

Technical Statement
Long Form Application for Construction Permit
New FX Facility ID 201714 Clifton Park, NY
December, 2017

The purpose of this long form application is to supplement the short form application previously filed, and to make changes in the short form proposal. The following summary lists the changes. The proposed tower site remains the same.

1. Change Antenna Elevation on tower structure.
2. Change to Directional Antenna Type.

Discussion:

The proposed facility will be classified as a fill-in translator for WABY(AM) at Watervliet, NY. The proposal is properly spaced to all other facilities with the exception of 2nd adjacent WYAI, Scotia, NY on channel 229 (93.7 mHz). The Interference study also shows lack of clearance to cochannel W231CF at Gloversville, NY, however, this number represents received interference, which is permissible.

The proposed facility will operate at 250 watts with a directional antenna at an existing tower site with ASR # 1004100. The 60 dBu contour of the proposed translator facility is fully contained within the 25 mile radius of WABY(AM). The proposed 60 dBu contour overlaps the short form application as the site has not changed. A Contour map is included at Exhibit 13 that demonstrates compliance.

Waiver Request – WYAI

WYAI operates on second adjacent channel 229 (93.7 mHz) as a Class A station. It is determined that WYAI has a signal strength of 72.25 dBu at the proposed translator site. Using the established Undesired to Desired Method, for actual interference to occur the interfering signal must be 40 db greater than the protected signal. By taking into account the 72.25 dBu signal from WYAI and adding 40 dBu to it, the interfering contour then becomes 112.25 dBu. The antenna is proposed to be mounted at 96 meters above ground level on an existing 124 meter tall tower.

Utilizing a two bay .85 wavelength spaced antenna, the distance to the 112.25 dBu interfering contour does not reach the ground. Subsequently, no interference will occur to WYAI. The following chart details these findings.

ERP (kw): 0.25
Height of Antenna above Ground (m): 96
Translator's IX Contour: 112
 Nicom BKG77 2BAY 0.85
Antenna Type: SPACING

<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	0.2500	278.5929	96.000
5	0.967	0.2338	269.3993	72.520
10	0.871	0.1897	242.6544	53.864
15	0.711	0.1264	198.0795	44.733
20	0.518	0.0671	144.3111	46.643
25	0.310	0.0240	86.3638	59.501
30	0.112	0.0031	31.2024	80.399
35	0.062	0.0010	17.2728	86.093
40	0.198	0.0098	55.1614	60.543
45	0.288	0.0207	80.2347	39.265
50	0.336	0.0282	93.6072	24.293
55	0.349	0.0305	97.2289	16.355
60	0.331	0.0274	92.2142	16.140
65	0.295	0.0218	82.1849	21.515
70	0.246	0.0151	68.5338	31.599
75	0.197	0.0097	54.8828	42.987
80	0.151	0.0057	42.0675	54.572
85	0.122	0.0037	33.9883	62.141
90	0.117	0.0034	32.5954	63.405

It is therefore the conclusion of the applicant that this Waiver Request towards WYAI is within the spirit of the FCC rules.