	066.0000	0150.9	091.0	51.37
262.0	000.2000	0220.8	018.4	037.8	066.0000	0150.9	091.3	51.31
263.0	000.2000	0219.9	018.3	037.7	066.0000	0150.9	091.5	51.24
264.0	000.2000	0219.0	018.3	037.6	066.0000	0150.9	091.8	51.16
265.0	000.2000	0217.9	018.3	037.5	066.0000	0150.6	092.0	51.08
266.0	000.2000	0216.3	018.2	037.4	066.0000	0150.6	092.3	51.00
267.0	000.2000	0214.3	018.1	037.3	066.0000	0150.6	092.6	50.91
268.0	000.2000	0212.7	018.0	037.2	066.0000	0150.6	092.9	50.83
269.0	000.2000	0211.1	018.0	037.1	066.0000	0150.6	093.2	50.75
270.0	000.2000	0209.5	017.9	037.0	066.0000	0150.6	093.5	50.67
271.0	000.2000	0208.0	017.8	036.9	066.0000	0150.6	093.7	50.59
272.0	000.2000	0206.6	017.8	036.8	066.0000	0150.6	094.0	50.51
273.0	000.2000	0205.1	017.7	036.8	066.0000	0150.6	094.3	50.43
274.0	000.2000	0203.8	017.7	036.7	066.0000	0150.6	094.6	50.35
275.0	000.2000	0203.0	017.6	036.6	066.0000	0150.6	094.9	50.27
276.0	000.2000	0202.3	017.6	036.5	066.0000	0150.6	095.2	50.19
277.0	000.2000	0202.0	017.6	036.4	066.0000	0150.3	095.4	50.11
278.0	000.2000	0201.8	017.6	036.4	066.0000	0150.3	095.7	50.03
279.0	000.2000	0202.3	017.6	036.3	066.0000	0150.3	096.0	49.96
280.0	000.2000	0203.4	017.6	036.1	066.0000	0150.3	096.2	49.89
281.0	000.2000	0204.6	017.7	036.0	066.0000	0150.3	096.5	49.82
282.0	000.2000	0206.3	017.8	035.9	066.0000	0150.3	096.7	49.76
283.0	000.2000	0207.8	017.8	035.8	066.0000	0150.3	097.0	49.69
284.0	000.2000	0209.4	017.9	035.7	066.0000	0150.3	097.2	49.61
285.0	000.2000	0210.8	018.0	035.6	066.0000	0150.3	097.5	49.54

KBDC.C BPED19981230ME
Channel = 203C1
Max ERP = 66 kW
RCAMSL = 522 M
N. Lat = 43 22 21
W. Lng = 93 15 57
Protected
60 dBu

KMSE
Channel = 204A
Max ERP = 0.2 kW
RCAMSL = 543 M
N. Lat = 44 02 28
W. Lng = 92 20 25
Interfering
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
345.0	066.0000	0145.5	054.1	256.3	000.2000	0211.3	091.0	28.52
346.0	066.0000	0146.2	054.2	256.4	000.2000	0211.3	090.1	28.80
347.0	066.0000	0146.7	054.3	256.4	000.2000	0211.3	089.1	29.09
348.0	066.0000	0147.0	054.3	256.4	000.2000	0211.3	088.2	29.39
349.0	066.0000	0147.1	054.3	256.4	000.2000	0211.3	087.2	29.69
350.0	066.0000	0147.3	054.3	256.4	000.2000	0211.3	086.3	29.99
351.0	066.0000	0147.6	054.4	256.3	000.2000	0211.3	085.3	30.29
352.0	066.0000	0147.6	054.4	256.3	000.2000	0211.3	084.4	30.59
353.0	066.0000	0147.8	054.4	256.2	000.2000	0211.3	083.4	30.89
354.0	066.0000	0148.0	054.4	256.1	000.2000	0211.3	082.5	31.19
355.0	066.0000	0148.3	054.5	256.1	000.2000	0211.3	081.5	31.50
356.0	066.0000	0148.9	054.5	256.0	000.2000	0211.3	080.6	31.80
357.0	066.0000	0149.4	054.6	255.9	000.2000	0211.3	079.6	32.11
358.0	066.0000	0150.4	054.7	255.9	000.2000	0211.3	078.7	32.42
359.0	066.0000	0151.3	054.9	255.8	000.2000	0211.3	077.7	32.73
000.0	066.0000	0152.0	054.9	255.7	000.2000	0211.3	076.8	33.04
001.0	066.0000	0152.0	054.9	255.5	000.2000	0212.6	075.8	33.40
002.0	066.0000	0151.9	054.9	255.3	000.2000	0212.6	074.9	33.70
003.0	066.0000	0151.8	054.9	255.0	000.2000	0212.6	074.0	34.00
004.0	066.0000	0151.0	054.8	254.7	000.2000	0212.6	073.1	34.29
005.0	066.0000	0150.5	054.8	254.4	000.2000	0214.7	072.3	34.65
006.0	066.0000	0150.3	054.7	254.1	000.2000	0214.7	071.4	34.94
007.0	066.0000	0150.3	054.7	253.8	000.2000	0214.7	070.5	35.24
008.0	066.0000	0150.3	054.7	253.5	000.2000	0217.6	069.6	35.64
009.0	066.0000	0150.3	054.7	253.1	000.2000	0217.6	068.8	35.93
010.0	066.0000	0150.3	054.7	252.8	000.2000	0217.6	067.9	36.22
011.0	066.0000	0150.2	054.7	252.4	000.2000	0220.3	067.1	36.61
012.0	066.0000	0149.9	054.7	251.9	000.2000	0220.3	066.3	36.88
013.0	066.0000	0149.7	054.6	251.5	000.2000	0222.2	065.5	37.23
014.0	066.0000	0149.6	054.6	251.0	000.2000	0222.2	064.7	37.50
015.0	066.0000	0149.6	054.6	250.5	000.2000	0222.2	063.9	37.78
016.0	066.0000	0149.6	054.6	250.0	000.2000	0223.1	063.1	38.09
017.0	066.0000	0149.4	054.6	249.5	000.2000	0222.6	062.4	38.33
018.0	066.0000	0149.1	054.6	248.9	000.2000	0222.6	061.7	38.59

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
019.0	066.0000	0148.6	054.5	248.3	000.2000	0221.0	061.0	38.78
020.0	066.0000	0148.2	054.5	247.6	000.2000	0221.0	060.3	39.03
021.0	066.0000	0148.2	054.4	247.0	000.2000	0219.0	059.6	39.22
022.0	066.0000	0148.5	054.5	246.4	000.2000	0216.8	058.9	39.39
023.0	066.0000	0149.0	054.6	245.7	000.2000	0216.8	058.2	39.66
024.0	066.0000	0149.6	054.6	245.1	000.2000	0215.0	057.5	39.85
025.0	066.0000	0150.1	054.7	244.4	000.2000	0213.0	056.9	40.03
026.0	066.0000	0150.3	054.7	243.6	000.2000	0213.0	056.2	40.27
027.0	066.0000	0150.4	054.7	242.8	000.2000	0211.0	055.7	40.40
028.0	066.0000	0150.4	054.7	242.0	000.2000	0209.2	055.1	40.54
029.0	066.0000	0150.5	054.7	241.2	000.2000	0207.5	054.6	40.67
030.0	066.0000	0150.4	054.7	240.3	000.2000	0206.1	054.1	40.80
031.0	066.0000	0150.2	054.7	239.4	000.2000	0205.1	053.7	40.93
032.0	066.0000	0149.9	054.7	238.5	000.2000	0204.8	053.3	41.07
033.0	066.0000	0149.7	054.7	237.6	000.2000	0204.8	052.9	41.22
034.0	066.0000	0149.8	054.7	236.6	000.2000	0205.1	052.5	41.39
035.0	066.0000	0150.1	054.7	235.6	000.2000	0205.9	052.1	41.57
036.0	066.0000	0150.3	054.7	234.7	000.2000	0206.7	051.8	41.75
037.0	066.0000	0150.6	054.8	233.7	000.2000	0207.5	051.4	41.91
038.0	066.0000	0150.9	054.8	232.6	000.2000	0208.5	051.2	42.07
039.0	066.0000	0151.2	054.8	231.6	000.2000	0209.8	050.9	42.23
040.0	066.0000	0151.4	054.9	230.5	000.2000	0211.2	050.7	42.38
041.0	066.0000	0151.7	054.9	229.5	000.2000	0212.4	050.5	42.52
042.0	066.0000	0151.8	054.9	228.4	000.2000	0211.9	050.4	42.55
043.0	066.0000	0152.0	054.9	227.3	000.2000	0210.6	050.2	42.53
044.0	066.0000	0152.2	055.0	226.2	000.2000	0208.7	050.2	42.47
045.0	066.0000	0152.5	055.0	225.1	000.2000	0206.6	050.1	42.40
046.0	066.0000	0152.8	055.0	224.0	000.2000	0205.3	050.1	42.35
047.0	066.0000	0153.0	055.1	222.9	000.2000	0204.8	050.1	42.31
048.0	066.0000	0153.2	055.1	221.8	000.2000	0204.1	050.2	42.26
049.0	066.0000	0153.5	055.1	220.7	000.2000	0203.1	050.3	42.18
050.0	066.0000	0153.9	055.2	219.7	000.2000	0202.2	050.4	42.09
051.0	066.0000	0154.2	055.2	218.6	000.2000	0201.7	050.5	42.01
052.0	066.0000	0154.5	055.3	217.5	000.2000	0201.3	050.7	41.91
053.0	066.0000	0154.7	055.3	216.4	000.2000	0199.2	051.0	41.73
054.0	066.0000	0154.9	055.3	215.4	000.2000	0197.6	051.2	41.54
055.0	066.0000	0155.0	055.3	214.4	000.2000	0195.8	051.5	41.34
056.0	066.0000	0155.0	055.3	213.4	000.2000	0194.3	051.9	41.13
057.0	066.0000	0154.9	055.3	212.4	000.2000	0193.0	052.3	40.91
058.0	066.0000	0154.8	055.3	211.5	000.2000	0191.8	052.7	40.69
059.0	066.0000	0154.6	055.3	210.6	000.2000	0191.8	053.2	40.51
060.0	066.0000	0154.4	055.3	209.7	000.2000	0190.7	053.7	40.27
061.0	066.0000	0154.3	055.2	208.8	000.2000	0189.4	054.2	40.01
062.0	066.0000	0154.2	055.2	208.0	000.2000	0187.9	054.8	39.74
063.0	066.0000	0154.2	055.2	207.2	000.2000	0185.9	055.3	39.43
064.0	066.0000	0154.1	055.2	206.4	000.2000	0183.5	055.9	39.10
065.0	066.0000	0154.0	055.2	205.6	000.2000	0183.5	056.5	38.87
066.0	066.0000	0154.0	055.2	204.9	000.2000	0181.4	057.1	38.54
067.0	066.0000	0154.2	055.2	204.2	000.2000	0180.2	057.8	38.26
068.0	066.0000	0154.5	055.3	203.5	000.2000	0179.7	058.4	37.99
069.0	066.0000	0154.7	055.3	202.8	000.2000	0179.7	059.1	37.75

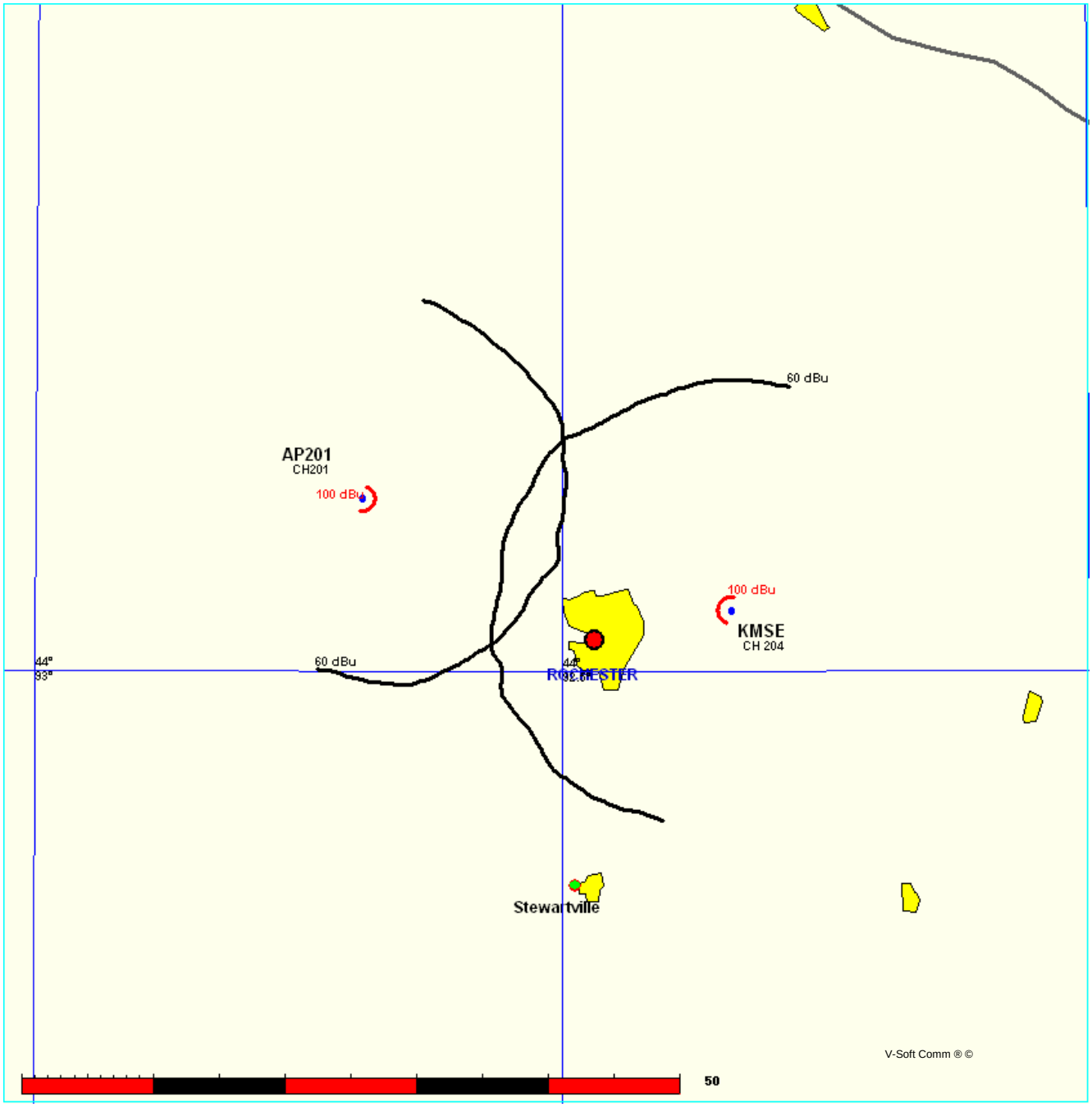
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
070.0	066.0000	0154.7	055.3	202.2	000.2000	0179.4	059.8	37.47
071.0	066.0000	0154.6	055.3	201.6	000.2000	0179.4	060.5	37.21
072.0	066.0000	0154.6	055.3	201.0	000.2000	0179.2	061.3	36.93
073.0	066.0000	0154.6	055.3	200.5	000.2000	0179.2	062.0	36.66
074.0	066.0000	0154.7	055.3	199.9	000.2000	0179.2	062.8	36.39
075.0	066.0000	0154.8	055.3	199.4	000.2000	0179.5	063.6	36.14
076.0	066.0000	0155.0	055.3	198.9	000.2000	0179.5	064.4	35.87
077.0	066.0000	0155.1	055.3	198.5	000.2000	0179.9	065.2	35.61
078.0	066.0000	0155.2	055.4	198.0	000.2000	0179.9	066.0	35.33
079.0	066.0000	0155.3	055.4	197.6	000.2000	0179.9	066.8	35.05
080.0	066.0000	0155.5	055.4	197.2	000.2000	0180.4	067.7	34.79
081.0	066.0000	0155.6	055.4	196.8	000.2000	0180.4	068.5	34.50
082.0	066.0000	0155.8	055.4	196.5	000.2000	0180.7	069.4	34.22
083.0	066.0000	0155.9	055.4	196.2	000.2000	0180.7	070.3	33.93
084.0	066.0000	0156.1	055.5	195.8	000.2000	0180.7	071.2	33.64
085.0	066.0000	0156.4	055.5	195.5	000.2000	0180.7	072.1	33.34
086.0	066.0000	0156.5	055.5	195.3	000.2000	0180.9	073.0	33.05
087.0	066.0000	0156.6	055.5	195.0	000.2000	0180.9	073.9	32.75
088.0	066.0000	0156.7	055.5	194.8	000.2000	0180.9	074.8	32.45
089.0	066.0000	0156.7	055.5	194.6	000.2000	0180.9	075.8	32.14
090.0	066.0000	0156.7	055.5	194.4	000.2000	0181.1	076.7	31.85
091.0	066.0000	0156.7	055.5	194.3	000.2000	0181.1	077.6	31.55
092.0	066.0000	0156.7	055.5	194.1	000.2000	0181.1	078.6	31.24
093.0	066.0000	0156.7	055.6	194.0	000.2000	0181.1	079.5	30.94
094.0	066.0000	0157.0	055.6	193.8	000.2000	0181.1	080.5	30.64
095.0	066.0000	0157.3	055.6	193.7	000.2000	0181.1	081.4	30.33
096.0	066.0000	0157.6	055.7	193.6	000.2000	0181.1	082.4	30.03
097.0	066.0000	0158.0	055.7	193.5	000.2000	0182.1	083.4	29.77
098.0	066.0000	0158.3	055.7	193.4	000.2000	0182.1	084.3	29.47
099.0	066.0000	0158.8	055.8	193.3	000.2000	0182.1	085.3	29.16
100.0	066.0000	0159.4	055.9	193.2	000.2000	0182.1	086.3	28.86
101.0	066.0000	0159.8	055.9	193.1	000.2000	0182.1	087.2	28.56
102.0	066.0000	0160.3	056.0	193.1	000.2000	0182.1	088.2	28.26
103.0	066.0000	0160.5	056.0	193.1	000.2000	0182.1	089.2	27.96
104.0	066.0000	0160.7	056.0	193.1	000.2000	0182.1	090.2	27.67
105.0	066.0000	0160.7	056.0	193.1	000.2000	0182.1	091.1	27.37

FMCommander Allocation Study
12-17-2005

KMSE CH 204 A
.2 kW 543 M COR
Prot. = 60 dBu
Intef. = 100 dBu

AP201 CH 201 A BNPED20000118AES
.17 kW, 507 M COR
Prot. = 60 dBu
Intef. = 100 dBu

Scale = 1:750,000



KMSE
Channel = 204A
Max ERP = 0.2 kW
RCAMSL = 543 M
N. Lat = 44 02 28
W. Lng = 92 20 25
Protected
60 dBu

AP201 BNPED20000118AES
Channel = 201A
Max ERP = 0.17 kW
RCAMSL = 507 M
N. Lat = 44 06 59
W. Lng = 92 41 22
Interfering
100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
227.0	000.2000	0210.6	018.0	144.2	000.1700	0151.7	025.4	51.33
228.0	000.2000	0211.9	018.0	144.4	000.1700	0151.7	025.1	51.54
229.0	000.2000	0212.4	018.0	144.6	000.1700	0151.6	024.8	51.75
230.0	000.2000	0212.2	018.0	144.6	000.1700	0151.6	024.5	51.97
231.0	000.2000	0211.2	018.0	144.6	000.1700	0151.6	024.2	52.20
232.0	000.2000	0209.8	017.9	144.5	000.1700	0151.7	023.8	52.44
233.0	000.2000	0208.5	017.9	144.3	000.1700	0151.7	023.5	52.67
234.0	000.2000	0207.5	017.8	144.2	000.1700	0151.7	023.2	52.90
235.0	000.2000	0206.7	017.8	144.2	000.1700	0151.7	022.9	53.13
236.0	000.2000	0205.9	017.7	144.1	000.1700	0151.7	022.6	53.37
237.0	000.2000	0205.1	017.7	143.9	000.1700	0151.7	022.3	53.60
238.0	000.2000	0204.8	017.7	143.8	000.1700	0151.7	022.0	53.83
239.0	000.2000	0205.1	017.7	143.8	000.1700	0151.7	021.7	54.07
240.0	000.2000	0206.1	017.8	143.9	000.1700	0151.7	021.4	54.31
241.0	000.2000	0207.5	017.8	143.9	000.1700	0151.7	021.0	54.56
242.0	000.2000	0209.2	017.9	144.0	000.1700	0151.7	020.7	54.81
243.0	000.2000	0211.0	018.0	144.1	000.1700	0151.7	020.4	55.06
244.0	000.2000	0213.0	018.1	144.2	000.1700	0151.7	020.1	55.31
245.0	000.2000	0215.0	018.1	144.3	000.1700	0151.7	019.8	55.57
246.0	000.2000	0216.8	018.2	144.3	000.1700	0151.7	019.4	55.83
247.0	000.2000	0219.0	018.3	144.4	000.1700	0151.7	019.1	56.10
248.0	000.2000	0221.0	018.4	144.4	000.1700	0151.7	018.8	56.37
249.0	000.2000	0222.6	018.5	144.4	000.1700	0151.7	018.4	56.63
250.0	000.2000	0223.1	018.5	144.2	000.1700	0151.7	018.1	56.89
251.0	000.2000	0222.2	018.4	143.8	000.1700	0151.7	017.8	57.14
252.0	000.2000	0220.3	018.4	143.2	000.1700	0152.5	017.5	57.42
253.0	000.2000	0217.6	018.3	142.5	000.1700	0152.5	017.3	57.64
254.0	000.2000	0214.7	018.1	141.7	000.1700	0153.6	017.0	57.91
255.0	000.2000	0212.6	018.0	141.0	000.1700	0154.6	016.8	58.18
256.0	000.2000	0211.3	018.0	140.4	000.1700	0155.3	016.5	58.44
257.0	000.2000	0212.0	018.0	140.0	000.1700	0155.3	016.2	58.69
258.0	000.2000	0214.2	018.1	139.8	000.1700	0155.3	015.9	58.96
259.0	000.2000	0216.8	018.2	139.6	000.1700	0155.3	015.6	59.24
260.0	000.2000	0219.5	018.3	139.4	000.1700	0155.9	015.2	59.56
261.0	000.2000	0220.7	018.4	138.9	000.1700	0155.9	014.9	59.69
262.0	000.2000	0220.8	018.4	138.2	000.1700	0156.5	014.7	60.04
263.0	000.2000	0219.9	018.3	137.4	000.1700	0157.2	014.4	60.36

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
264.0	000.2000	0219.0	018.3	136.5	000.1700	0157.2	014.2	60.64
265.0	000.2000	0217.9	018.3	135.6	000.1700	0157.8	014.0	60.95
266.0	000.2000	0216.3	018.2	134.5	000.1700	0158.1	013.8	61.21
267.0	000.2000	0214.3	018.1	133.3	000.1700	0157.9	013.6	61.42
268.0	000.2000	0212.7	018.0	132.2	000.1700	0157.8	013.4	61.65
269.0	000.2000	0211.1	018.0	131.0	000.1700	0157.9	013.2	61.88
270.0	000.2000	0209.5	017.9	129.8	000.1700	0158.1	013.1	62.10
271.0	000.2000	0208.0	017.8	128.5	000.1700	0158.3	012.9	62.31
272.0	000.2000	0206.6	017.8	127.3	000.1700	0158.2	012.8	62.49
273.0	000.2000	0205.1	017.7	125.9	000.1700	0158.2	012.7	62.65
274.0	000.2000	0203.8	017.7	124.6	000.1700	0158.2	012.6	62.82
275.0	000.2000	0203.0	017.6	123.3	000.1700	0157.1	012.5	62.92
276.0	000.2000	0202.3	017.6	122.0	000.1700	0155.9	012.3	63.01
277.0	000.2000	0202.0	017.6	120.6	000.1700	0155.0	012.2	63.12
278.0	000.2000	0201.8	017.6	119.3	000.1700	0155.1	012.1	63.29
279.0	000.2000	0202.3	017.6	118.0	000.1700	0156.1	012.0	63.55
280.0	000.2000	0203.4	017.6	116.6	000.1700	0157.2	011.8	63.83
281.0	000.2000	0204.6	017.7	115.2	000.1700	0159.5	011.7	64.18
282.0	000.2000	0206.3	017.8	113.8	000.1700	0160.9	011.6	64.48
283.0	000.2000	0207.8	017.8	112.4	000.1700	0165.2	011.4	64.93
284.0	000.2000	0209.4	017.9	110.9	000.1700	0167.7	011.3	65.25
285.0	000.2000	0210.8	018.0	109.3	000.1700	0171.6	011.2	65.61
286.0	000.2000	0211.8	018.0	107.7	000.1700	0172.4	011.2	65.75
287.0	000.2000	0212.4	018.0	106.1	000.1700	0171.5	011.2	65.75
288.0	000.2000	0212.4	018.0	104.5	000.1700	0168.1	011.2	65.54
289.0	000.2000	0211.9	018.0	102.9	000.1700	0165.8	011.2	65.34
290.0	000.2000	0211.3	018.0	101.3	000.1700	0162.6	011.3	65.04
291.0	000.2000	0210.6	017.9	099.8	000.1700	0162.5	011.4	64.90
292.0	000.2000	0210.1	017.9	098.3	000.1700	0164.7	011.5	64.89
293.0	000.2000	0210.0	017.9	096.7	000.1700	0165.6	011.5	64.82
294.0	000.2000	0210.2	017.9	095.3	000.1700	0166.8	011.6	64.75
295.0	000.2000	0210.3	017.9	093.8	000.1700	0167.6	011.7	64.64
296.0	000.2000	0209.8	017.9	092.4	000.1700	0167.9	011.9	64.44
297.0	000.2000	0209.1	017.9	091.1	000.1700	0167.7	012.0	64.19
298.0	000.2000	0208.0	017.8	089.9	000.1700	0167.5	012.2	63.91
299.0	000.2000	0206.9	017.8	088.7	000.1700	0168.5	012.4	63.68
300.0	000.2000	0206.1	017.8	087.6	000.1700	0169.8	012.6	63.48
301.0	000.2000	0206.0	017.8	086.4	000.1700	0172.6	012.8	63.39
302.0	000.2000	0206.6	017.8	085.2	000.1700	0173.0	012.9	63.19
303.0	000.2000	0207.7	017.8	084.0	000.1700	0173.0	013.1	62.98
304.0	000.2000	0209.0	017.9	082.8	000.1700	0173.1	013.2	62.77
305.0	000.2000	0210.3	017.9	081.7	000.1700	0172.4	013.4	62.50
306.0	000.2000	0211.5	018.0	080.5	000.1700	0171.7	013.6	62.23
307.0	000.2000	0212.8	018.0	079.5	000.1700	0171.5	013.8	61.97
308.0	000.2000	0213.8	018.1	078.5	000.1700	0172.7	014.0	61.78
309.0	000.2000	0214.3	018.1	077.6	000.1700	0172.7	014.2	61.49
310.0	000.2000	0214.1	018.1	076.8	000.1700	0174.5	014.5	61.28
311.0	000.2000	0213.4	018.1	076.2	000.1700	0176.5	014.7	61.06
312.0	000.2000	0212.7	018.0	075.6	000.1700	0176.5	015.0	60.92
313.0	000.2000	0212.6	018.0	074.9	000.1700	0178.0	015.3	60.77
314.0	000.2000	0212.7	018.0	074.3	000.1700	0179.3	015.5	60.61

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
315.0	000.2000	0212.3	018.0	073.8	000.1700	0179.3	015.8	60.37
316.0	000.2000	0210.7	018.0	073.5	000.1700	0180.8	016.1	60.18
317.0	000.2000	0208.3	017.9	073.3	000.1700	0180.8	016.4	59.91
318.0	000.2000	0205.4	017.7	073.2	000.1700	0180.8	016.8	59.63
319.0	000.2000	0202.4	017.6	073.2	000.1700	0180.8	017.1	59.35
320.0	000.2000	0199.9	017.5	073.1	000.1700	0180.8	017.4	59.08
321.0	000.2000	0197.8	017.4	073.0	000.1700	0180.8	017.8	58.82
322.0	000.2000	0196.0	017.3	072.9	000.1700	0180.8	018.1	58.57
323.0	000.2000	0194.5	017.2	072.7	000.1700	0180.8	018.4	58.32
324.0	000.2000	0193.2	017.2	072.6	000.1700	0180.8	018.7	58.07
325.0	000.2000	0192.3	017.1	072.4	000.1700	0182.6	019.0	57.92
326.0	000.2000	0191.5	017.1	072.3	000.1700	0182.6	019.3	57.68
327.0	000.2000	0191.0	017.1	072.1	000.1700	0182.6	019.6	57.44
328.0	000.2000	0190.8	017.1	071.9	000.1700	0182.6	019.9	57.21
329.0	000.2000	0190.5	017.1	071.7	000.1700	0182.6	020.1	56.98
330.0	000.2000	0189.9	017.0	071.6	000.1700	0182.6	020.4	56.74
331.0	000.2000	0189.1	017.0	071.6	000.1700	0182.6	020.7	56.51
332.0	000.2000	0188.7	017.0	071.5	000.1700	0184.3	021.0	56.35
333.0	000.2000	0189.0	017.0	071.3	000.1700	0184.3	021.3	56.13
334.0	000.2000	0189.7	017.0	071.1	000.1700	0184.3	021.6	55.90
335.0	000.2000	0190.1	017.1	071.0	000.1700	0184.3	021.9	55.68
336.0	000.2000	0190.3	017.1	070.9	000.1700	0184.3	022.2	55.45
337.0	000.2000	0190.3	017.1	070.8	000.1700	0184.3	022.5	55.22
338.0	000.2000	0190.2	017.1	070.8	000.1700	0184.3	022.8	55.00
339.0	000.2000	0190.0	017.0	070.8	000.1700	0184.3	023.1	54.78
340.0	000.2000	0189.6	017.0	070.8	000.1700	0184.3	023.4	54.55
341.0	000.2000	0188.9	017.0	070.9	000.1700	0184.3	023.7	54.33
342.0	000.2000	0188.2	017.0	070.9	000.1700	0184.3	024.0	54.12
343.0	000.2000	0188.2	017.0	070.9	000.1700	0184.3	024.3	53.90
344.0	000.2000	0188.8	017.0	070.9	000.1700	0184.3	024.6	53.69
345.0	000.2000	0189.6	017.0	070.9	000.1700	0184.3	024.9	53.47
346.0	000.2000	0190.1	017.1	070.9	000.1700	0184.3	025.2	53.26
347.0	000.2000	0190.6	017.1	070.9	000.1700	0184.3	025.5	53.05

AP201 BNPED20000118AES
Channel = 201A
Max ERP = 0.17 kW
RCAMSL = 507 M
N. Lat = 44 06 59
W. Lng = 92 41 22
Protected
60 dBu

KMSE
Channel = 204A
Max ERP = 0.2 kW
RCAMSL = 543 M
N. Lat = 44 02 28
W. Lng = 92 20 25
Interfering
100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
047.0	000.1700	0170.8	015.4	318.7	000.2000	0202.4	025.2	54.74
048.0	000.1700	0171.6	015.5	318.9	000.2000	0202.4	024.9	54.94
049.0	000.1700	0172.9	015.5	319.0	000.2000	0202.4	024.6	55.13
050.0	000.1700	0173.8	015.6	319.1	000.2000	0202.4	024.4	55.33
051.0	000.1700	0174.3	015.6	319.1	000.2000	0202.4	024.1	55.53
052.0	000.1700	0174.5	015.6	319.1	000.2000	0202.4	023.8	55.73
053.0	000.1700	0174.8	015.6	319.1	000.2000	0202.4	023.6	55.93
054.0	000.1700	0175.2	015.6	319.1	000.2000	0202.4	023.3	56.13
055.0	000.1700	0175.5	015.7	319.1	000.2000	0202.4	023.0	56.34
056.0	000.1700	0176.1	015.7	319.1	000.2000	0202.4	022.7	56.55
057.0	000.1700	0176.9	015.7	319.1	000.2000	0202.4	022.5	56.76
058.0	000.1700	0177.8	015.8	319.1	000.2000	0202.4	022.2	56.97
059.0	000.1700	0178.8	015.8	319.1	000.2000	0202.4	021.9	57.18
060.0	000.1700	0180.0	015.9	319.1	000.2000	0202.4	021.6	57.40
061.0	000.1700	0181.3	015.9	319.1	000.2000	0202.4	021.3	57.62
062.0	000.1700	0182.4	016.0	319.0	000.2000	0202.4	021.1	57.84
063.0	000.1700	0183.5	016.0	319.0	000.2000	0202.4	020.8	58.06
064.0	000.1700	0184.5	016.1	318.9	000.2000	0202.4	020.5	58.29
065.0	000.1700	0185.5	016.1	318.8	000.2000	0202.4	020.2	58.51
066.0	000.1700	0186.2	016.1	318.7	000.2000	0202.4	019.9	58.73
067.0	000.1700	0186.4	016.1	318.4	000.2000	0205.4	019.7	59.08
068.0	000.1700	0186.3	016.1	318.1	000.2000	0205.4	019.4	59.29
069.0	000.1700	0186.0	016.1	317.8	000.2000	0205.4	019.1	59.50
070.0	000.1700	0185.4	016.1	317.4	000.2000	0208.3	018.9	59.83
071.0	000.1700	0184.3	016.1	316.9	000.2000	0208.3	018.7	60.02
072.0	000.1700	0182.6	016.0	316.4	000.2000	0210.7	018.4	60.31
073.0	000.1700	0180.8	015.9	315.7	000.2000	0210.7	018.2	60.48
074.0	000.1700	0179.3	015.8	315.1	000.2000	0212.3	018.0	60.72
075.0	000.1700	0178.0	015.8	314.5	000.2000	0212.3	017.8	60.90
076.0	000.1700	0176.5	015.7	313.9	000.2000	0212.7	017.6	61.08
077.0	000.1700	0174.5	015.6	313.1	000.2000	0212.6	017.4	61.22
078.0	000.1700	0172.7	015.5	312.4	000.2000	0212.7	017.3	61.37
079.0	000.1700	0171.5	015.5	311.7	000.2000	0212.7	017.1	61.52
080.0	000.1700	0171.4	015.5	311.1	000.2000	0213.4	016.9	61.72

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
081.0	000.1700	0171.7	015.5	310.5	000.2000	0213.4	016.6	61.91
082.0	000.1700	0172.4	015.5	310.0	000.2000	0214.1	016.4	62.12
083.0	000.1700	0173.1	015.5	309.4	000.2000	0214.3	016.2	62.32
084.0	000.1700	0173.0	015.5	308.8	000.2000	0214.3	016.0	62.48
085.0	000.1700	0173.0	015.5	308.1	000.2000	0213.8	015.8	62.62
086.0	000.1700	0172.6	015.5	307.3	000.2000	0212.8	015.7	62.71
087.0	000.1700	0171.2	015.5	306.3	000.2000	0211.5	015.5	62.76
088.0	000.1700	0169.8	015.4	305.4	000.2000	0210.3	015.4	62.81
089.0	000.1700	0168.5	015.3	304.5	000.2000	0209.0	015.3	62.84
090.0	000.1700	0167.5	015.3	303.5	000.2000	0209.0	015.2	62.93
091.0	000.1700	0167.7	015.3	302.7	000.2000	0207.7	015.1	63.01
092.0	000.1700	0167.9	015.3	301.8	000.2000	0206.6	014.9	62.84
093.0	000.1700	0168.1	015.3	300.9	000.2000	0206.0	014.8	62.97
094.0	000.1700	0167.6	015.3	300.0	000.2000	0206.1	014.7	63.08
095.0	000.1700	0166.8	015.2	298.9	000.2000	0206.9	014.6	63.20
096.0	000.1700	0166.2	015.2	297.9	000.2000	0208.0	014.5	63.34
097.0	000.1700	0165.6	015.2	296.9	000.2000	0209.1	014.5	63.46
098.0	000.1700	0164.7	015.1	295.8	000.2000	0209.8	014.4	63.54
099.0	000.1700	0163.5	015.1	294.8	000.2000	0210.3	014.4	63.58
100.0	000.1700	0162.5	015.0	293.7	000.2000	0210.2	014.4	63.59
101.0	000.1700	0162.6	015.0	292.7	000.2000	0210.0	014.3	63.66
102.0	000.1700	0163.8	015.1	291.7	000.2000	0210.1	014.2	63.80
103.0	000.1700	0165.8	015.2	290.7	000.2000	0210.6	014.1	63.99
104.0	000.1700	0168.1	015.3	289.7	000.2000	0211.3	013.9	64.21
105.0	000.1700	0170.0	015.4	288.6	000.2000	0211.9	013.8	64.38
106.0	000.1700	0171.5	015.5	287.5	000.2000	0212.4	013.7	64.51
107.0	000.1700	0172.4	015.5	286.4	000.2000	0211.8	013.7	64.54
108.0	000.1700	0172.4	015.5	285.2	000.2000	0210.8	013.7	64.49
109.0	000.1700	0171.6	015.5	284.1	000.2000	0209.4	013.8	64.35
110.0	000.1700	0169.9	015.4	283.0	000.2000	0207.8	013.9	64.15
111.0	000.1700	0167.7	015.3	282.0	000.2000	0206.3	014.0	63.90
112.0	000.1700	0165.2	015.1	281.0	000.2000	0204.6	014.2	63.61
113.0	000.1700	0162.8	015.0	280.1	000.2000	0203.4	014.4	63.34
114.0	000.1700	0160.9	014.9	279.2	000.2000	0202.3	014.5	63.10
115.0	000.1700	0159.5	014.9	278.3	000.2000	0201.8	014.7	62.91
116.0	000.1700	0158.3	014.8	277.4	000.2000	0202.0	014.8	62.76
117.0	000.1700	0157.2	014.7	276.5	000.2000	0202.0	015.0	62.60
118.0	000.1700	0156.1	014.7	275.7	000.2000	0202.3	015.1	62.73
119.0	000.1700	0155.1	014.6	274.9	000.2000	0203.0	015.3	62.63
120.0	000.1700	0154.7	014.6	274.1	000.2000	0203.8	015.4	62.55
121.0	000.1700	0155.0	014.6	273.2	000.2000	0205.1	015.5	62.53
122.0	000.1700	0155.9	014.7	272.3	000.2000	0206.6	015.6	62.52
123.0	000.1700	0157.1	014.7	271.3	000.2000	0208.0	015.6	62.52
124.0	000.1700	0157.9	014.8	270.5	000.2000	0209.5	015.7	62.50
125.0	000.1700	0158.2	014.8	269.7	000.2000	0209.5	015.9	62.39
126.0	000.1700	0158.2	014.8	268.9	000.2000	0211.1	016.0	62.32
127.0	000.1700	0158.2	014.8	268.2	000.2000	0212.7	016.2	62.26
128.0	000.1700	0158.3	014.8	267.5	000.2000	0214.3	016.4	62.19
129.0	000.1700	0158.3	014.8	266.8	000.2000	0214.3	016.5	62.05
130.0	000.1700	0158.1	014.8	266.2	000.2000	0216.3	016.7	61.98
131.0	000.1700	0157.9	014.8	265.6	000.2000	0216.3	016.9	61.82

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
132.0	000.1700	0157.8	014.8	265.0	000.2000	0217.9	017.1	61.72
133.0	000.1700	0157.9	014.8	264.4	000.2000	0219.0	017.3	61.61
134.0	000.1700	0158.0	014.8	263.8	000.2000	0219.0	017.5	61.45
135.0	000.1700	0158.1	014.8	263.3	000.2000	0219.9	017.7	61.32
136.0	000.1700	0157.8	014.8	262.8	000.2000	0219.9	017.9	61.14
137.0	000.1700	0157.2	014.7	262.4	000.2000	0220.8	018.1	60.99
138.0	000.1700	0156.5	014.7	262.1	000.2000	0220.8	018.3	60.80
139.0	000.1700	0155.9	014.7	261.7	000.2000	0220.8	018.6	60.61
140.0	000.1700	0155.3	014.6	261.4	000.2000	0220.7	018.8	60.41
141.0	000.1700	0154.6	014.6	261.1	000.2000	0220.7	019.0	60.21
142.0	000.1700	0153.6	014.5	260.8	000.2000	0220.7	019.3	60.01
143.0	000.1700	0152.5	014.5	260.6	000.2000	0220.7	019.5	59.81
144.0	000.1700	0151.7	014.4	260.4	000.2000	0219.5	019.8	59.56
145.0	000.1700	0151.6	014.4	260.1	000.2000	0219.5	020.0	59.38
146.0	000.1700	0152.0	014.4	259.8	000.2000	0219.5	020.2	59.20
147.0	000.1700	0152.3	014.5	259.5	000.2000	0216.8	020.5	58.91
148.0	000.1700	0152.0	014.4	259.2	000.2000	0216.8	020.7	58.72
149.0	000.1700	0151.7	014.4	259.0	000.2000	0216.8	021.0	58.53
150.0	000.1700	0151.2	014.4	258.9	000.2000	0216.8	021.2	58.33
151.0	000.1700	0150.7	014.4	258.7	000.2000	0216.8	021.4	58.14
152.0	000.1700	0150.4	014.4	258.6	000.2000	0216.8	021.7	57.95
153.0	000.1700	0150.7	014.4	258.4	000.2000	0214.2	021.9	57.66
154.0	000.1700	0150.9	014.4	258.2	000.2000	0214.2	022.2	57.47
155.0	000.1700	0150.8	014.4	258.0	000.2000	0214.2	022.4	57.29
156.0	000.1700	0150.7	014.4	257.9	000.2000	0214.2	022.7	57.10
157.0	000.1700	0150.8	014.4	257.8	000.2000	0214.2	022.9	56.91
158.0	000.1700	0151.2	014.4	257.6	000.2000	0214.2	023.1	56.73
159.0	000.1700	0151.7	014.4	257.5	000.2000	0212.0	023.4	56.45
160.0	000.1700	0151.8	014.4	257.4	000.2000	0212.0	023.6	56.27
161.0	000.1700	0151.5	014.4	257.3	000.2000	0212.0	023.9	56.08
162.0	000.1700	0151.5	014.4	257.3	000.2000	0212.0	024.1	55.90
163.0	000.1700	0152.1	014.4	257.1	000.2000	0212.0	024.4	55.72
164.0	000.1700	0152.3	014.5	257.1	000.2000	0212.0	024.6	55.53
165.0	000.1700	0152.0	014.4	257.1	000.2000	0212.0	024.9	55.35
166.0	000.1700	0151.0	014.4	257.2	000.2000	0212.0	025.1	55.17
167.0	000.1700	0150.0	014.3	257.3	000.2000	0212.0	025.4	54.99