

W292DV
Comprehensive Engineering Exhibit
October 2011

This application for W292DV requests a change of channel to 284, decrease of power, and modification of the existing directional antenna system, with no change in location or height.

As the channel change from 292 to 284 normally would preclude minor change application processing, waiver of the rule is requested and documented elsewhere in this application.

The facility will continue to be utilized as a "fill-in" translator for primary station WLTW(FM). The 54 dBu service contour of the proposed facility is within that of the primary station, as demonstrated in Figure 1. With no change in location being made, the proposed and licensed 60 dBu contours overlap.

Attached as Figure 2 is an allocation spacing report wherein it can be determined that the proposed location is within the protected contour of 2nd adjacent facilities of WWPR-FM and WAXQ (FM).

Stations WWPR-FM and WAXQ share the same combined Empire State Building antenna, transmit with the same power, and thus produce the same level of signal at the translator location. As described below, this instant proposal will not cause predicted interference to WWPR-FM and WAXQ.

Specifically, using the line of site method, it has been determined that WWPR-FM and WAXQ both present a signal of 115 dBu in the area where 155888 is located. The proposed facility's +40 dB 155 dBu interference level contour to WWPR-FM and WAXQ, as determined by the line of site calculation, reaches a maximum distance of 0.33 meters, a distance which does not reach any habitable area, as demonstrated by the aerial image of Figure 3, thus qualifying this proposal using the procedure known as "Living Way".

The proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation." In accordance with 47 C.F.R. 1.1307(b)(1) Table 1, only "Part 74 – Subpart L" facilities with an ERP greater than 100 watts, are subject to routine environmental evaluation. Since the facility proposed in this application will operate with an ERP of less than 100 watts, it is "categorically excluded." The licensee will fully cooperate with other site users to temporarily reduce power or cease broadcasting, as necessary, to protect workers and others having access to the site from excessive levels of RF Radiation.

Figure 1.

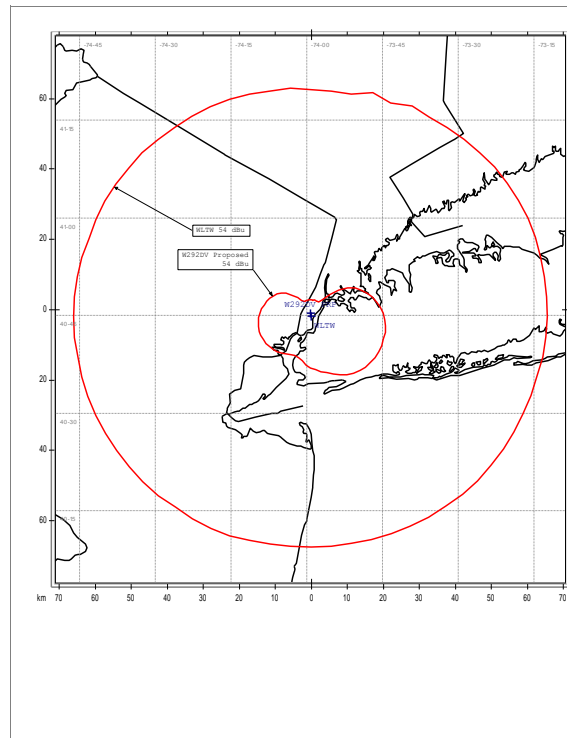


Figure 2. Spacing Study

Search of channel 284 (104.7 MHz Class D) at 40-45-22.0 N, 73-59-12.0 W.						
Callsign	Chanl	ARN	Cls	Dist_km	Clr	Notes
WAXQ	282	BLH19960426KA	B	0.86	-80.70 dB	Living Way
WWPR-FM	286	BLH19940204KB	B	0.86	-80.70 dB	Living Way
WNYC-FM	230	BLH20110815ADD	B	0.86	-14.1 km	I.F. <100w
NEW	284	BNPFT20030317FAG	D	40.49	0.59 dB	Clear
WSPK	284	BLH19840802CR	B	81.41	0.09 dB	Clear
NEW	284	BNPFT20030313AMV	D	37.66	0.65 dB	Clear
W284BW	284	BLFT20110923AAX	D	51.53	3.72 dB	Clear
NEW	284	BNPFT20030313ARH	D	48.67	4.76 dB	Clear
W284AQ	284	BLFT20101203ABF	D	67.85	14.07 dB	Clear
WRFF	283	BMLH20090513AAG	B	132.72	19.09 dB	Clear
WRFF	283	BMLH19880301KB	B	132.72	19.28 dB	Clear
WDAS-FM	287	BXMLH20030731AIX	B	132.72	21.51 dB	Clear

Figure 3 Aerial Image of Site

