

Exhibit 18.1

Tabulation of Proposed Non-Commercial Allocation

Cookeville Christian Broadcasting REFERENCE 36 26 23.0 N. 85 24 27.0 W. CH# 206A - 89.1 MHz, Pwr= 1.4 kw, HAAT= 203.4 M, COR= 498 M Average Protected F(50-50)= 27.93 km Omni-directional DISPLAY DATES DATA 02-06-13 SEARCH 02-07-13											
CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT* (Overlap in km)
206A WOCG Livingston	CP _CX TN	119.3 299.3	1.76 BNPED20071018AIC	36 25 55.0 85 23 25.0	1.200 198	82.7 492	29.4 Cookeville Christian Broad	-104.9*<	-99.8*<		
203A WTTU Cookeville	LIC _HN TN	196.7 16.7	30.53 BLED19921130KJ	36 10 36.0 85 30 20.0	2.000 50	1.8 378	18.0 Tennessee Technological Un	0.2	10.3		
205C1 WKYU-FM Bowling Green	LIC _CX KY	303.8 123.1	131.03 BMLED20070507AFC	37 05 23.0 86 38 05.0	100.000 219	95.6 383	64.6 Western Kentucky Universit	3.1	17.7		
206C2 WOFM Alcoa	LIC _HX TN	109.8 290.7	140.03 BLED20030227ADH	36 00 13.0 83 56 34.0	1.600 452	108.4 763	41.9 Educational Media Foundati	8.7	28.0		
207A WZVK Glasgow	LIC _CX KY	323.7 143.4	70.70 BLED20110112AAN	36 57 05.0 85 52 43.0	0.800 60	19.5 289	13.2 Bowling Green Community Br	18.9	8.9		
206C2 WOFM Alcoa	CP _CX TN	109.8 290.7	140.03 BMPED20120925AEU	36 00 13.0 83 56 34.0	1.600 452	108.2 761	41.9 Educational Media Foundati	8.9	28.1		
207C3 WMKW Crossville	LIC DVN TN	152.1 332.4	83.22 BLED19961120KA	35 46 38.0 84 58 34.0	0.500 425	44.4 930	29.2 The Moody Bible Institute	12.0	13.6		
205C WMBW Chattanooga	LIC _CY TN	179.1 359.1	164.32 BMLED20020919AAA	34 57 43.0 85 22 40.0	100.000 460	121.3 760	81.7 The Moody Bible Institute	15.1	40.4		
209C1 WDCL-FM Somerset	LIC _CN KY	15.1 195.3	82.75 BLED19850408KA	37 09 29.0 85 09 50.0	100.000 174	7.6 444	61.2 Western Kentucky Universit	44.5	19.3		
206C3 WECV Nashville	LIC DCX TN	255.0 74.2	125.35 BLED20110921ADQ	36 08 28.0 86 45 23.0	22.000 59	57.2 224	16.6 Community Broadcasting, In	39.6	27.2		
206A WECV Nashville	LIC DCN TN	255.0 74.2	125.35 BLED19980805KB	36 08 28.0 86 45 23.0	1.400 61	50.8 225	14.5 Community Broadcasting, In	46.0	29.4		
208C1 WMOT Murfreesboro	LIC DCX TN	247.2 66.6	100.55 BLED20050916AAV	36 05 07.0 86 26 22.0	100.000 206	7.7 384	61.3 Middle Tennessee State Uni	65.4	37.1		
207C1 KYAI McKee	LIC DCX KY	63.0 243.9	158.01 BLED20111028AEV	37 04 30.0 83 49 14.0	50.000 165	73.3 517	48.0 Educational Media Foundati	59.3	71.8		
203A WVCP Gallatin	LIC _CX TN	267.9 87.3	93.37 BLED20030508ABK	36 24 15.0 86 27 01.0	1.000 67	1.6 248	15.2 Volunteer State Community	63.1	76.0		
204C3 NEW Oak Ridge	CP DCX TN	116.3 296.9	89.31 BMPED20101122AFL	36 04 48.0 84 31 00.0	17.000 27	1.6 487	16.4 Calvary Chapel of Knoxville	65.1	71.0		
203A WWQS Spring City	LIC DCX TN	148.1 328.4	93.64 BLED20120516ACA	35 43 24.0 84 51 34.0	6.000 94	1.6 478	15.8 The Power Foundation	66.3	75.8		
203C2 WEKF Corbin	LIC DVX KY	54.1 234.7	110.95 BLED20030602BKI	37 01 13.0 84 23 41.0	21.000 152	4.0 465	40.9 Eastern Kentucky Universit	81.8	68.0		
204A WLCU Campbellsville	LIC DCN KY	2.4 182.4	100.64 BLED20110225ACQ	37 20 39.0 85 21 34.0	0.800 63	1.6 304	14.7 Campbellsville University	68.2	83.6		

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= - Zone 2, Co to 3rd adjacent.
 All separation margins (if shown) include rounding
 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.
 < = Contour overlap

Light Blue Highlighted Text denotes the WOCG(FM) - Livingston, TN facility to be modified by this Form 340 proposal. This facility need not be protected.

Yellow Highlighted Text denotes §73.509 Contour Protection Studies toward select stations as included in **Exhibit(s) 18.2 to 18.3.**

Exhibit 18.2

Contour Protection Study Toward WTTU(FM) - Cookeville, TN

Cookeville Christian Broadcasting

FMCommander Single Allocation Study - 02-07-2013 - NED 03 SEC
WOCG.P's Overlaps (In= 0.23 km, Out= 10.33 km)

WOCG.P CH 206 A
Lat= 36 26 23.0, Lng= 85 24 27.0
1.4 kW 203.4 M HAAT, 498 M COR
Prot.= 60 dBu, Intef.= 100 dBu

WTTU CH 203 A BLED19921130KJ
Lat= 36 10 36.0, Lng= 85 30 20.0
2.0 kW 50 M HAAT, 378 M COR
Prot.= 60 dBu, Intef.= 100 dBu

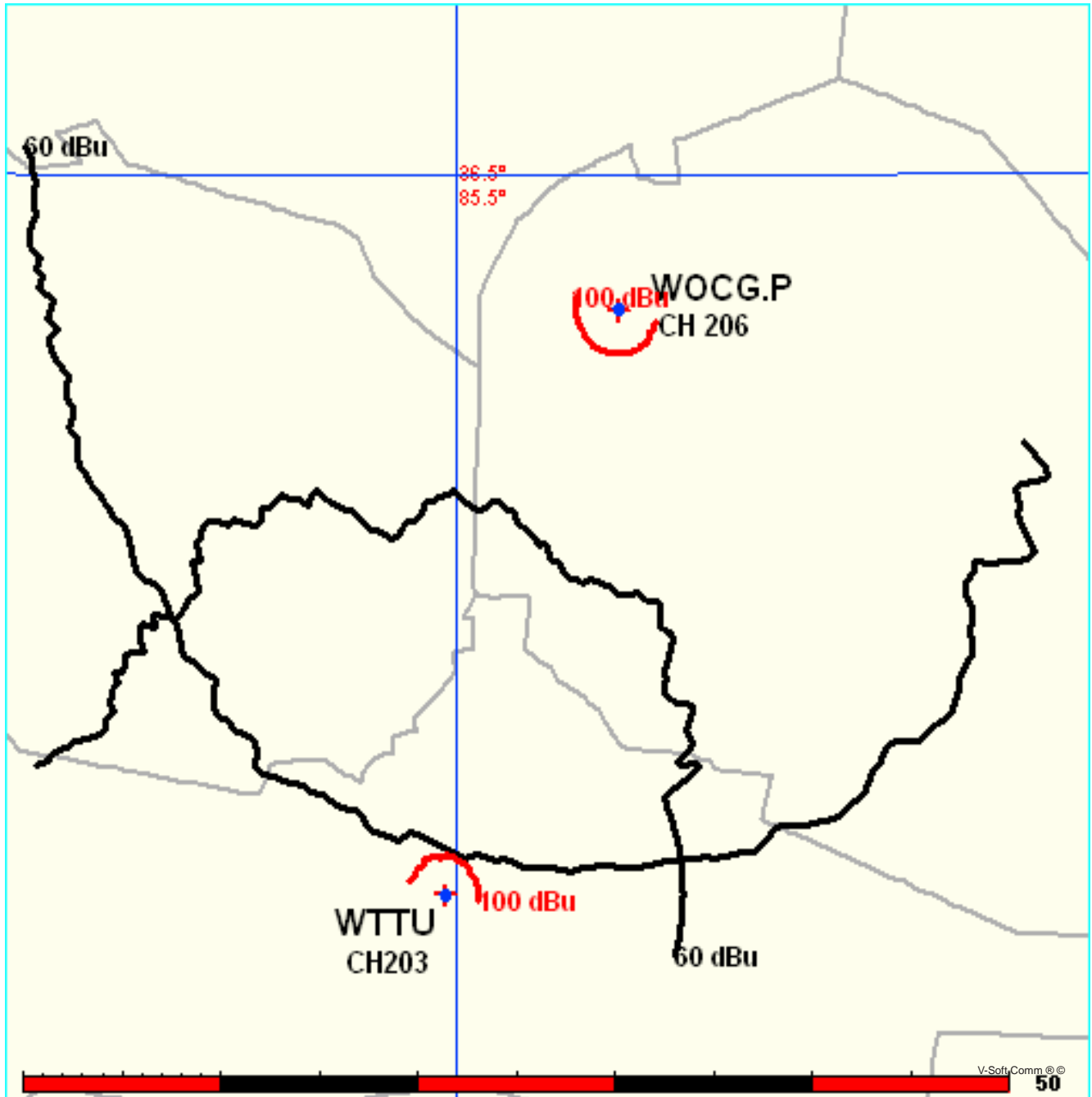


Exhibit 18.2

Contour Protection Study Toward WTTU(FM) - Cookeville, TN

02-07-2013

Terrain Data: NED 03 SEC

FMOver Analysis

WOCG.P

WTTU BLED19921130KJ

Channel = 206A
Max ERP = 1.4 kW
RCAMSL = 498 M
N. Lat. 36 26 23.0
W. Lng. 85 24 27.0
Protected
60 dBu

Channel = 203A
Max ERP = 2 kW
RCAMSL = 378 M
N. Lat. 36 10 36.0
W. Lng. 85 30 20.0
Interfering
100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
154.0	001.4000	0194.4	027.3	077.4	002.0000	-0009.7	021.3	50.87	
155.0	001.4000	0195.1	027.4	077.8	002.0000	-0012.4	020.8	51.23	
156.0	001.4000	0198.8	027.6	078.8	002.0000	-0022.1	020.4	51.55	
157.0	001.4000	0199.8	027.7	079.2	002.0000	-0023.5	019.9	51.91	
158.0	001.4000	0199.1	027.6	079.4	002.0000	-0023.8	019.5	52.29	
159.0	001.4000	0197.7	027.6	079.4	002.0000	-0023.9	019.0	52.69	
160.0	001.4000	0196.8	027.5	079.5	002.0000	-0024.2	018.5	53.08	
161.0	001.4000	0194.1	027.3	079.2	002.0000	-0023.4	018.0	53.49	
162.0	001.4000	0191.0	027.1	078.7	002.0000	-0022.0	017.5	53.91	
163.0	001.4000	0190.4	027.1	078.8	002.0000	-0022.2	017.0	54.30	
164.0	001.4000	0196.7	027.5	080.3	002.0000	-0028.3	016.6	54.67	
165.0	001.4000	0201.1	027.8	081.5	002.0000	-0027.6	016.1	55.04	
166.0	001.4000	0203.2	027.9	082.2	002.0000	-0028.9	015.7	55.44	
167.0	001.4000	0201.6	027.8	082.0	002.0000	-0028.1	015.2	55.87	
168.0	001.4000	0201.4	027.8	082.1	002.0000	-0028.4	014.7	56.36	
169.0	001.4000	0202.6	027.9	082.6	002.0000	-0031.6	014.2	56.93	
170.0	001.4000	0201.8	027.8	082.5	002.0000	-0030.8	013.7	57.55	
171.0	001.4000	0200.2	027.7	082.1	002.0000	-0028.3	013.2	58.20	
172.0	001.4000	0199.8	027.7	082.0	002.0000	-0028.1	012.8	58.87	
173.0	001.4000	0199.5	027.7	081.9	002.0000	-0027.6	012.3	59.58	
174.0	001.4000	0199.7	027.7	081.9	002.0000	-0027.7	011.8	60.31	
175.0	001.4000	0198.7	027.6	081.4	002.0000	-0027.7	011.3	61.06	
176.0	001.4000	0200.6	027.7	082.0	002.0000	-0027.9	010.8	61.86	
177.0	001.4000	0202.6	027.9	082.5	002.0000	-0030.6	010.3	62.69	
178.0	001.4000	0202.5	027.9	082.2	002.0000	-0028.7	009.9	63.53	
179.0	001.4000	0203.6	027.9	082.3	002.0000	-0029.3	009.4	64.41	
180.0	001.4000	0203.7	028.0	082.0	002.0000	-0027.9	008.9	65.30	
181.0	001.4000	0201.7	027.8	080.6	002.0000	-0028.9	008.4	66.16	
182.0	001.4000	0202.1	027.8	080.1	002.0000	-0027.3	007.9	67.09	
183.0	001.4000	0203.9	028.0	080.2	002.0000	-0027.8	007.4	68.17	
184.0	001.4000	0204.3	028.0	079.5	002.0000	-0024.3	007.0	69.33	
185.0	001.4000	0207.1	028.2	080.0	002.0000	-0026.8	006.4	70.67	
186.0	001.4000	0207.0	028.2	078.7	002.0000	-0021.8	006.0	71.98	
187.0	001.4000	0206.1	028.1	076.5	002.0000	-0013.1	005.5	73.32	

Exhibit 18.2

Contour Protection Study Toward WTTU(FM) - Cookeville, TN

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
188.0	001.4000	0207.7	028.2	075.7	002.0000	-0020.0	005.0	74.90
189.0	001.4000	0207.7	028.2	073.3	002.0000	-0004.8	004.6	76.41
190.0	001.4000	0208.5	028.3	070.9	002.0000	0008.5	004.1	78.22
191.0	001.4000	0207.8	028.2	066.5	002.0000	0029.4	003.7	79.99
192.0	001.4000	0205.9	028.1	060.1	002.0000	0043.1	003.4	84.75
193.0	001.4000	0208.8	028.3	056.5	002.0000	0046.2	002.9	88.09
194.0	001.4000	0207.9	028.2	047.8	002.0000	0047.4	002.7	90.11
195.0	001.4000	0207.8	028.2	038.1	002.0000	0064.3	002.5	94.17
196.0	001.4000	0212.3	028.5	028.3	002.0000	0064.1	002.0	97.68
197.0	001.4000	0211.4	028.5	014.1	002.0000	0069.4	002.0	97.93
198.0	001.4000	0209.8	028.4	001.5	002.0000	0081.8	002.2	97.36
199.0	001.4000	0209.1	028.3	350.7	002.0000	0067.0	002.5	94.42
200.0	001.4000	0208.1	028.2	342.4	002.0000	0089.2	002.8	94.19
201.0	001.4000	0207.8	028.2	335.5	002.0000	0091.6	003.1	92.49
202.0	001.4000	0207.9	028.2	329.9	002.0000	0096.0	003.5	91.12
203.0	001.4000	0217.2	028.9	317.1	002.0000	0078.2	003.6	88.98
204.0	001.4000	0216.5	028.8	314.9	002.0000	0077.9	004.1	86.85
205.0	001.4000	0218.0	028.9	311.5	002.0000	0084.2	004.5	85.80
206.0	001.4000	0219.4	029.0	308.9	002.0000	0082.6	005.0	84.01
207.0	001.4000	0213.9	028.6	311.5	002.0000	0084.4	005.6	82.32
208.0	001.4000	0210.3	028.4	312.6	002.0000	0084.2	006.1	80.62
209.0	001.4000	0213.0	028.6	310.0	002.0000	0085.3	006.6	79.48
210.0	001.4000	0214.1	028.7	308.6	002.0000	0081.7	007.0	77.79
211.0	001.4000	0213.5	028.6	308.4	002.0000	0080.8	007.5	76.47
212.0	001.4000	0212.5	028.5	308.5	002.0000	0081.3	008.0	75.44
213.0	001.4000	0215.7	028.8	306.7	002.0000	0084.7	008.5	74.88
214.0	001.4000	0215.7	028.8	306.5	002.0000	0084.8	009.0	73.95
215.0	001.4000	0217.7	028.9	305.6	002.0000	0082.8	009.5	72.83
216.0	001.4000	0222.3	029.2	303.9	002.0000	0080.8	010.0	71.71
217.0	001.4000	0222.8	029.2	303.8	002.0000	0080.9	010.5	70.84
218.0	001.4000	0226.8	029.5	302.6	002.0000	0083.8	011.1	70.25
219.0	001.4000	0226.1	029.4	303.1	002.0000	0083.2	011.6	69.37
220.0	001.4000	0215.8	028.8	306.7	002.0000	0084.7	012.0	68.82
221.0	001.4000	0211.1	028.4	308.3	002.0000	0080.1	012.5	67.62
222.0	001.4000	0212.8	028.6	307.9	002.0000	0079.0	013.0	66.79
223.0	001.4000	0216.0	028.8	307.1	002.0000	0080.9	013.5	66.28
224.0	001.4000	0213.6	028.6	308.0	002.0000	0078.9	014.0	65.45
225.0	001.4000	0216.5	028.8	307.5	002.0000	0079.5	014.5	64.88
226.0	001.4000	0214.4	028.7	308.3	002.0000	0080.4	015.0	64.62
227.0	001.4000	0207.9	028.2	310.2	002.0000	0085.6	015.4	64.78
228.0	001.4000	0199.6	027.7	312.4	002.0000	0082.5	015.9	64.08
229.0	001.4000	0200.6	027.7	312.3	002.0000	0082.3	016.4	63.64
230.0	001.4000	0201.5	027.8	312.3	002.0000	0082.3	016.8	63.23
231.0	001.4000	0204.8	028.0	311.9	002.0000	0082.4	017.4	62.80
232.0	001.4000	0207.5	028.2	311.6	002.0000	0083.9	017.9	62.53
233.0	001.4000	0203.3	027.9	312.7	002.0000	0085.6	018.3	62.34
234.0	001.4000	0199.8	027.7	313.7	002.0000	0083.2	018.7	61.72

MUNN-REESE, INC.

Broadcast Engineering Consultants

COLDWATER, MI 49036

Exhibit 18.2

Contour Protection Study Toward WTTU(FM) - Cookeville, TN

02-07-2013

Terrain Data: NED 03 SEC

FMOver Analysis

WTTU BLED19921130KJ

WOCG.P

Channel = 203A

Max ERP = 2 kW

RCAMSL = 378 M

N. Lat. 36 10 36.0

W. Lng. 85 30 20.0

Protected

60 dBu

Channel = 206A

Max ERP = 1.4 kW

RCAMSL = 498 M

N. Lat. 36 26 23.0

W. Lng. 85 24 27.0

Interfering

100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
332.0	002.0000	0089.2	020.8	239.8	001.4000	0195.3	021.4	65.68	
333.0	002.0000	0089.1	020.8	239.7	001.4000	0195.2	021.1	65.95	
334.0	002.0000	0093.8	021.4	241.2	001.4000	0203.2	020.7	66.61	
335.0	002.0000	0092.7	021.2	240.7	001.4000	0198.9	020.3	66.71	
336.0	002.0000	0094.0	021.4	241.1	001.4000	0202.3	020.0	67.16	
337.0	002.0000	0096.5	021.7	241.8	001.4000	0203.6	019.6	67.54	
338.0	002.0000	0093.0	021.3	240.5	001.4000	0197.2	019.2	67.53	
339.0	002.0000	0091.7	021.1	239.9	001.4000	0195.2	018.9	67.71	
340.0	002.0000	0087.4	020.6	238.2	001.4000	0194.3	018.6	67.89	
341.0	002.0000	0091.2	021.1	239.3	001.4000	0193.6	018.2	68.22	
342.0	002.0000	0091.9	021.1	239.3	001.4000	0193.6	017.8	68.54	
343.0	002.0000	0086.5	020.5	237.0	001.4000	0194.0	017.6	68.71	
344.0	002.0000	0083.3	020.1	235.4	001.4000	0197.5	017.4	69.05	
345.0	002.0000	0081.4	019.9	234.3	001.4000	0201.0	017.1	69.41	
346.0	002.0000	0080.6	019.8	233.6	001.4000	0200.1	016.9	69.61	
347.0	002.0000	0076.4	019.2	231.4	001.4000	0206.5	016.8	69.96	
348.0	002.0000	0071.5	018.6	228.9	001.4000	0200.5	016.8	69.70	
349.0	002.0000	0071.1	018.5	228.2	001.4000	0199.6	016.5	69.87	
350.0	002.0000	0068.7	018.2	226.7	001.4000	0210.4	016.4	70.43	
351.0	002.0000	0066.1	017.9	225.1	001.4000	0216.8	016.3	70.75	
352.0	002.0000	0066.7	018.0	224.6	001.4000	0215.7	016.0	70.95	
353.0	002.0000	0070.1	018.4	225.3	001.4000	0217.3	015.5	71.47	
354.0	002.0000	0072.0	018.7	225.2	001.4000	0217.3	015.1	71.82	
355.0	002.0000	0071.9	018.6	224.4	001.4000	0215.1	014.9	71.68	
356.0	002.0000	0074.2	019.0	224.4	001.4000	0215.3	014.4	72.22	
357.0	002.0000	0079.2	019.6	225.5	001.4000	0216.5	013.7	73.12	
358.0	002.0000	0079.2	019.6	224.5	001.4000	0215.5	013.5	73.40	
359.0	002.0000	0080.8	019.8	224.1	001.4000	0213.9	013.1	73.87	
000.0	002.0000	0082.1	020.0	223.5	001.4000	0212.5	012.7	74.33	
001.0	002.0000	0084.0	020.2	223.1	001.4000	0215.6	012.3	75.05	
002.0	002.0000	0079.9	019.7	220.3	001.4000	0216.8	012.5	74.85	
003.0	002.0000	0078.3	019.5	218.5	001.4000	0226.5	012.5	75.29	
004.0	002.0000	0077.4	019.4	216.9	001.4000	0222.8	012.4	75.29	

MUNN-REESE, INC.

Broadcast Engineering Consultants

COLDWATER, MI 49036

Exhibit 18.2

Contour Protection Study Toward WTTU(FM) - Cookeville, TN

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
005.0	002.0000	0076.6	019.3	215.3	001.4000	0220.1	012.3	75.31
006.0	002.0000	0077.3	019.4	214.2	001.4000	0215.9	012.0	75.52
007.0	002.0000	0080.1	019.7	213.5	001.4000	0215.7	011.6	76.23
008.0	002.0000	0080.5	019.8	212.1	001.4000	0212.9	011.4	76.43
009.0	002.0000	0077.8	019.4	209.8	001.4000	0214.1	011.6	76.18
010.0	002.0000	0078.1	019.5	208.3	001.4000	0210.3	011.4	76.25
011.0	002.0000	0074.4	019.0	206.0	001.4000	0219.2	011.8	76.05
012.0	002.0000	0072.0	018.7	204.1	001.4000	0216.2	012.0	75.57
013.0	002.0000	0071.4	018.6	202.5	001.4000	0213.0	012.0	75.42
014.0	002.0000	0069.7	018.4	200.9	001.4000	0207.6	012.2	74.92
015.0	002.0000	0067.4	018.1	199.3	001.4000	0208.5	012.5	74.56
016.0	002.0000	0068.5	018.2	197.9	001.4000	0210.1	012.3	74.86
017.0	002.0000	0065.2	017.8	196.4	001.4000	0213.4	012.7	74.36
018.0	002.0000	0062.7	017.4	195.1	001.4000	0208.1	013.1	73.65
019.0	002.0000	0063.5	017.5	193.7	001.4000	0208.6	013.0	73.79
020.0	002.0000	0060.8	017.2	192.6	001.4000	0207.5	013.4	73.20
021.0	002.0000	0059.2	016.9	191.5	001.4000	0207.4	013.7	72.83
022.0	002.0000	0059.8	017.0	190.2	001.4000	0209.7	013.7	72.95
023.0	002.0000	0059.8	017.0	189.0	001.4000	0207.7	013.7	72.79
024.0	002.0000	0059.3	016.9	187.9	001.4000	0207.4	013.9	72.59
025.0	002.0000	0062.1	017.3	186.2	001.4000	0206.3	013.6	72.91
026.0	002.0000	0062.6	017.4	184.9	001.4000	0207.0	013.6	72.89
027.0	002.0000	0062.6	017.4	183.7	001.4000	0204.0	013.7	72.61
028.0	002.0000	0062.9	017.4	182.5	001.4000	0203.0	013.8	72.46
029.0	002.0000	0063.2	017.5	181.3	001.4000	0202.0	013.9	72.29
030.0	002.0000	0061.6	017.3	180.7	001.4000	0202.2	014.3	71.87
031.0	002.0000	0062.8	017.4	179.3	001.4000	0203.9	014.3	71.94
032.0	002.0000	0063.9	017.6	177.9	001.4000	0202.6	014.3	71.83
033.0	002.0000	0066.2	017.9	176.2	001.4000	0200.8	014.2	71.85
034.0	002.0000	0065.7	017.8	175.4	001.4000	0198.8	014.5	71.46
035.0	002.0000	0065.4	017.8	174.5	001.4000	0199.6	014.7	71.22
036.0	002.0000	0067.0	018.0	173.1	001.4000	0199.7	014.8	71.17
037.0	002.0000	0067.6	018.1	172.0	001.4000	0199.8	014.9	71.00
038.0	002.0000	0064.4	017.6	172.3	001.4000	0199.7	015.5	70.77
039.0	002.0000	0061.6	017.3	172.5	001.4000	0199.2	015.9	70.34
040.0	002.0000	0060.6	017.1	172.2	001.4000	0199.8	016.2	70.10
041.0	002.0000	0062.1	017.3	170.9	001.4000	0200.4	016.3	70.05
042.0	002.0000	0061.0	017.2	170.7	001.4000	0200.8	016.7	69.79
043.0	002.0000	0057.9	016.7	171.3	001.4000	0199.9	017.2	69.32
044.0	002.0000	0055.1	016.3	171.9	001.4000	0199.6	017.7	68.88
045.0	002.0000	0051.6	015.7	172.9	001.4000	0199.1	018.3	68.37
046.0	002.0000	0050.5	015.5	172.8	001.4000	0199.0	018.6	68.10
047.0	002.0000	0048.9	015.2	173.0	001.4000	0199.5	019.0	67.81
048.0	002.0000	0047.5	014.9	173.2	001.4000	0199.8	019.4	67.53
049.0	002.0000	0047.7	015.0	172.7	001.4000	0199.0	019.6	67.34
050.0	002.0000	0047.7	015.0	172.2	001.4000	0199.8	019.8	67.19

Exhibit 18.3

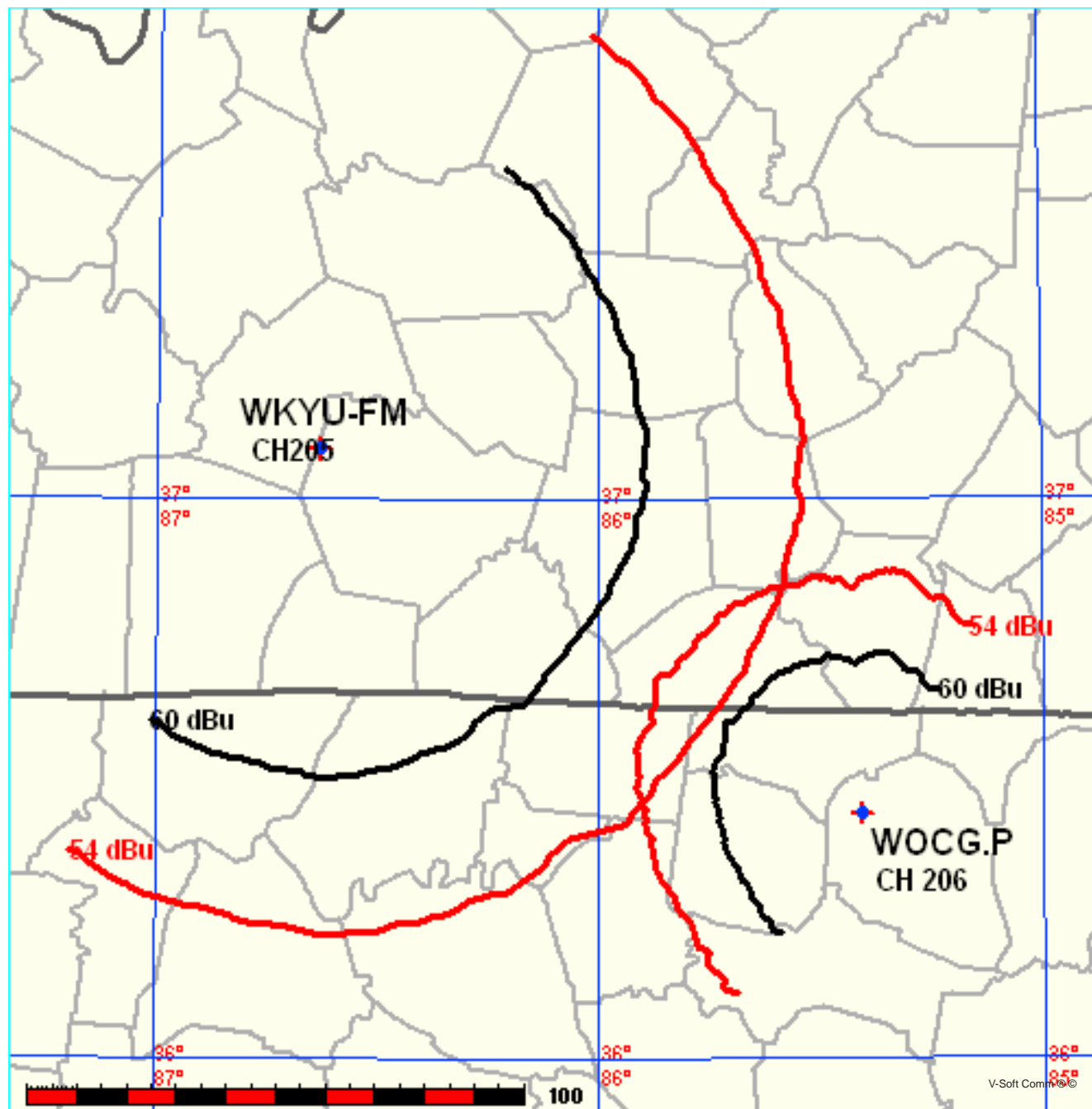
Contour Protection Study Toward WKYU-FM - Bowling Green, KY

Cookeville Christian Broadcasting

FMCommander Single Allocation Study - 02-07-2013 - NED 03 SEC
WOCG.P's Overlaps (In= 3.11 km, Out= 17.71 km)

WOCG.P CH 206 A
Lat= 36 26 23.0, Lng= 85 24 27.0
1.4 kW 203.4 M HAAT, 498 M COR
Prot.= 60 dBu, Intef.= 54 dBu

WKYU-FM CH 205 C1 BMLED20070507AFC
Lat= 37 05 23.0, Lng= 86 38 05.0
100.0 kW 219 M HAAT, 383 M COR
Prot.= 60 dBu, Intef.= 54 dBu



MUNN-REESE, INC.
Broadcast Engineering Consultants
COLDWATER, MI 49036

Exhibit 18.3

Contour Protection Study Toward WKYU-FM - Bowling Green, KY

02-07-2013

Terrain Data: NED 03 SEC

FMOver Analysis

WOCG.P

WKYU-FM BMLED20070507AFC

Channel = 206A

Max ERP = 1.4 kW

RCAMSL = 498 M

N. Lat. 36 26 23.0

W. Lng. 85 24 27.0

Protected

60 dBu

Channel = 205C1

Max ERP = 100 kW

RCAMSL = 383 M

N. Lat. 37 05 23.0

W. Lng. 86 38 05.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
260.0	001.4000	0208.0	028.2	133.1	100.0000	0204.9	112.3	49.45	
261.0	001.4000	0211.4	028.5	133.1	100.0000	0205.0	111.8	49.57	
262.0	001.4000	0210.1	028.4	132.9	100.0000	0205.1	111.4	49.65	
263.0	001.4000	0208.4	028.3	132.7	100.0000	0205.1	111.1	49.72	
264.0	001.4000	0212.3	028.5	132.6	100.0000	0205.2	110.6	49.84	
265.0	001.4000	0215.8	028.8	132.5	100.0000	0205.1	110.0	49.97	
266.0	001.4000	0218.4	028.9	132.4	100.0000	0205.2	109.6	50.08	
267.0	001.4000	0219.7	029.0	132.3	100.0000	0205.1	109.1	50.18	
268.0	001.4000	0214.0	028.6	131.9	100.0000	0205.2	109.0	50.21	
269.0	001.4000	0220.9	029.1	131.9	100.0000	0205.2	108.4	50.37	
270.0	001.4000	0218.0	028.9	131.7	100.0000	0205.6	108.2	50.43	
271.0	001.4000	0216.4	028.8	131.4	100.0000	0206.2	107.9	50.51	
272.0	001.4000	0228.3	029.6	131.5	100.0000	0206.1	107.0	50.74	
273.0	001.4000	0224.9	029.4	131.2	100.0000	0206.8	106.8	50.80	
274.0	001.4000	0231.0	029.8	131.1	100.0000	0207.0	106.2	50.97	
275.0	001.4000	0228.4	029.6	130.8	100.0000	0207.5	106.0	51.03	
276.0	001.4000	0237.9	030.2	130.8	100.0000	0207.5	105.2	51.24	
277.0	001.4000	0237.9	030.2	130.6	100.0000	0207.6	104.9	51.32	
278.0	001.4000	0237.9	030.2	130.3	100.0000	0207.5	104.6	51.40	
279.0	001.4000	0235.3	030.0	130.0	100.0000	0206.8	104.5	51.42	
280.0	001.4000	0239.0	030.3	129.8	100.0000	0206.2	104.0	51.52	
281.0	001.4000	0240.5	030.4	129.6	100.0000	0205.4	103.6	51.59	
282.0	001.4000	0241.0	030.4	129.4	100.0000	0204.4	103.4	51.63	
283.0	001.4000	0245.5	030.7	129.2	100.0000	0203.6	102.9	51.74	
284.0	001.4000	0249.0	030.9	129.0	100.0000	0202.7	102.5	51.83	
285.0	001.4000	0257.4	031.4	128.8	100.0000	0202.1	101.8	52.00	
286.0	001.4000	0252.0	031.0	128.4	100.0000	0201.9	101.9	51.97	
287.0	001.4000	0254.0	031.2	128.2	100.0000	0202.0	101.5	52.06	
288.0	001.4000	0253.2	031.1	127.9	100.0000	0202.1	101.4	52.11	
289.0	001.4000	0252.7	031.1	127.6	100.0000	0202.7	101.2	52.17	
290.0	001.4000	0248.0	030.8	127.3	100.0000	0202.5	101.3	52.14	
291.0	001.4000	0242.4	030.5	126.9	100.0000	0202.5	101.5	52.09	
292.0	001.4000	0240.5	030.4	126.6	100.0000	0203.4	101.4	52.13	
293.0	001.4000	0239.9	030.3	126.3	100.0000	0204.5	101.3	52.20	
294.0	001.4000	0246.8	030.7	126.1	100.0000	0205.2	100.8	52.37	

MUNN-REESE, INC.

Broadcast Engineering Consultants
COLDWATER, MI 49036

Exhibit 18.3

Contour Protection Study Toward WKYU-FM - Bowling Green, KY

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
295.0	001.4000	0251.6	031.0	125.8	100.0000	0205.4	100.4	52.48
296.0	001.4000	0251.3	031.0	125.5	100.0000	0205.4	100.3	52.51
297.0	001.4000	0247.7	030.8	125.2	100.0000	0206.0	100.5	52.49
298.0	001.4000	0253.8	031.2	124.9	100.0000	0206.9	100.0	52.65
299.0	001.4000	0259.2	031.5	124.6	100.0000	0207.7	099.6	52.79
300.0	001.4000	0265.4	031.8	124.3	100.0000	0208.3	099.2	52.93
301.0	001.4000	0269.3	032.1	124.0	100.0000	0208.5	098.9	53.01
302.0	001.4000	0275.2	032.4	123.7	100.0000	0208.4	098.6	53.12
303.0	001.4000	0279.4	032.7	123.3	100.0000	0208.6	098.3	53.20
304.0	001.4000	0272.3	032.3	123.0	100.0000	0208.3	098.7	53.07
305.0	001.4000	0262.0	031.6	122.7	100.0000	0209.1	099.3	52.92
306.0	001.4000	0252.9	031.1	122.4	100.0000	0209.5	099.9	52.77
307.0	001.4000	0255.2	031.2	122.1	100.0000	0210.1	099.8	52.82
308.0	001.4000	0258.3	031.4	121.8	100.0000	0211.1	099.7	52.89
309.0	001.4000	0263.0	031.7	121.4	100.0000	0211.9	099.5	52.98
310.0	001.4000	0260.7	031.6	121.1	100.0000	0211.4	099.7	52.91
311.0	001.4000	0256.1	031.3	120.8	100.0000	0210.3	100.0	52.77
312.0	001.4000	0251.8	031.0	120.6	100.0000	0209.4	100.4	52.63
313.0	001.4000	0252.7	031.1	120.2	100.0000	0208.7	100.4	52.60
314.0	001.4000	0252.2	031.1	119.9	100.0000	0208.6	100.6	52.55
315.0	001.4000	0256.9	031.3	119.6	100.0000	0208.6	100.4	52.59
316.0	001.4000	0266.1	031.9	119.2	100.0000	0208.9	100.0	52.71
317.0	001.4000	0261.9	031.6	119.0	100.0000	0209.6	100.4	52.62
318.0	001.4000	0257.7	031.4	118.7	100.0000	0210.5	100.9	52.53
319.0	001.4000	0256.8	031.3	118.4	100.0000	0212.0	101.1	52.51
320.0	001.4000	0259.1	031.5	118.1	100.0000	0213.8	101.1	52.56
321.0	001.4000	0258.3	031.4	117.8	100.0000	0215.3	101.4	52.53
322.0	001.4000	0261.9	031.6	117.5	100.0000	0215.8	101.4	52.54
323.0	001.4000	0269.1	032.1	117.1	100.0000	0215.7	101.3	52.59
324.0	001.4000	0272.5	032.3	116.8	100.0000	0214.8	101.3	52.54
325.0	001.4000	0267.5	032.0	116.6	100.0000	0214.5	101.8	52.38
326.0	001.4000	0271.2	032.2	116.2	100.0000	0214.6	101.9	52.37
327.0	001.4000	0271.8	032.2	115.9	100.0000	0214.5	102.2	52.29
328.0	001.4000	0268.9	032.1	115.7	100.0000	0214.1	102.6	52.16
329.0	001.4000	0272.7	032.3	115.4	100.0000	0212.9	102.7	52.09
330.0	001.4000	0265.3	031.8	115.3	100.0000	0212.4	103.4	51.88
331.0	001.4000	0263.9	031.8	115.0	100.0000	0211.7	103.8	51.76
332.0	001.4000	0266.4	031.9	114.7	100.0000	0211.4	104.0	51.69
333.0	001.4000	0262.8	031.7	114.6	100.0000	0211.3	104.5	51.55
334.0	001.4000	0264.5	031.8	114.3	100.0000	0211.4	104.7	51.48
335.0	001.4000	0264.4	031.8	114.1	100.0000	0211.5	105.1	51.39
336.0	001.4000	0263.8	031.7	113.9	100.0000	0211.7	105.5	51.29
337.0	001.4000	0263.8	031.7	113.6	100.0000	0212.5	105.9	51.22
338.0	001.4000	0263.9	031.8	113.4	100.0000	0213.5	106.2	51.15
339.0	001.4000	0261.7	031.6	113.2	100.0000	0214.3	106.7	51.05
340.0	001.4000	0256.2	031.3	113.2	100.0000	0214.6	107.3	50.90

Exhibit 18.3

Contour Protection Study Toward WKYU-FM - Bowling Green, KY

02-07-2013

Terrain Data: NED 03 SEC

FMOver Analysis

WKYU-FM BMLED20070507AFC

WOCG.P

Channel = 205C1

Max ERP = 100 kW

RCAMSL = 383 M

N. Lat. 37 05 23.0

W. Lng. 86 38 05.0

Protected

60 dBu

Channel = 206A

Max ERP = 1.4 kW

RCAMSL = 498 M

N. Lat. 36 26 23.0

W. Lng. 85 24 27.0

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
078.0	100.0000	0214.4	065.2	332.1	001.4000	0266.8	097.2	36.87	
079.0	100.0000	0214.0	065.1	331.9	001.4000	0265.9	096.1	37.18	
080.0	100.0000	0212.8	065.0	331.7	001.4000	0263.4	095.1	37.43	
081.0	100.0000	0211.3	064.9	331.3	001.4000	0263.0	094.1	37.73	
082.0	100.0000	0208.4	064.6	330.9	001.4000	0263.8	093.1	38.06	
083.0	100.0000	0210.8	064.8	330.8	001.4000	0264.0	092.0	38.42	
084.0	100.0000	0213.9	065.1	330.7	001.4000	0264.1	090.8	38.79	
085.0	100.0000	0220.4	065.7	330.7	001.4000	0264.0	089.5	39.19	
086.0	100.0000	0221.0	065.8	330.5	001.4000	0264.5	088.5	39.54	
087.0	100.0000	0224.8	066.1	330.3	001.4000	0265.0	087.3	39.93	
088.0	100.0000	0227.1	066.3	330.1	001.4000	0265.2	086.2	40.29	
089.0	100.0000	0227.5	066.3	329.7	001.4000	0267.4	085.2	40.69	
090.0	100.0000	0222.4	065.9	329.1	001.4000	0272.9	084.4	41.10	
091.0	100.0000	0221.2	065.8	328.6	001.4000	0270.9	083.5	41.33	
092.0	100.0000	0219.1	065.6	328.0	001.4000	0268.6	082.6	41.54	
093.0	100.0000	0219.9	065.7	327.6	001.4000	0272.1	081.6	41.96	
094.0	100.0000	0215.7	065.3	326.9	001.4000	0271.9	080.9	42.18	
095.0	100.0000	0220.3	065.7	326.6	001.4000	0272.2	079.8	42.57	
096.0	100.0000	0229.5	066.5	326.6	001.4000	0272.0	078.4	43.03	
097.0	100.0000	0231.0	066.7	326.1	001.4000	0271.2	077.4	43.32	
098.0	100.0000	0227.7	066.4	325.3	001.4000	0268.6	076.7	43.46	
099.0	100.0000	0224.3	066.1	324.6	001.4000	0268.7	076.1	43.68	
100.0	100.0000	0225.8	066.2	324.0	001.4000	0272.4	075.2	44.10	
101.0	100.0000	0223.2	066.0	323.2	001.4000	0271.0	074.6	44.26	
102.0	100.0000	0218.8	065.6	322.4	001.4000	0264.5	074.1	44.21	
103.0	100.0000	0220.5	065.7	321.8	001.4000	0261.3	073.3	44.39	
104.0	100.0000	0220.9	065.8	321.1	001.4000	0258.6	072.6	44.55	
105.0	100.0000	0224.6	066.1	320.5	001.4000	0255.8	071.6	44.78	
106.0	100.0000	0226.4	066.2	319.8	001.4000	0260.5	070.9	45.20	
107.0	100.0000	0224.3	066.1	318.9	001.4000	0256.4	070.4	45.22	
108.0	100.0000	0225.9	066.2	318.1	001.4000	0257.2	069.7	45.49	
109.0	100.0000	0223.1	065.9	317.2	001.4000	0261.2	069.3	45.74	
110.0	100.0000	0220.0	065.7	316.3	001.4000	0264.8	069.1	45.96	

MUNN-REESE, INC.

Broadcast Engineering Consultants

COLDWATER, MI 49036

Exhibit 18.3

Contour Protection Study Toward WKYU-FM - Bowling Green, KY

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
111.0	100.0000	0216.6	065.4	315.3	001.4000	0258.6	068.9	45.82
112.0	100.0000	0216.4	065.3	314.4	001.4000	0255.3	068.4	45.85
113.0	100.0000	0214.9	065.2	313.5	001.4000	0252.7	068.1	45.86
114.0	100.0000	0211.5	064.9	312.5	001.4000	0252.8	068.1	45.89
115.0	100.0000	0211.6	064.9	311.6	001.4000	0255.2	067.7	46.09
116.0	100.0000	0214.5	065.2	310.7	001.4000	0254.8	067.2	46.27
117.0	100.0000	0215.6	065.3	309.8	001.4000	0261.4	066.8	46.62
118.0	100.0000	0214.4	065.2	308.8	001.4000	0263.3	066.7	46.73
119.0	100.0000	0209.4	064.7	307.8	001.4000	0258.3	067.0	46.46
120.0	100.0000	0208.6	064.6	306.8	001.4000	0254.1	066.9	46.34
121.0	100.0000	0211.0	064.8	305.8	001.4000	0253.5	066.6	46.44
122.0	100.0000	0210.4	064.8	304.9	001.4000	0263.9	066.5	46.80
123.0	100.0000	0208.2	064.6	303.9	001.4000	0273.1	066.7	47.05
124.0	100.0000	0208.5	064.6	302.9	001.4000	0279.2	066.7	47.26
125.0	100.0000	0206.5	064.4	302.0	001.4000	0275.1	066.9	47.04
126.0	100.0000	0205.3	064.3	301.0	001.4000	0269.3	067.1	46.78
127.0	100.0000	0202.4	064.0	300.1	001.4000	0265.7	067.5	46.52
128.0	100.0000	0202.1	064.0	299.2	001.4000	0261.1	067.7	46.30
129.0	100.0000	0202.9	064.1	298.2	001.4000	0256.0	067.8	46.08
130.0	100.0000	0206.7	064.4	297.2	001.4000	0247.4	067.7	45.83
131.0	100.0000	0207.3	064.5	296.3	001.4000	0249.5	067.9	45.83
132.0	100.0000	0205.2	064.3	295.4	001.4000	0251.3	068.4	45.71
133.0	100.0000	0205.0	064.3	294.5	001.4000	0249.1	068.8	45.51
134.0	100.0000	0202.3	064.0	293.7	001.4000	0245.0	069.4	45.16
135.0	100.0000	0208.0	064.6	292.7	001.4000	0238.5	069.3	44.97
136.0	100.0000	0212.1	064.9	291.7	001.4000	0239.8	069.4	44.98
137.0	100.0000	0212.8	065.0	290.9	001.4000	0242.8	069.9	44.94
138.0	100.0000	0215.1	065.2	290.0	001.4000	0248.3	070.2	45.01
139.0	100.0000	0217.6	065.4	289.1	001.4000	0252.5	070.6	45.03
140.0	100.0000	0221.0	065.8	288.1	001.4000	0252.7	070.9	44.92
141.0	100.0000	0217.0	065.4	287.5	001.4000	0255.0	071.8	44.68
142.0	100.0000	0209.4	064.7	287.1	001.4000	0254.6	073.0	44.26
143.0	100.0000	0205.0	064.3	286.6	001.4000	0252.9	074.0	43.87
144.0	100.0000	0198.3	063.6	286.2	001.4000	0252.3	075.2	43.46
145.0	100.0000	0191.9	063.0	285.8	001.4000	0252.2	076.4	43.07
146.0	100.0000	0187.6	062.6	285.4	001.4000	0255.7	077.4	42.84
147.0	100.0000	0185.3	062.4	284.9	001.4000	0257.3	078.3	42.60
148.0	100.0000	0188.6	062.7	284.2	001.4000	0250.6	078.8	42.22
149.0	100.0000	0187.6	062.6	283.7	001.4000	0248.1	079.6	41.87
150.0	100.0000	0191.8	063.0	282.9	001.4000	0245.2	080.2	41.60
151.0	100.0000	0200.8	063.9	281.9	001.4000	0240.8	080.4	41.37
152.0	100.0000	0203.9	064.2	281.3	001.4000	0238.2	081.1	41.07
153.0	100.0000	0204.8	064.3	280.7	001.4000	0239.4	081.9	40.84
154.0	100.0000	0207.5	064.5	280.1	001.4000	0238.4	082.7	40.56
155.0	100.0000	0207.3	064.5	279.7	001.4000	0240.0	083.6	40.32
156.0	100.0000	0211.2	064.9	279.1	001.4000	0235.4	084.4	39.92