

Channel Study

REFERENCE		CH# 230D - 93.9 MHz, Pwr= 0.099 kW DA, HAAT= 0.0 M, COR= 580 M								DISPLAY DATES	
42 01 54.7 N.		Average Protected F(50-50)= 5.6 km								DATA 03-21-17	
76 47 02.2 W.		Standard Directional								SEARCH 03-29-17	
CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
230D Elmira	W230BB!	LIC	DC NY	0.0 0.0	0.00 BLFT20160311AAV	42 01 54.7 76 47 02.2	0.099	49.0 580	14.9 Tower Broadcasting Llc	-64.1	-64.4
232A Elmira	WLTV	LIC	CX NY	0.0 0.0	0.00 BLH20160311AAU	42 01 54.7 76 47 02.2	1.200 224	2.2 627	30.5 Tower Broadcasting Llc	-17.2*<	-31.2*<
230B Norwich	WKXZ	LIC	CX NY	61.9 242.8	123.85 BMLH20041109AAG	42 32 51.0 75 27 09.0	26.000 206	132.0 639	66.1 Townsquare Media Oneonta L	-16.9*<	16.8
228D Elmira	W228DN	LIC	H NY	71.4 251.4	0.02 BLFT20161128AGE	42 01 55.0 76 47 01.0	0.010	0.2 548	5.9 Europa Communications, Inc	-6.0*<	-6.0*<
229D Corning	W229AS	LIC	C NY	299.2 119.1	25.42 BLFT20060302ACV	42 08 35.0 77 03 09.0	0.050 -121	6.7 303	4.7 Tower Broadcasting Llc	10.2	8.7
229D Waverly	W229AR	LIC	C NY	97.8 278.0	18.90 BLFT20100715AHX	42 00 31.0 76 33 28.0	0.005 -39	5.8 337	4.1 Tower Broadcasting Llc	11.1	11.3
230A Dansville	WDNY-FM	LIC	CN NY	307.6 127.1	88.22 BLH19900409KD	42 30 45.0 77 38 07.0	0.570 226	59.6 684	19.0 Genesee Media Corporation	16.3	28.2
231D Ithaca	W231DK	LIC	DC NY	32.3 212.5	47.44 BLFT20170131ABZ	42 23 31.0 76 28 30.0	0.250	3.0 529	2.1 Saga Communications Of New	31.6	26.2
228D Mansfield	W228DM	CP	DV PA	240.0 59.8	29.68 BPFT20170217ABY	41 53 53.0 77 05 38.0	0.250	0.0 655	2.9 Southern Belle, Llc	27.5	26.8
228D Towanda	W228CH	CP	C PA	134.3 314.5	40.71 BMPFT20150602AAH	41 46 33.0 76 25 57.8	0.010	0.2 441	6.7 Family Life Ministries, In	36.6	34.0
230D Wellsboro	W230BM	LIC	DV PA	234.5 54.1	51.87 BLFT20081204ACG	41 45 36.0 77 17 32.0	0.040 39	14.7 548	4.7 Family Life Ministries, In	34.9	39.7
228A Ithaca	WVBR-FM	LIC	CN NY	31.9 212.1	51.99 BLH3713	42 25 42.0 76 26 57.0	3.000 76	1.7 433	16.2 Cornell Media Guild, Inc.	37.4	35.2
228D Towanda	W228CH	LIC	DV PA	132.5 312.7	39.33 BLFT20140514ADB	41 47 33.6 76 26 03.6	0.019	0.0 431	0.6 Family Life Ministries, In	35.8	38.7
227B1 Muncy	WBZD-FM	LIC	NCN PA	188.9 8.8	92.19 BLH19970403KF	41 12 42.0 76 57 16.0	1.700 372	2.6 624	45.7 Backyard Broadcasting Pa,	84.1	46.3
233B Syracuse	WYYY	LIC	CX NY	28.0 208.4	115.35 BMLH20120607ADA	42 56 46.0 76 07 07.0	100.000 198	6.0 495	65.1 Cc Licenses, Llc	96.2	49.1
228D Wellsboro	W228DM	LIC	DC PA	233.0 52.7	52.93 BLFT20161109AAP	41 44 41.0 77 17 35.0	0.200	0.2 491	2.9 Southern Belle, Llc	50.5	50.0
231B Sunbury	WQKX	LIC	CX PA	177.0 357.0	138.54 BMLH20050822AAE	40 47 10.0 76 41 49.0	16.000 268	79.6 509	67.7 Sunbury Broadcasting Corpo	53.3	59.8
229A Clyde	WCIP	LIC	C NY	356.4 176.4	107.07 BMLED20010511AAY	42 59 38.0 76 51 59.0	3.800 100	36.1 241	23.9 Family Life Ministries, In	55.6	59.9
227D Binghamton	WJOB-FM1	LIC	DC NY	82.9 263.5	76.77 BLFTB20160609ABD	42 06 49.0 75 51 46.0	0.260	0.9 461	16.4 The Broome County Urban Le	73.4	60.4

Terrain database is FCC NGDC 30 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= East Zone, Co to 3rd adjacent.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)

***affixed to 'IN' or 'OUT' values = site inside restricted contour.

< = Contour Overlap

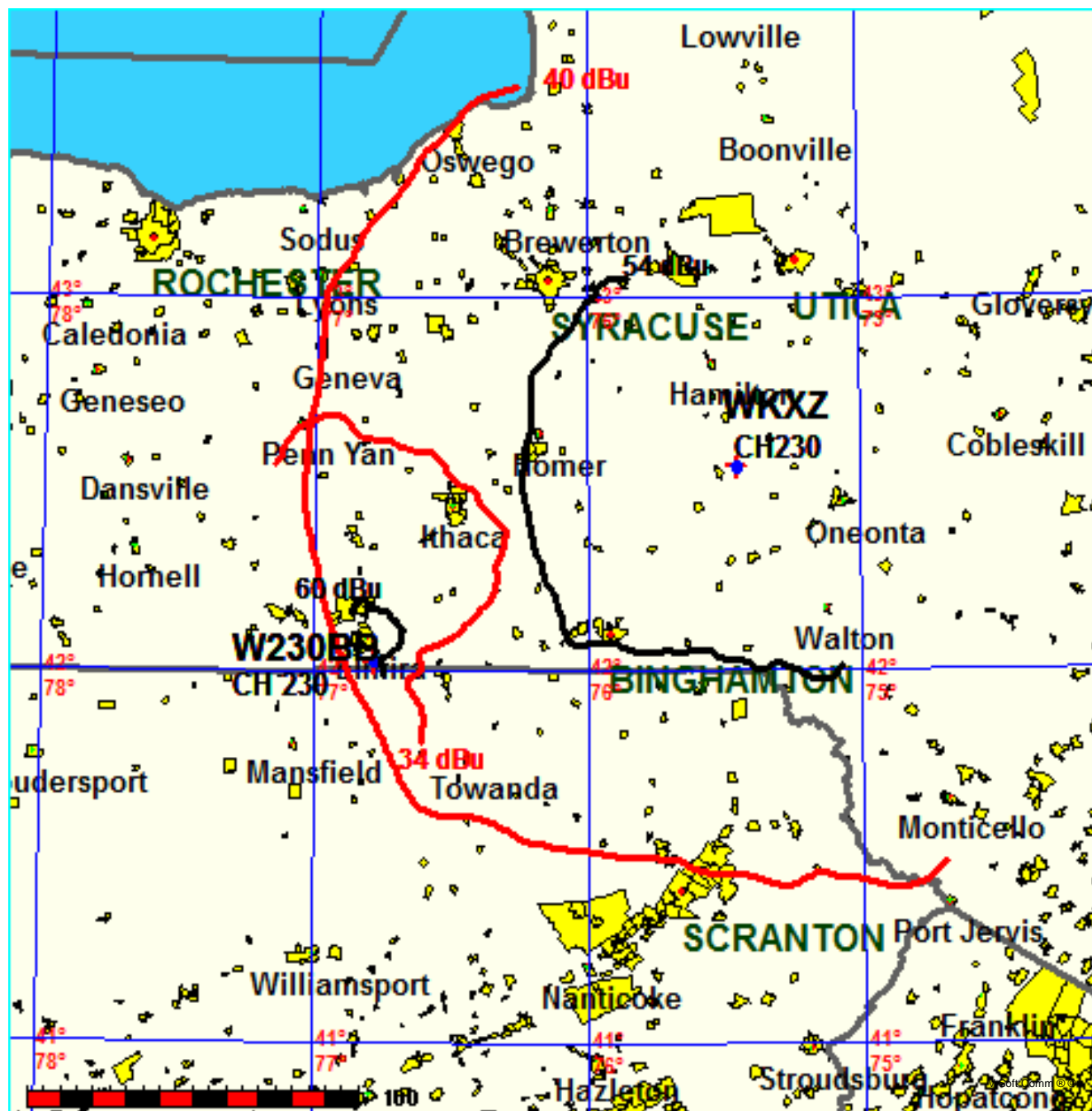
Reference station has protected zone issue: Canada

Tower Broadcasting Llc

FMCommander Single Allocation Study - 03-29-2017 - FCC NGDC 30 Sec
W230BB's Overlaps (In= -16.93 km, Out= 16.83 km)

W230BB CH 230 D DA
Lat= 42 01 54.7, Lng= 76 47 02.2
0.099 kW 0 m HAAT, 580 m COR
Prot.= 60 dBu, Intef.= 34 dBu

WKXZ CH 230 B BMLH20041109AAG
Lat= 42 32 51.0, Lng= 75 27 09.0
26.0 kW 206 m HAAT, 639 m COR
Prot.= 54 dBu, Intef.= 40 dBu

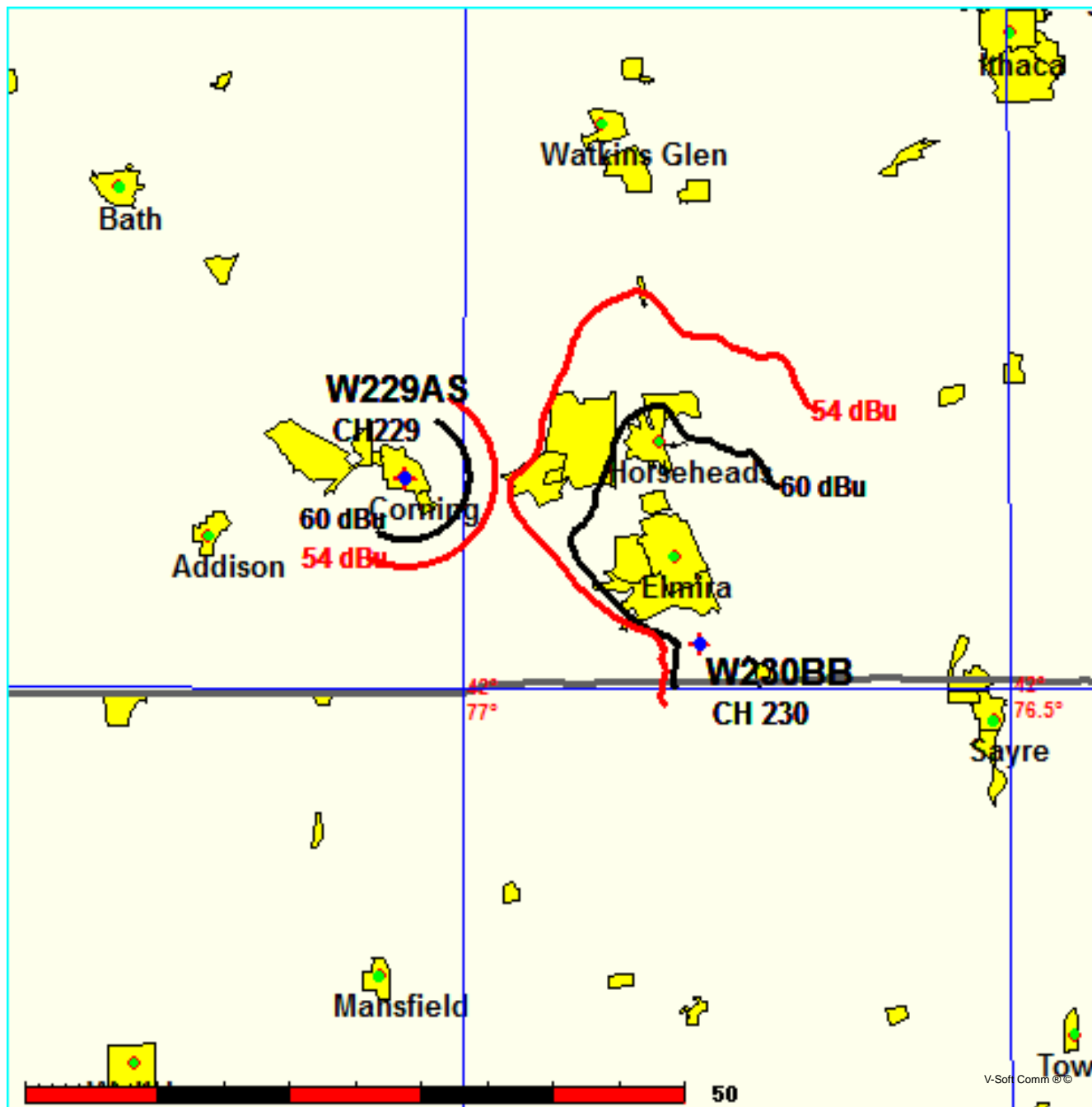


Tower Broadcasting Llc

FMCommander Single Allocation Study - 03-29-2017 - FCC NGDC 30 Sec
W230BB's Overlaps (In= 10.21 km, Out= 8.71 km)

W230BB CH 230 D DA
Lat= 42 01 54.7, Lng= 76 47 02.2
0.099 kW 0 m HAAT, 580 m COR
Prot.= 60 dBu, Intef.= 54 dBu

W229AS CH 229 D BLFT20060302ACV
Lat= 42 08 35.0, Lng= 77 03 09.0
0.05 kW -121.4 m HAAT, 303 m COR
Prot.= 60 dBu, Intef.= 54 dBu

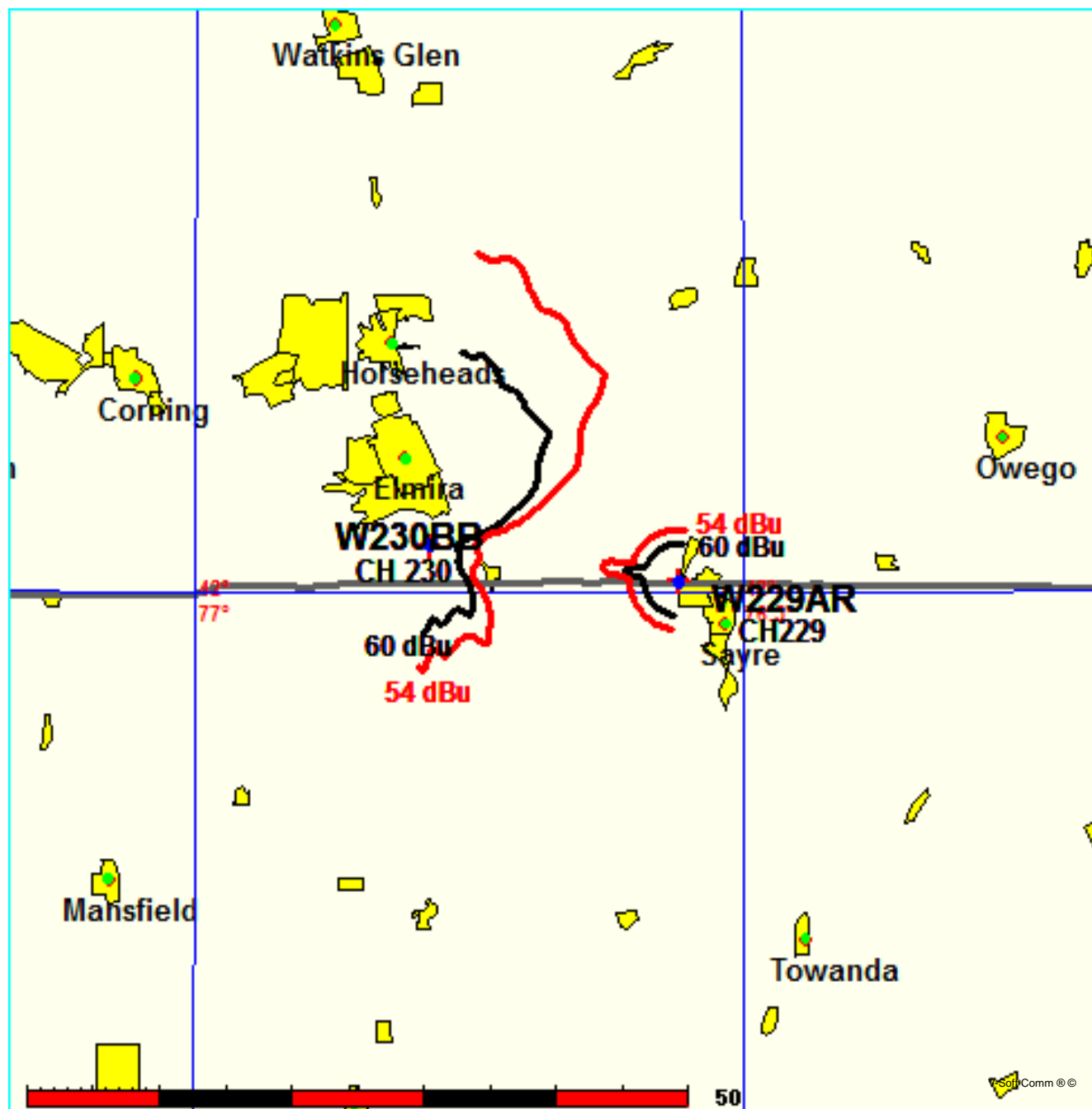


Tower Broadcasting Llc

FMCommander Single Allocation Study - 03-29-2017 - FCC NGDC 30 Sec
W230BB's Overlaps (In= 11.09 km, Out= 11.26 km)

W230BB CH 230 D DA
Lat= 42 01 54.7, Lng= 76 47 02.2
0.099 kW 0 m HAAT, 580 m COR
Prot.= 60 dBu, Intef.= 54 dBu

W229AR CH 229 D BLFT20100715AHX
Lat= 42 00 31.0, Lng= 76 33 28.0
0.005 kW -39.3 m HAAT, 337 m COR
Prot.= 60 dBu, Intef.= 54 dBu



Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60dBu contour of second adjacent channel station WLVY, channel 232A, Elmira, NY. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

The proposed ERP for W230BB.P:	99 watts
The proposed COR for W230BB.P:	41 meters
WLVY F(50/50) contour at proposed site:	134.3dBu
The F(50/10) contour of proposed W230BB.P:	174.3dBu

WLVY and W230BB are located on the same tower structure at a vertical separation distance of 46.6 meters. Utilizing a free space calculation based on the WLVY effective radiated power of 1.2kw, results in the determination of 134.3dbu at the proposed W230BB antenna. The predicted distance to the 174.3dbu interfering contour is .13 meters. Exhibit 13-A1 demonstrates the distances to the interfering contour by taking into account the vertical elevation pattern of the Scala CA2-CP single bay antenna. It has been determined that the interfering contour of 174.3dbu does not extend to any regularly occupied structures.

As can be seen in Exhibit 13–A2, there are no regularly occupied structures at the base of the tower and there are no occupied structures within the interfering contour.

Therefore, Tower Broadcasting LLC respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

EXHIBIT 13 - A1
74.1204(d) Showing
W230BB
Elmira, NY

ERP (kw): 0.099
Height of Antenna above Ground (m): 41
Translator's IX Contour: 174.3
Antenna Type: Scala CA2-CP

<u>Depression Angle from Horizon</u>	<u>Antenna Relative Field</u>	<u>ERP (kw) from the Antenna RF</u>	<u>Dist. To IX Contour (m)</u>	<u>Height IX Contour Above Ground (m)</u>
0	1.000	0.0990	0.1345	41.000
5	0.990	0.0970	0.1332	40.988
10	0.979	0.0949	0.1317	40.977
15	0.952	0.0897	0.1281	40.967
20	0.920	0.0838	0.1238	40.958
25	0.877	0.0761	0.1180	40.950
30	0.829	0.0680	0.1115	40.944
35	0.772	0.0590	0.1039	40.940
40	0.715	0.0506	0.0962	40.938
45	0.647	0.0414	0.0870	40.938
50	0.570	0.0322	0.0767	40.941
55	0.487	0.0235	0.0655	40.946
60	0.388	0.0149	0.0522	40.955
65	0.292	0.0084	0.0393	40.964
70	0.187	0.0035	0.0252	40.976
75	0.095	0.0009	0.0128	40.988
80	0.045	0.0002	0.0061	40.994
85	0.032	0.0001	0.0043	40.996
90	0.030	0.0001	0.0040	40.996

Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60dBu contour of second adjacent translator W228DN, channel 228D, Elmira, NY. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

The proposed ERP for W230BB.P:	99 watts
The proposed COR for W230BB.P:	41 meters
W228DN F(50/50) contour at proposed site:	117.6dBu
The F(50/10) contour of proposed W230BB.P:	157.6dBu

The predicted distance to the 157.6dbu interfering contour is .92 meters. Exhibit 13-A1 demonstrates the distances to the interfering contour by taking into account the vertical elevation pattern of the Scala CA2-CP single bay antenna. It has been determined that the interfering contour of 157.6dbu does not extend to any regularly occupied structures.

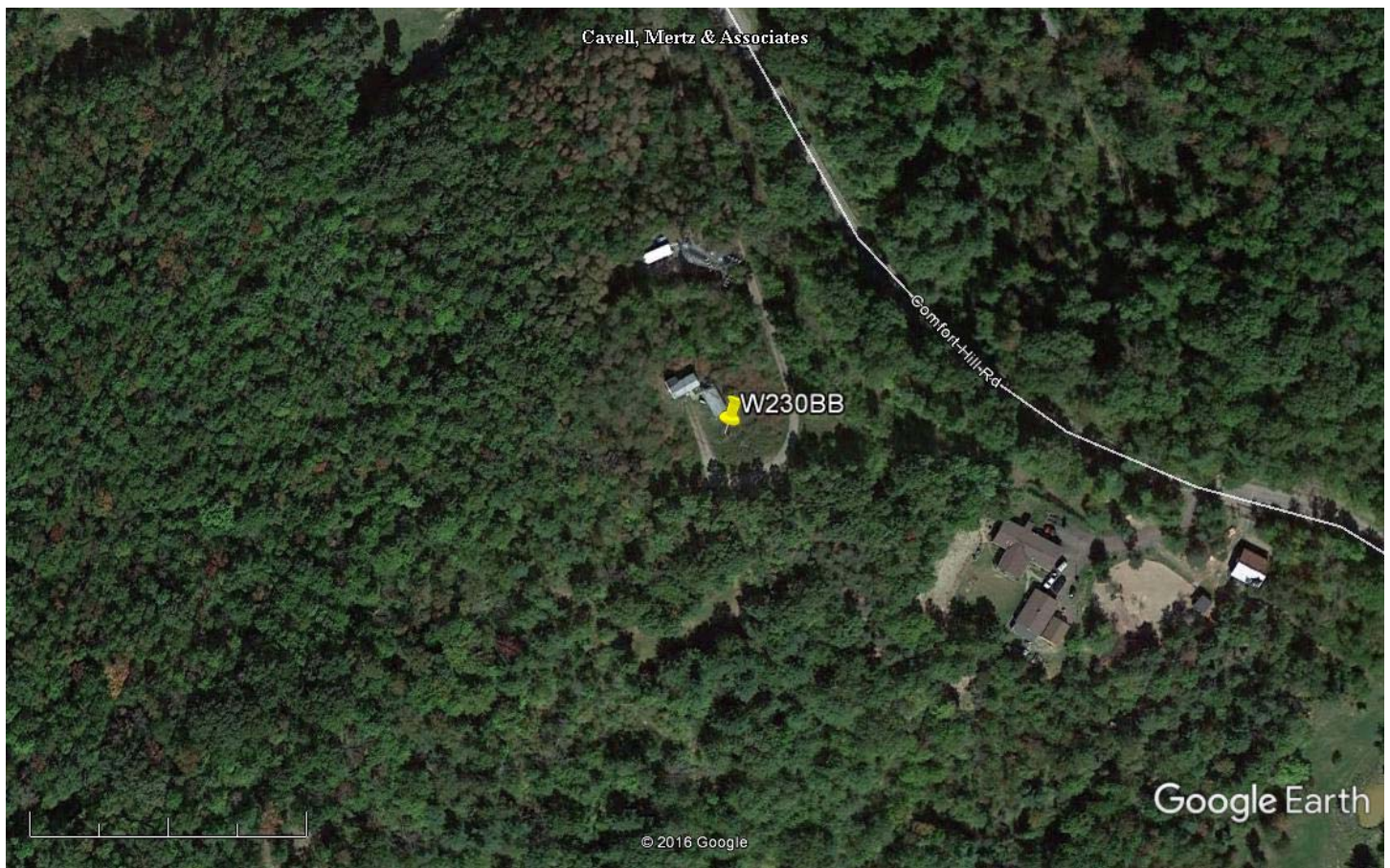
As can be seen in Exhibit 13–A2, there are no regularly occupied structures at the base of the tower and there are no occupied structures within the interfering contour.

Therefore, Tower Broadcasting LLC respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

EXHIBIT 13 - A1
74.1204(d) Showing
W230BB
Elmira, NY

ERP (kw): 0.099
Height of Antenna above Ground (m): 41
Translator's IX Contour: 157.6
Antenna Type: Scala CA2-CP

<u>Depression Angle from Horizon</u>	<u>Antenna Relative Field</u>	<u>ERP (kw) from the Antenna RF</u>	<u>Dist. To IX Contour (m)</u>	<u>Height IX Contour Above Ground (m)</u>
0	1.000	0.0990	0.9201	41.000
5	0.990	0.0970	0.9109	40.921
10	0.979	0.0949	0.9007	40.844
15	0.952	0.0897	0.8759	40.773
20	0.920	0.0838	0.8465	40.710
25	0.877	0.0761	0.8069	40.659
30	0.829	0.0680	0.7627	40.619
35	0.772	0.0590	0.7103	40.593
40	0.715	0.0506	0.6578	40.577
45	0.647	0.0414	0.5953	40.579
50	0.570	0.0322	0.5244	40.598
55	0.487	0.0235	0.4481	40.633
60	0.388	0.0149	0.3570	40.691
65	0.292	0.0084	0.2687	40.757
70	0.187	0.0035	0.1721	40.838
75	0.095	0.0009	0.0874	40.916
80	0.045	0.0002	0.0414	40.959
85	0.032	0.0001	0.0294	40.971
90	0.030	0.0001	0.0276	40.972



Google Earth

feet 700
meters 200



Yellow Pin Marker

NAD 27

42-01-54.7 N 76-47-02.2 W