

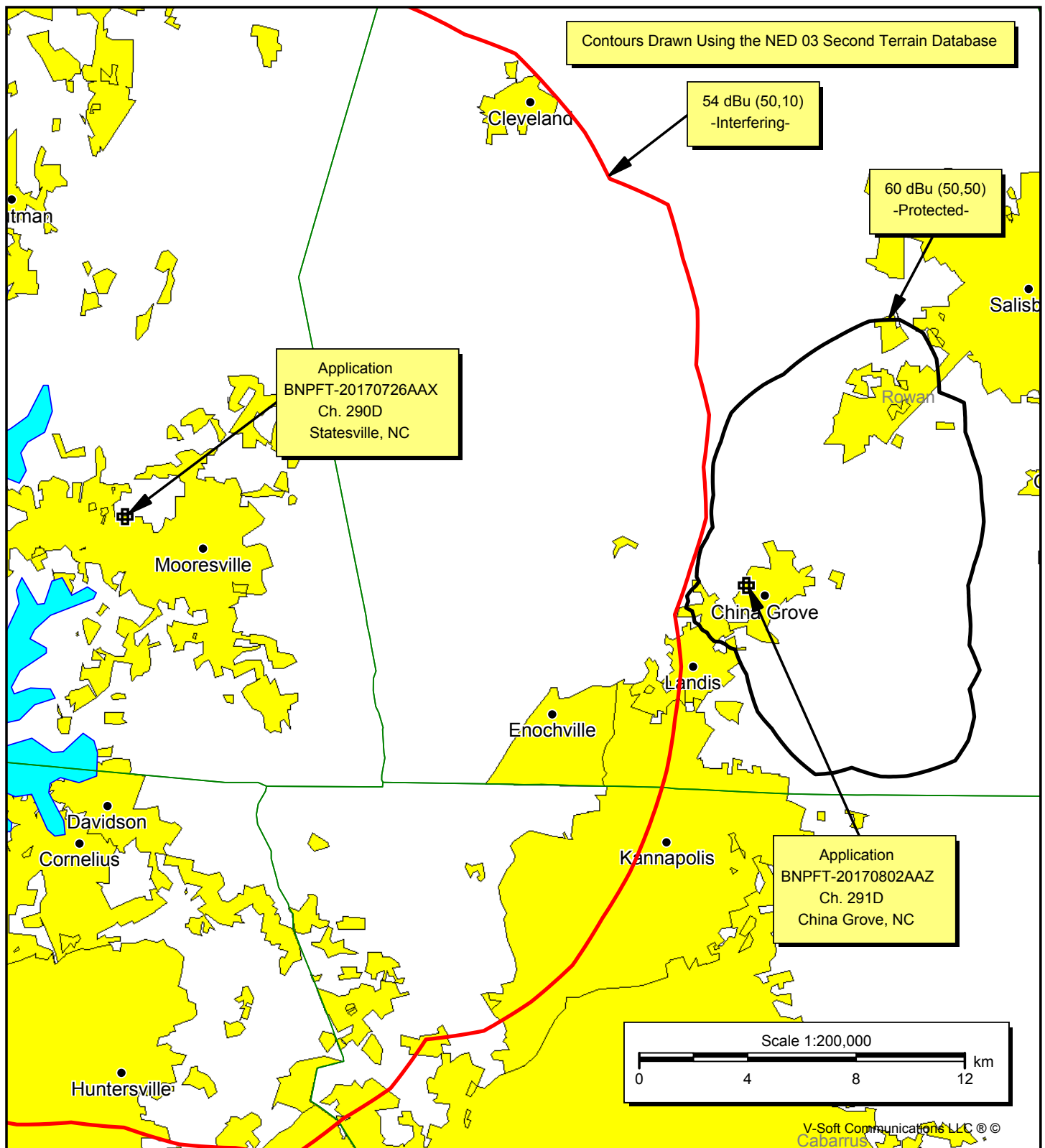
Allocation Study
New FM Translator
Channel 291D – 106.1 MHz
0.250 kW ERP (DA) – 299 m COR AMSL
China Grove, North Carolina
November 2017

Searching from Proposed Site

REFERENCE		CH# 291D - 106.1 MHz, Pwr= 0.25 kW DA, HAAT= 57.6 M, COR= 299 M								DISPLAY DATES	
35 34 21.0 N.		Average Protected F(50-50)= 10.0 km								DATA 11-20-17	
80 35 22.0 W.		Standard Directional								SEARCH 11-20-17	
CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DI ST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
293C1 Salisbury	WEND	LIC	CN NC	301.6 121.6	4.18 BLH19990302KD	35 35 32.0 80 37 44.0	84.000 319	9.8 552	71.4 Capstar Tx, Lic	-7.7*	-67.3*
291C2 Waxhaw	WOLS	LIC	NCX NC	193.7 13.6	78.80 BLH20081014ADN	34 53 01.0 80 47 37.0	21.000 188	121.8 358	47.1 Ghb Of Waxhaw, Inc.	-49.1*	19.0
290D China Grove	1763591I	APP	V NC	0.0 0.0	0.00 BNPFT20170802AAZ	35 34 21.0 80 35 22.0	0.250	13.8 296	10.0 South Rowan Broadcasting C	-20.8	-19.9
290D Statesville	1762615	APP	DC NC	276.4 96.3	22.97 BNPFT20170726AAX	35 35 43.0 80 50 31.0	0.250	21.5 384	13.7 Iredell Broadcasting, Inc	0.1	6.3
291C3 Jefferson	WMMY	LIC	NCN NC	313.5 132.9	123.27 BLH20000104ABR	36 19 53.0 81 35 17.0	10.500 155	115.8 1226	47.3 High Country Adventures, L	3.9	68.2
291C3 Jefferson	AL8777	RSV-A	N NC	324.0 143.5	125.01 RM7494	36 28 46.0 81 24 41.0	25.000 100	115.8 1002	34.9	4.0	74.8
291D Lexington	W291DD	CP	DC NC	30.1 210.3	77.55 BMPFT20170707AAV	36 10 31.7 80 09 24.0	0.250	51.8 417	15.9 Clearcast, Inc.	14.3	22.8
291C1 Knightdale	WTKK	LIC	C NC	85.9 267.1	186.66 BLH20090601APS	35 40 28.0 78 31 40.0	27.500 489	162.1 567	71.4 Capstar Tx, Lic	15.6	87.0
289C1 Clemons	WVBZ	LIC	NCX NC	12.4 192.6	91.59 BLH20110902AAJ	36 22 36.4 80 22 08.6	30.000 472	8.6 794	74.1 Clear Channel Broadcasting	72.2	16.8
289D Pineville	W289B0	LIC	DC NC	212.2 32.0	49.01 BLFT20120725AIIH	35 11 56.4 80 52 35.9	0.250 130	1.1 332	13.0 Truth Broadcasting Corpora	43.7	35.5
289D Pineville	W289B0	CP	C NC	212.2 32.0	49.01 BPFT20170718ADA	35 11 56.4 80 52 35.9	0.250	1.1 332	13.0 Truth Broadcasting Corpora	43.7	35.5
238C1 High Point	WHPE-FM	LIC	CX NC	52.4 232.8	63.61 BMLED20140602AZZ	35 55 11.0 80 01 47.0	100.000 159	19.7 399	3.6 Bible Broadcasting Network	21.5R	42.1M
290D Hickory	W290CW	LIC	C NC	285.2 104.8	64.32 BLFT20160915AAJ	35 43 20.0 81 16 38.0	0.250	19.8 391	12.8 Newton-conover Communi cati	42.4	48.4
290L1 Troy	WURE-LP	LIC	NC	110.2 290.6	67.07 BLL20161222AAV	35 21 43.0 79 53 43.0	0.037 49			48.8	48.1

Terrain database is NED 03 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference Zone= East Zone, Co to 3rd
adjacent.

All separation margins (if shown) include rounding. Call signs with exclamation marks need not be protected.
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 restricted contour.
< = Station meets FCC minimum distance spacing for its class.
Reference station has protected zone issue: AM tower



Section 74.1204 Clearance to Application BNPFT-20170726AAX

New FM Translator

Channel 291D - 106.1 MHz

0.250 kW ERP (DA) - 299 m COR AMSL

China Grove, North Carolina

Bromo Communications, Inc.

November 2017

§74.1204 Clearance to BNPFT-20170726AAX

New FM Translator

Channel 291D – 106.1 MHz
0.250 kW ERP (DA) – 299 m COR AMSL
China Grove, North Carolina
November 2017

FMOver Calculation

11-29-2017 Terrain Data: NED 03 SEC FMOver Analysis

BNPFT20170802AAZ (Amendment)
China Grove, NC
Channel = 291D
Max ERP = 0.25 kW
RCAMSL = 299 m
N. Lat. 35 34 21.0
W. Lng. 80 35 22.0

1762615 BNPFT20170726AAX
Statesville, NC
Channel = 290D
Max ERP = 0.25 kW
RCAMSL = 384 m
N. Lat. 35 35 43.0
W. Lng. 80 50 31.0

Protected
60 dBu

Interfering
54 dBu

Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Actual (dBu)	I X (km)
186.0	000.0010	0071.0	002.7	103.0	000.2500	0118.0	023.2	52.40	
187.0	000.0009	0071.2	002.7	102.9	000.2500	0117.7	023.1	52.42	
188.0	000.0008	0070.4	002.6	102.7	000.2500	0117.1	023.0	52.42	
189.0	000.0007	0068.4	002.5	102.4	000.2500	0116.9	023.0	52.45	
190.0	000.0006	0067.2	002.4	102.2	000.2500	0117.1	022.9	52.49	
191.0	000.0006	0067.3	002.4	102.2	000.2500	0117.1	022.9	52.52	
192.0	000.0006	0067.3	002.4	102.2	000.2500	0117.1	022.9	52.55	
193.0	000.0006	0067.1	002.4	102.2	000.2500	0117.1	022.8	52.58	
194.0	000.0006	0066.8	002.4	102.2	000.2500	0117.1	022.8	52.61	
195.0	000.0006	0066.9	002.4	102.1	000.2500	0117.1	022.7	52.65	
196.0	000.0006	0066.2	002.3	102.1	000.2500	0117.1	022.7	52.68	
197.0	000.0006	0064.5	002.3	102.0	000.2500	0117.0	022.7	52.70	
198.0	000.0006	0063.9	002.3	102.0	000.2500	0117.0	022.6	52.73	
199.0	000.0006	0062.8	002.3	102.0	000.2500	0116.9	022.6	52.75	
200.0	000.0006	0061.2	002.3	101.9	000.2500	0116.7	022.5	52.77	
201.0	000.0006	0058.6	002.3	101.8	000.2500	0116.4	022.5	52.77	
202.0	000.0006	0057.9	002.2	101.8	000.2500	0116.3	022.5	52.79	
203.0	000.0006	0057.7	002.2	101.8	000.2500	0116.2	022.4	52.81	
204.0	000.0006	0059.0	002.3	101.8	000.2500	0116.3	022.4	52.85	
205.0	000.0006	0060.3	002.3	101.8	000.2500	0116.3	022.3	52.88	
206.0	000.0006	0061.8	002.3	101.8	000.2500	0116.4	022.3	52.92	
207.0	000.0006	0063.0	002.3	101.8	000.2500	0116.4	022.3	52.95	
208.0	000.0006	0065.6	002.3	101.9	000.2500	0116.6	022.2	53.00	
209.0	000.0006	0067.1	002.4	101.9	000.2500	0116.6	022.2	53.04	
210.0	000.0006	0067.8	002.4	101.9	000.2500	0116.6	022.1	53.07	
211.0	000.0006	0067.8	002.4	101.8	000.2500	0116.4	022.1	53.09	
212.0	000.0006	0068.4	002.4	101.8	000.2500	0116.4	022.1	53.11	
213.0	000.0006	0066.2	002.3	101.7	000.2500	0116.1	022.0	53.11	
214.0	000.0006	0065.1	002.3	101.6	000.2500	0115.9	022.0	53.12	
215.0	000.0006	0064.2	002.3	101.6	000.2500	0115.7	022.0	53.14	
216.0	000.0006	0061.9	002.3	101.5	000.2500	0115.5	021.9	53.14	
217.0	000.0006	0060.4	002.3	101.4	000.2500	0115.3	021.9	53.15	

Bromo Communications, Inc.

Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Actual (dBu)	I X (km)
218.0	000.0006	0057.6	002.2	101.3	000.2500	0115.1	021.9	53.15	
219.0	000.0006	0057.3	002.2	101.2	000.2500	0115.0	021.8	53.16	
220.0	000.0006	0058.5	002.3	101.2	000.2500	0115.0	021.8	53.20	
221.0	000.0006	0058.1	002.2	101.1	000.2500	0114.9	021.8	53.22	
222.0	000.0006	0058.2	002.3	101.1	000.2500	0114.9	021.7	53.24	
223.0	000.0006	0057.9	002.3	101.1	000.2500	0114.8	021.7	53.27	
224.0	000.0006	0060.2	002.3	101.1	000.2500	0114.9	021.6	53.31	
225.0	000.0006	0060.4	002.3	101.0	000.2500	0114.8	021.6	53.33	
226.0	000.0006	0058.7	002.3	100.9	000.2500	0114.7	021.6	53.34	
227.0	000.0006	0058.1	002.3	100.8	000.2500	0114.6	021.6	53.36	
228.0	000.0007	0057.9	002.3	100.8	000.2500	0114.6	021.5	53.39	
229.0	000.0007	0057.6	002.3	100.7	000.2500	0114.5	021.5	53.40	
230.0	000.0007	0056.4	002.3	100.6	000.2500	0114.3	021.5	53.40	
231.0	000.0007	0057.6	002.3	100.7	000.2500	0114.3	021.4	53.44	
232.0	000.0007	0058.4	002.3	100.6	000.2500	0114.2	021.4	53.47	
233.0	000.0007	0057.8	002.3	100.6	000.2500	0114.0	021.3	53.48	
234.0	000.0007	0056.7	002.3	100.5	000.2500	0113.8	021.3	53.49	
235.0	000.0007	0055.7	002.3	100.4	000.2500	0113.5	021.3	53.48	
236.0	000.0008	0054.4	002.3	100.3	000.2500	0113.3	021.3	53.48	
237.0	000.0008	0052.5	002.3	100.2	000.2500	0113.0	021.2	53.47	
238.0	000.0008	0051.0	002.3	100.1	000.2500	0112.9	021.2	53.48	
239.0	000.0008	0051.4	002.3	100.0	000.2500	0112.9	021.2	53.51	
240.0	000.0008	0048.4	002.2	099.9	000.2500	0113.0	021.2	53.50	
241.0	000.0009	0047.1	002.2	099.7	000.2500	0112.9	021.2	53.51	
242.0	000.0009	0045.8	002.2	099.6	000.2500	0112.7	021.2	53.50	
243.0	000.0009	0046.0	002.2	099.6	000.2500	0112.5	021.2	53.51	
244.0	000.0009	0045.1	002.2	099.5	000.2500	0112.2	021.1	53.50	
245.0	000.0010	0044.1	002.2	099.4	000.2500	0112.0	021.1	53.50	
246.0	000.0010	0043.8	002.2	099.3	000.2500	0111.8	021.1	53.50	
247.0	000.0010	0043.2	002.2	099.2	000.2500	0111.5	021.1	53.50	
248.0	000.0010	0045.3	002.3	099.2	000.2500	0111.5	021.0	53.55	
249.0	000.0011	0047.3	002.3	099.2	000.2500	0111.5	020.9	53.61	
250.0	000.0011	0047.8	002.4	099.1	000.2500	0111.4	020.9	53.63	
251.0	000.0011	0046.9	002.3	099.0	000.2500	0111.2	020.9	53.62	
252.0	000.0011	0044.5	002.3	098.8	000.2500	0111.2	020.9	53.59	
253.0	000.0011	0043.4	002.3	098.7	000.2500	0111.1	020.9	53.59	
254.0	000.0011	0041.7	002.2	098.6	000.2500	0111.0	020.9	53.57	
255.0	000.0011	0041.4	002.2	098.5	000.2500	0111.0	020.9	53.57	
256.0	000.0011	0042.0	002.2	098.4	000.2500	0111.0	020.9	53.59	
257.0	000.0011	0042.9	002.3	098.3	000.2500	0111.1	020.9	53.63	
258.0	000.0012	0043.6	002.3	098.2	000.2500	0111.2	020.8	53.68	
259.0	000.0012	0043.0	002.3	098.1	000.2500	0111.4	020.8	53.69	
260.0	000.0012	0041.2	002.2	098.0	000.2500	0111.7	020.8	53.68	
261.0	000.0012	0040.5	002.2	097.9	000.2500	0111.8	020.9	53.69	
262.0	000.0011	0039.0	002.1	097.7	000.2500	0111.9	020.9	53.65	
263.0	000.0011	0037.8	002.1	097.6	000.2500	0112.0	020.9	53.65	
264.0	000.0011	0036.9	002.1	097.5	000.2500	0112.1	021.0	53.63	
265.0	000.0011	0036.4	002.0	097.4	000.2500	0112.4	021.0	53.64	
266.0	000.0011	0036.6	002.0	097.3	000.2500	0112.6	021.0	53.66	
267.0	000.0010	0036.2	002.0	097.2	000.2500	0112.8	021.0	53.66	
268.0	000.0010	0034.9	002.0	097.0	000.2500	0112.9	021.0	53.64	
269.0	000.0010	0032.6	001.9	096.9	000.2500	0112.9	021.1	53.60	
270.0	000.0010	0031.2	001.9	096.8	000.2500	0113.0	021.1	53.57	
271.0	000.0010	0029.2	001.8	096.7	000.2500	0113.1	021.2	53.54	
272.0	000.0009	0027.6	001.8	096.6	000.2500	0113.2	021.2	53.54	
273.0	000.0009	0026.9	001.8	096.5	000.2500	0113.4	021.2	53.54	
274.0	000.0009	0028.2	001.8	096.5	000.2500	0113.6	021.2	53.54	
275.0	000.0008	0028.7	001.7	096.4	000.2500	0113.8	021.2	53.54	
276.0	000.0008	0029.2	001.7	096.3	000.2500	0114.0	021.2	53.56	
277.0	000.0008	0031.5	001.8	096.2	000.2500	0114.2	021.2	53.60	

Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Actual (dBu)	I X (km)
278.0	000.0008	0033.3	001.8	096.1	000.2500	0114.5	021.2	53.65	
279.0	000.0008	0034.3	001.8	096.0	000.2500	0114.7	021.2	53.67	
280.0	000.0007	0036.5	001.9	095.9	000.2500	0114.9	021.1	53.72	
281.0	000.0007	0037.1	001.9	095.8	000.2500	0115.1	021.1	53.75	
282.0	000.0007	0037.0	001.9	095.8	000.2500	0115.2	021.1	53.74	
283.0	000.0007	0036.1	001.8	095.7	000.2500	0115.4	021.2	53.71	
284.0	000.0007	0038.0	001.9	095.6	000.2500	0115.6	021.1	53.77	
285.0	000.0007	0039.2	001.9	095.5	000.2500	0115.8	021.1	53.80	
286.0	000.0007	0042.1	002.0	095.4	000.2500	0116.0	021.0	53.86	
287.0	000.0007	0044.6	002.0	095.2	000.2500	0116.2	021.0	53.92	
288.0	000.0006	0044.3	002.0	095.2	000.2500	0116.3	021.0	53.90	
289.0	000.0006	0043.1	001.9	095.1	000.2500	0116.4	021.1	53.86	
290.0	000.0006	0042.5	001.9	095.0	000.2500	0116.6	021.1	53.85	
291.0	000.0006	0043.2	001.9	094.9	000.2500	0116.7	021.1	53.87	
292.0	000.0006	0044.4	002.0	094.8	000.2500	0116.8	021.1	53.89	
293.0	000.0006	0044.6	002.0	094.7	000.2500	0116.9	021.1	53.90	
294.0	000.0006	0044.0	002.0	094.6	000.2500	0117.1	021.1	53.89	
295.0	000.0006	0043.9	002.0	094.6	000.2500	0117.3	021.1	53.89	
296.0	000.0006	0043.6	002.0	094.5	000.2500	0117.4	021.1	53.88	
297.0	000.0006	0045.2	002.0	094.4	000.2500	0117.4	021.1	53.90	
298.0	000.0006	0045.8	002.0	094.3	000.2500	0117.4	021.1	53.90	
299.0	000.0006	0045.3	002.0	094.2	000.2500	0117.4	021.1	53.88	
300.0	000.0006	0046.5	002.0	094.1	000.2500	0117.4	021.1	53.89	
301.0	000.0006	0045.9	002.0	094.0	000.2500	0117.5	021.2	53.87	
302.0	000.0006	0047.6	002.0	093.9	000.2500	0117.6	021.1	53.90	
303.0	000.0006	0048.8	002.1	093.7	000.2500	0117.7	021.1	53.92	
304.0	000.0006	0048.6	002.1	093.7	000.2500	0117.9	021.2	53.91	
305.0	000.0006	0049.4	002.1	093.5	000.2500	0118.0	021.2	53.92	
306.0	000.0006	0050.0	002.1	093.4	000.2500	0118.1	021.2	53.92	
307.0	000.0006	0051.2	002.1	093.3	000.2500	0118.2	021.2	53.92	
308.0	000.0006	0053.2	002.2	093.2	000.2500	0118.2	021.2	53.94	
309.0	000.0006	0053.6	002.2	093.1	000.2500	0118.3	021.2	53.93	
310.0	000.0006	0053.1	002.2	093.0	000.2500	0118.4	021.2	53.91	
311.0	000.0006	0052.9	002.2	092.9	000.2500	0118.5	021.2	53.90	
312.0	000.0006	0054.2	002.2	092.8	000.2500	0118.6	021.2	53.90	
313.0	000.0006	0055.1	002.2	092.7	000.2500	0118.7	021.2	53.90	
314.0	000.0006	0053.9	002.2	092.7	000.2500	0118.7	021.3	53.87	
315.0	000.0006	0055.7	002.2	092.5	000.2500	0118.8	021.3	53.87	
316.0	000.0006	0057.1	002.2	092.4	000.2500	0118.8	021.3	53.87	
317.0	000.0006	0057.3	002.2	092.3	000.2500	0118.9	021.3	53.85	
318.0	000.0006	0058.1	002.2	092.2	000.2500	0119.0	021.3	53.85	
319.0	000.0006	0059.0	002.3	092.1	000.2500	0119.1	021.4	53.84	
320.0	000.0006	0059.6	002.3	092.1	000.2500	0119.2	021.4	53.83	
321.0	000.0006	0060.2	002.3	091.9	000.2500	0119.3	021.4	53.83	
322.0	000.0006	0062.6	002.3	091.8	000.2500	0119.5	021.4	53.83	
323.0	000.0007	0062.6	002.3	091.7	000.2500	0119.7	021.4	53.83	
324.0	000.0007	0063.1	002.4	091.6	000.2500	0120.0	021.4	53.84	
325.0	000.0007	0062.2	002.4	091.5	000.2500	0120.1	021.5	53.81	
326.0	000.0007	0062.1	002.4	091.4	000.2500	0120.4	021.5	53.82	
327.0	000.0007	0062.2	002.4	091.3	000.2500	0120.5	021.5	53.81	
328.0	000.0008	0063.2	002.4	091.2	000.2500	0120.5	021.5	53.79	
329.0	000.0008	0064.4	002.4	091.1	000.2500	0120.4	021.6	53.77	
330.0	000.0008	0064.1	002.5	091.0	000.2500	0120.4	021.6	53.74	
331.0	000.0010	0065.0	002.6	090.6	000.2500	0120.6	021.6	53.79	
332.0	000.0011	0065.2	002.7	090.3	000.2500	0121.2	021.6	53.84	
333.0	000.0013	0065.7	002.8	090.0	000.2500	0122.0	021.5	53.90	
334.0	000.0016	0065.5	002.9	089.7	000.2500	0122.7	021.5	53.94	
335.0	000.0018	0065.7	003.0	089.4	000.2500	0123.1	021.6	53.96	
336.0	000.0020	0066.8	003.2	089.0	000.2500	0122.5	021.5	53.93	
337.0	000.0023	0066.9	003.3	088.7	000.2500	0122.6	021.6	53.92	

Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Actual (dBu)	I X (km)
338.0	000.0026	0067.6	003.4	088.3	000.2500	0122.2	021.6	53.89	
339.0	000.0029	0067.1	003.5	088.1	000.2500	0122.3	021.6	53.87	
340.0	000.0032	0066.4	003.5	087.8	000.2500	0122.1	021.6	53.84	
341.0	000.0041	0066.9	003.8	087.1	000.2500	0122.1	021.6	53.84	
342.0	000.0052	0066.8	004.0	086.5	000.2500	0121.2	021.6	53.78	
343.0	000.0063	0067.3	004.2	085.9	000.2500	0121.1	021.6	53.76	
344.0	000.0077	0068.0	004.5	085.2	000.2500	0121.4	021.7	53.76	
345.0	000.0090	0068.3	004.7	084.7	000.2500	0121.8	021.7	53.76	
346.0	000.0105	0067.2	004.8	084.2	000.2500	0122.5	021.8	53.76	
347.0	000.0122	0065.5	005.0	083.9	000.2500	0123.5	021.8	53.78	
348.0	000.0139	0063.9	005.1	083.6	000.2500	0123.9	021.9	53.74	
349.0	000.0159	0063.2	005.2	083.2	000.2500	0124.4	022.0	53.72	
350.0	000.0178	0064.0	005.4	082.7	000.2500	0125.0	022.1	53.70	
351.0	000.0207	0066.2	005.7	082.0	000.2500	0126.4	022.1	53.73	
352.0	000.0239	0066.6	005.9	081.4	000.2500	0127.2	022.2	53.70	
353.0	000.0272	0066.1	006.0	081.0	000.2500	0126.8	022.4	53.59	
354.0	000.0308	0066.2	006.2	080.6	000.2500	0127.2	022.5	53.54	
355.0	000.0344	0065.8	006.4	080.2	000.2500	0127.2	022.6	53.44	
356.0	000.0384	0064.9	006.5	079.9	000.2500	0126.9	022.7	53.33	
357.0	000.0426	0064.5	006.6	079.6	000.2500	0126.4	022.8	53.20	
358.0	000.0471	0063.7	006.8	079.3	000.2500	0126.7	023.0	53.12	
359.0	000.0518	0062.5	006.9	079.1	000.2500	0127.1	023.1	53.05	
000.0	000.0566	0060.3	006.9	079.1	000.2500	0127.2	023.2	52.96	
001.0	000.0608	0059.1	007.0	079.0	000.2500	0127.4	023.4	52.88	
002.0	000.0650	0058.5	007.0	078.9	000.2500	0127.5	023.5	52.79	
003.0	000.0694	0060.2	007.3	078.4	000.2500	0127.2	023.7	52.63	
004.0	000.0740	0060.7	007.4	078.2	000.2500	0127.3	023.8	52.53	
005.0	000.0787	0059.0	007.4	078.2	000.2500	0127.3	024.0	52.43	

At no point on the 60 dBu (protected) contour of the amendment to Application BNPFT-20170802AAZ China Grove, NC does Application BNPFT-20170726AAX Statesville, NC deliver more than 54 dBu (interfering).