

## **Exhibit 12**

### **Non-Interference Compliance**

**Channel: 233**

Reference to: FCC File Number: BLFT-20090302AAH (W233AY Sunapee, NH)  
Facility id 146333) This Application proposes a site modification to Newport, NH.

### **Description of Exhibit 12 Contents**

This exhibit will show that the proposed facility complies with contour overlap interference protection provisions in 47 CFR 74.1204.

Specifically we will show compliance because the Proposed ch. 233 Translator is fully spaced with all domestic and international stations, applications, and allotments.

The applicant certifies that should any actual interference occur, operation of the translator will be suspended in accordance with 47 CFR 74.1203.

Page 3, Exhibit 12(a), displays the F(50/50) 60 dbu of the proposed channel 233 Translator overlapping the F(50/50) 60 dbu of the original W233AY Licensed Facilities, thus compliance with CFR, 74.1233(a) (2).

Please note that the Primary Station is (WNTK-FM), thus the proposed ch. 233 Translator is allowed the maximum power of 250 Watts ERP.

Page 4, Exhibit 12(b), is a Table showing the distance to the F (50/50) 60 dbu contour of the Proposed 94.5 Translator, prepared using ComStudy 2.2. \*(Also note the HAAT Column of this Exhibit for Reference)

Page 5, Exhibit 12(c), is a Table showing the distance to the Proposed ch. 233 Translator's F(50,10) 34 dBu Interfering Contour.

Page 6, Exhibit 12(d), is a Topographical map of the area around the proposed channel 233 translator site.

Since the proposed channel 233 translator is about 182 kilometers from the Canadian Border, the applicant certifies that the 50/10, 34 dbu contour does not extend beyond the U.S. Border, or exceed 60 kilometers in any direction, in compliance with CFR 47, Sec. 74.1235 (d)3, which states that "the distance to the 34 dbu interfering contour may not exceed 60 kilometers in any direction", and hence is in compliance with 47 CFR 74.1204(h). (see page 5, Exhibit 12(c) & Page 7, Exhibit 12 (e))

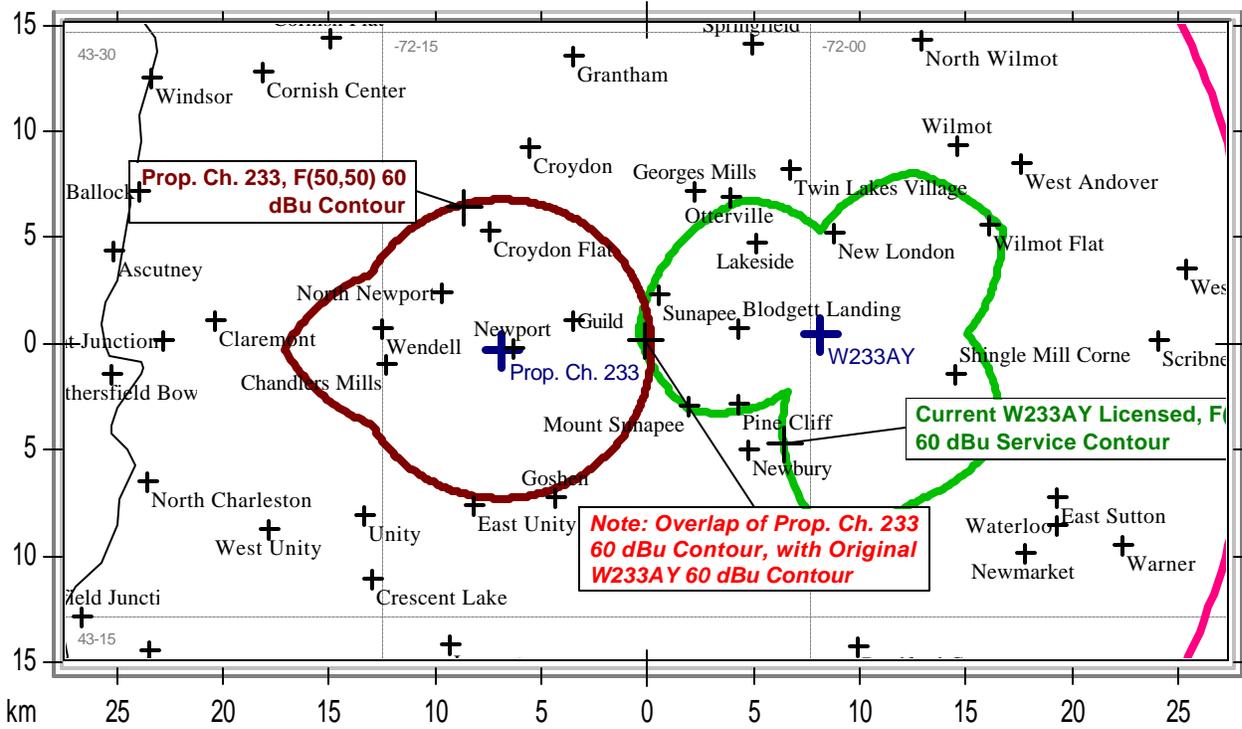
### **Explanation of ComStudy Frequency Finder Results:**

The Interference analysis for the instant application was performed using data taken directly from the FCC's FM database, which looks for prohibited overlap with contours of adjacent stations, and prohibited proximity to stations 53 or 54 channels from the proposed translator station (IF) using 3 arc second terrain data and the FCC's contour algorithms. See results of analysis in Table on Page 8, Exhibit 12(f). (ComStudy uses the FCC's FM Database, thus the results included the proposed translator. This line was deleted from the Table to save confusion) The results show the proposal is fully spaced to all domestic, and international stations, applications, and allotments.

The proposed channel 233 Translator can operate with an effective radiated power of 250-watts at 10 meters AGL. . (see page 3, Exhibit 12(a) Contour Study) (For reference HAAT on the 12 required radials, see page 3, Exhibit 12 (a) and note the HAAT column)

The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radio frequency electromagnetic exposure limits for controlled and uncontrolled environments). (See page 9, Exhibit 12(g), FM Model)

Prop. Ch. 233 Xlator is fully spaced to all Domestic & Intl. Stns. Applications & Allotments



Prop. ch. 233 is allowed 250 watts as a Fill-in Xlator for WNTK-FM

State Borders      Lat/Lon Grid

**Prop. Ch. 233, Newport, NH**  
**Distance to 60 dBu Contour**

**Site:** Prop. Ch. 233  
**Coordinates:** 43-21-52.2 N, 72-10-49.9 W  
**Freq:** 94.50000 MHz  
**ERP:** 250.00 W

<b>Bearing</b>	<b>ERP W</b>	<b>HAAT</b>	<b>DH</b>	<b>Distance</b>	<b>Lat</b>	<b>Lon</b>
0	250	-85	-21427	7.09	43.428341	-72.1806
30	250	-93	18774	7.09	43.428331	-72.179
60	250	-94	-19748	7.09	43.428302	-72.1775
90	250	-111	16453	7.09	43.428253	-72.176
120	250	-199	-30978	7.09	43.428185	-72.1744
150	250	-215	-9659	7.09	43.428097	-72.1729
180	250	-119	-20104	7.09	43.427991	-72.1714
210	250	-188	16453	7.09	43.427864	-72.1698
240	250	-123	-19761	7.09	43.427719	-72.1683
270	250	61	-2052	7.09	43.427554	-72.1668
300	250	-99	-20465	7.09	43.42737	-72.1653
330	250	-146	16453	7.09	43.427167	-72.1638

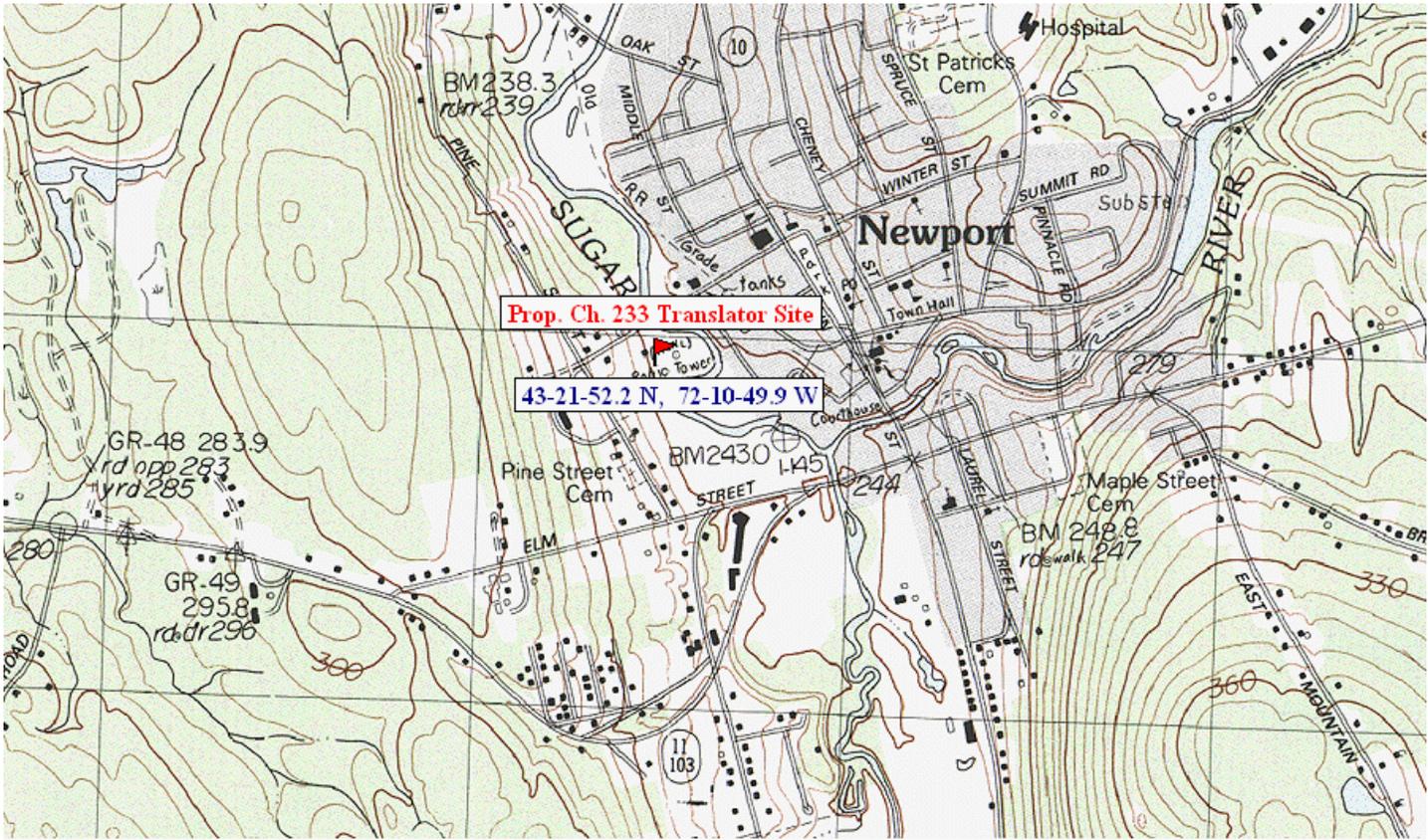
**Prop. Ch. 233, Newport, NH**  
**Distance to 34 dBu Contour**

**Site:** Prop. Ch. 233  
**Coordinates:** 43-21-52.2 N, 72-10-49.9 W  
**Freq:** 94.50000 MHz  
**ERP:** 250.00 W

<b>Bearing</b>	<b>ERP W</b>	<b>HAAT</b>	<b>DH</b>	<b>Distance</b>	<b>Lat</b>	<b>Lon</b>
0	250	-85	-21427	35.63	43.68497	-72.1806
30	250	-93	18774	35.63	43.68492	-72.1728
60	250	-94	-19748	35.63	43.684773	-72.1651
90	250	-111	16453	35.63	43.684528	-72.1574
120	250	-199	-30978	35.63	43.684185	-72.1496
150	250	-215	-9659	35.63	43.683744	-72.1419
180	250	-119	-20104	35.63	43.683205	-72.1342
210	250	-188	16453	35.63	43.682568	-72.1265
240	250	-123	-19761	35.63	43.681834	-72.1189
270	250	61	-2052	35.63	43.681003	-72.1112
300	250	-99	-20465	35.63	43.680076	-72.1036
330	250	-146	16453	35.63	43.679051	-72.096

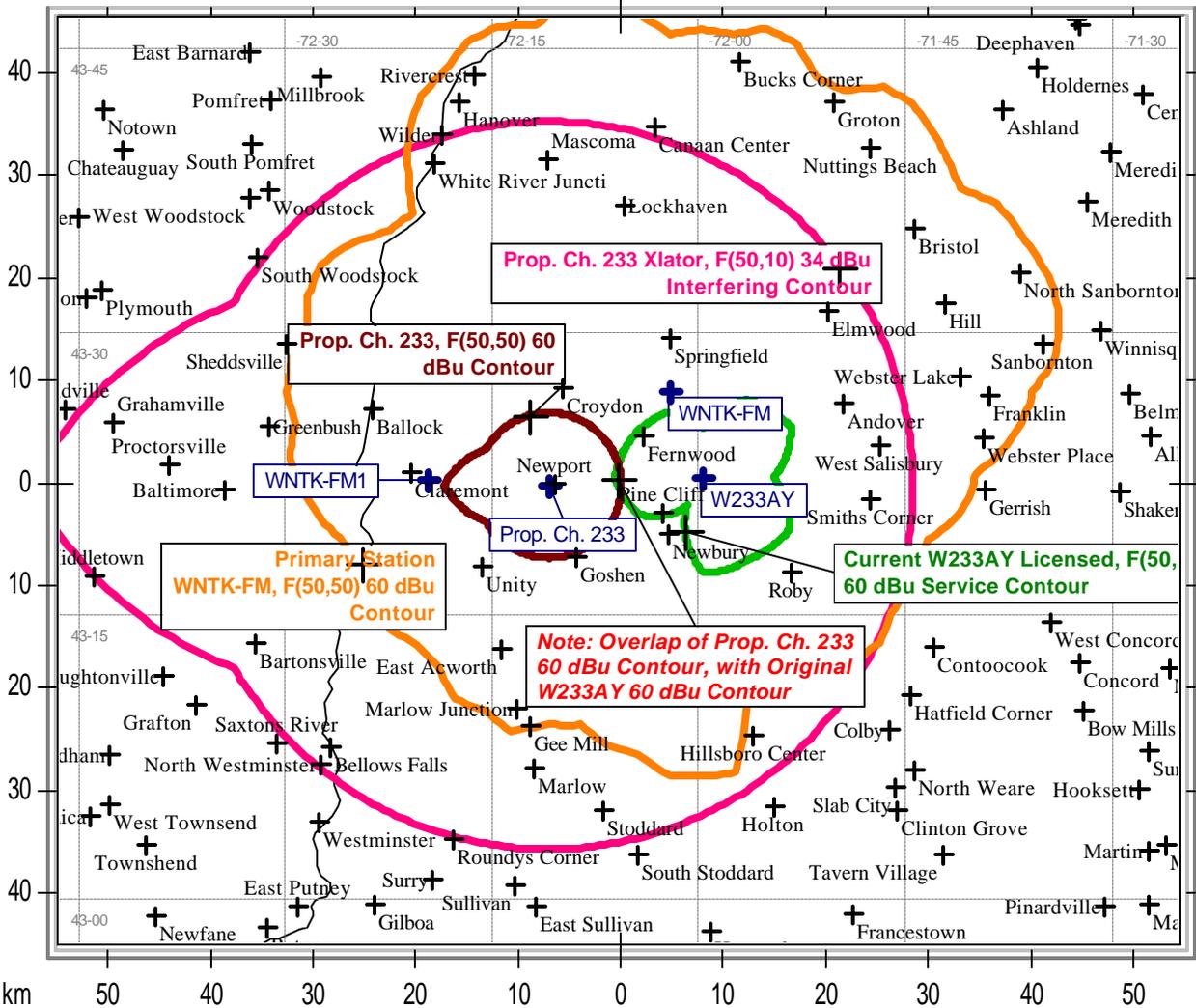
Proposed Ch. 233 Translator, Newport, NH  
Site Topo

43-21-52.2 N  
72-10-49.9 W



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Prop. Ch. 233 Xlator is fully spaced to all Domestic & Intl. Stns. Applications & Allotments



Prop. ch. 233 is allowed 250 watts as a Fill-in Xlator for WNTK-FM

State Borders      Lat/Lon Grid

**Prop. Ch. 233 Translator, Newport, NH  
Frequency Separation Table**

**43-21-52.2 N      250 Watts ERP  
72-10-49.9 W      10 Meters AGL**

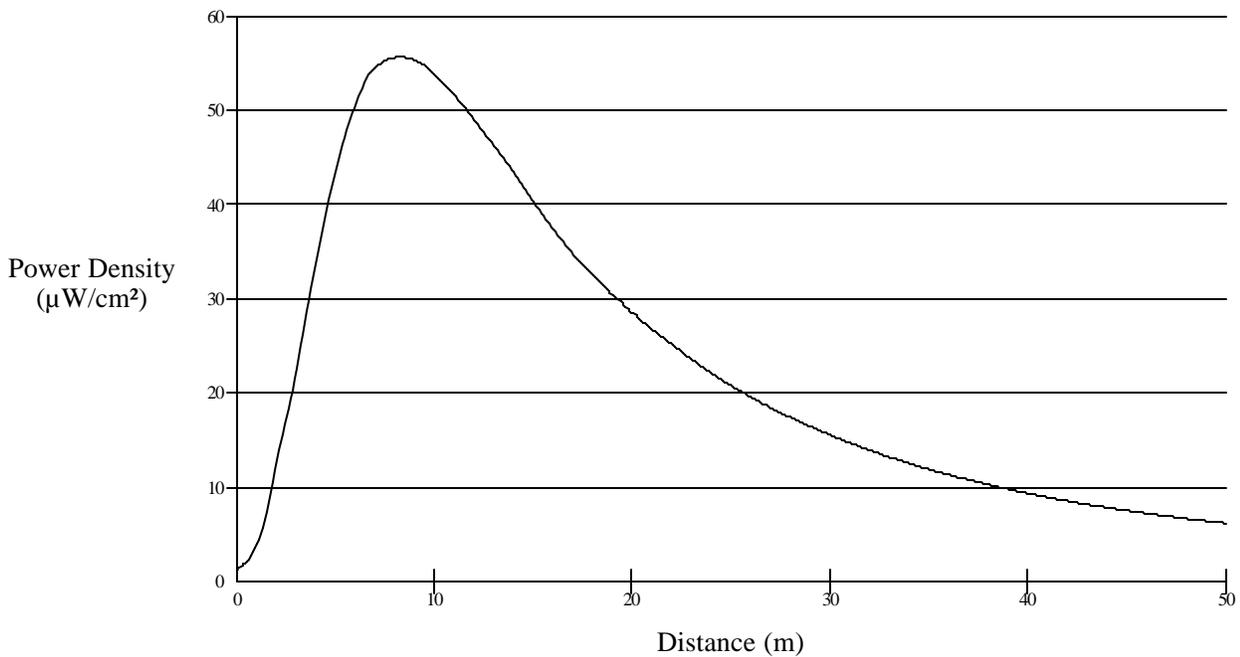
<b>Callsign</b>	<b>State</b>	<b>City</b>	<b>Freq</b>	<b>Channel</b>	<b>ERP_w</b>	<b>Class</b>	<b>Status</b>	<b>Distance_km</b>	<b>Sep</b>	<b>Clr</b>
	NH	MT. WASHINGTON	94.9	235	0	C	USE	122.9	0	35.33 dB
	VT	ALBANY	94.5	233	0	A	APP	155.25	0	29.58 dB
NEW	NH	BERLIN	94.5	233	10	D	APP	150.01	0	27.76 dB
NEW	NH	KEENE	94.1	231	10	D	APP	51.31	0	32.70 dB
NEW	VT	BRATTLEBORO	94.1	231	10	D	APP	55.32	0	33.95 dB
W232AJ	NH	GREENVILLE, ETC.	94.3	232	5	D	LIC	61.34	0	21.04 dB
W232AP	VT	WHITE RIVER Jct.	94.3	232	10	D	LIC	33.54	0	17.26 dB
W233AM	NY	GLOVERSVILLE	94.5	233	1	D	LIC	180.34	0	33.24 dB
W233AR	VT	BRATTLEBORO	94.5	233	10	D	LIC	68.52	0	12.21 dB
W233BD	VT	BURLINGTON	94.5	233	27	D	LIC	139.79	0	25.89 dB
W233BE	ME	RICHMOND CENTER	94.5	233	250	D	LIC	199.68	0	36.97 dB
W234AL	MA	NORTH ADAMS	94.7	234	50	D	LIC	106.01	0	34.03 dB
W234BD	VT	BOLTON	94.7	234	10	D	LIC	126.44	0	36.02 dB
WARX	ME	LEWISTON	93.9	230	27500	B	LIC	194.19	0	35.60 dB
WBAR-FM	NY	LAKE LUZERNE	94.7	234	0	A	USE	134.31	0	38.99 dB
WBAR-FM	NY	LAKE LUZERNE	94.7	234	320	A	APP	127.61	0	32.94 dB
WBAR-FM	NY	LAKE LUZERNE	94.7	234	1250	A	LIC	127.6	0	31.09 dB
WBTN-FM	VT	BENNINGTON	94.3	232	0	A	USE	93.32	0	32.00 dB
WBTN-FM	VT	BENNINGTON	94.3	232	3000	A	LIC	93.28	0	28.11 dB
WBTN-FM	VT	BENNINGTON	94.3	232	3000	A	APP	93.26	0	28.11 dB
WCNH-LP	NH	CONCORD	94.7	234	0	D	APP	52.52	0	24.08 dB
WCNH-LP	NH	CONCORD	94.7	234	100	LP100	LIC	52.52	13	22.93 dB
WCYY	ME	BIDDEFORD	94.3	232	0	B1	USE	139.77	0	36.89 dB
WCYY	ME	BIDDEFORD	94.3	232	11500	B1	LIC	145.14	0	31.03 dB
WDVT	VT	RUTLAND	94.5	233	0	A	USE	76.04	0	15.01 dB
WDVT	VT	RUTLAND	94.5	233	3000	A	LIC	73.81	0	12.21 dB
WDVT	VT	RUTLAND	94.5	233	6000	A	APP	70.73	0	1.65 dB
WERB	CT	BERLIN	94.5	233	24	D	LIC	199.25	0	36.97 dB

WFTN-FM	NH	FRANKLIN	94.1	231	0	A	USE	48.1	0	35.27 dB
WFTN-FM	NH	FRANKLIN	94.1	231	6000	A	LIC	48.1	0	15.59 dB
WHJY	RI	PROVIDENCE	94.1	231	50000	B	LIC	183.24	0	32.49 dB
WHOM	NH	MOUNT WASHINGTON	94.9	235	20500	C	LIC	122.84	0	12.70 dB
WHOM	NH	MOUNT WASHINGTON	94.9	235	20500	C	LIC	122.82	0	12.66 dB
WHOM	NH	MOUNT WASHINGTON	94.9	235	48000	C	LIC	122.83	0	9.02 dB
WJMN	MA	BOSTON	94.5	233	0	B	USE	141.08	0	21.76 dB
WJMN	MA	BOSTON	94.5	233	9200	B	LIC	141.08	0	9.01 dB
WKHP-LP	NH	KEENE	94.9	235	100	LP100	LIC	47.37	6	37.74 dB
WMAS-FM	MA	SPRINGFIELD	94.7	234	0	B	USE	143.89	0	35.76 dB
WMAS-FM	MA	SPRINGFIELD	94.7	234	50000	B	LIC	143.89	0	25.85 dB
WMXR	VT	WOODSTOCK	93.9	230	0	A	USE	39.85	0	32.34 dB
WMXR	VT	WOODSTOCK	93.9	230	670	A	LIC	35.37	0	4.44 dB
WMXR	VT	WOODSTOCK	93.9	230	3500	A	APP	35.26	0	1.40 dB
WNYV	NY	WHITEHALL	94.1	231	3000	A	LIC	103.47	0	33.37 dB
WRSI	MA	TURNERS FALLS	93.9	230	2500	A	LIC	98.25	0	30.45 dB
WVTQ	VT	SUNDERLAND	95.1	236	96	A	LIC	79.18	0	21.83 dB
WYKV	NY	RAVENA	94.5	233	0	A	USE	166.28	0	31.38 dB
WYKV	NY	RAVENA	94.5	233	3000	A	LIC	164.38	0	25.89 dB

### ENVIRONMENTAL IMPACT

The Applicant proposes to mount it's antenna with the center of radiation at 10 meters above ground level. Figure 1. below, shows the maximum power density produced by the proposed facility at a point 2 meters above ground is 55.622 uW/cm2, 27.8 percent of the 200 uW/cm2 ANSI limit for uncontrolled general population exposure. Therefore, this proposal complies with ANSI standards.

Power Density vs Distance



Distance: 50 (m)  
Horizontal ERP 250 (w)  
Vertical ERP 250 (w)  
Antenna Height 10 (m)  
Antenna Type: Shively 6810      Number of Elements: 1, Spacing 1

The maximum power density was found to be 55.62240 uW/cm2 @ 8.3 meters.