

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of NEW YORK SPECTRUM HOLDING COMPANY, LLC, licensee of digital Low Power Television Station WXNY-LD, Channel 32 in New York, New York, in support of its displacement Application for Construction Permit to specify operation on Channel 23. This station is being displaced as a result of the spectrum auction and the repack allotment of Channel 32 to WLIW-DT in Garden City, New York. That station has a repack authorization on Channel 32 from a site located just 7 kilometers from that of WXNY-LD. Clearly, significant interference to and from each of these stations would occur if both operated on the same channel, meaning that WXNY-LD is in a displacement situation. No change in the licensed WXNY-LD site location or antenna height is proposed herein.

It is proposed to mount a custom directional antenna at the 208-meter level of the existing 214.6-meter Citigroup Building in Long Island City, NY, where the present WXNY-LD antenna is located. The proposed effective radiated power for the facility is 15.0 kW in horizontal plane. Exhibit B is a map upon which the predicted 51 dBu service contour is plotted.

Included in a separate showing is a summary report from a TVStudy interference analysis for the proposed facility. Our study employed both a cell size of 0.5 kilometer and an increment spacing of 0.1 kilometer. Further the applicant proposes use of a full-service mask filter. The results indicate that the proposed WXNY-LD facility meets the Commission's interference requirements to all full-power and low-power co-channel and adjacent-channel television facilities, except to the pre-repack facility of WDVb-CD, Channel 23 in Edison, New Jersey. WDVb-CD has been allotted repack Channel 22 in Edison and the instant proposal

EXHIBIT A

protects that new facility. Since operation of WXNY-LD on proposed Channel 23 is contingent upon the move of WDVB-CD to its post-repack facility on Channel 22, the instant applicant has requested a waiver of the Commission's "contingent application Rule", which the FCC has said it will entertain during this LPTV displacement filing window.

A detailed power density calculation is provided in Exhibit C.

Since no change in the overall height or location of the existing Citigroup Building is proposed herein, the Federal Aviation Administration has not been notified of this application. In addition, and for the same reason, FCC tower registration is not required for this structure.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in blue ink, appearing to read "K. T. Fisher", with a stylized flourish at the end.

KEVIN T. FISHER

May 7, 2018



POWER DENSITY CALCULATION

PROPOSED WXNY-LD
CHANNEL 23 – NEW YORK, NEW YORK

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this New York facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15.0 kW, an antenna radiation center 208 meters above ground, and assuming a vertical relative field value of 10 percent at the steeper elevation angles for the proposed custom directional antenna, a maximum power density value two meters above ground of 0.00012 mW/cm^2 is calculated to occur near the base of the building. Since this is significantly less than 0.1 percent of the 0.35 mW/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 23 (524-530 MHz), a grant of this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive non-ionizing radiation.