

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of NEW YORK SPECTRUM HOLDING COMPANY, LLC ("NYSHC"), licensee of digital Low Power Television Station KQHO-LD, Channel 20 in Houston, Texas, in support of its channel-sharing amendment to its Channel 27 displacement Application for Construction Permit (LMS-0000053158). NYSHC entered into a channel-sharing agreement with Word Broadcasting Network, licensee of station KBPX-LD and also applicant for displacement Channel 27 in Houston, in order to settle the mutual exclusivity between the two applications. The facility proposed herein is identical to that authorized to KBPX-LD in LMS-0000053878. No change in the KQHO-LD site location or antenna height is proposed herein.

It is proposed to mount a broadband circularly-polarized directional antenna at the 322-meter level of the existing 325-meter downtown Houston building on which the present KQHO-LD antenna is located. The proposed effective radiated power for the facility is 15.0 kW in the horizontal and vertical planes. Exhibit B is a map upon which the predicted 51 dBu service contour is plotted.

A detailed power density calculation is provided in Exhibit C.

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

EXHIBIT A

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". The signature is stylized with a large "K" and a long horizontal stroke at the end.

KEVIN T. FISHER

February 20, 2019

**CONTOUR POPULATION
2015 U.S. CENSUS DATA
5,196,399 (1,930,787 HH)**

Smith and Fisher, LLC

**PROPOSED CH. 35
51 DBU CONTOUR**



POWER DENSITY CALCULATION

PROPOSED KQHO-LD
CHANNEL 27 – HOUSTON, TEXAS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Houston facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15.0 kW (H,V), an antenna radiation center 322 meters above ground, and assuming a vertical relative field value of 10 percent at the steeper elevation angles for the proposed panel antenna, a maximum power density value two meters above ground of 0.000098 mW/cm^2 is calculated to occur near the base of the building. Since this is significantly less than 0.1 percent of the 0.37 mW/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 27 (548-554 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.