

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of KTBS, LLC, licensee of full-power digital television station KTBS-TV, Channel 28 in Shreveport, Louisiana, in support of its Application for Construction Permit to specify operation with an elliptically-polarized omnidirectional antenna instead of the licensed horizontally-polarized antenna. No change in transmitter site location, antenna height or effective radiated power is proposed.

It is proposed to mount a Dielectric elliptically-polarized antenna at the 547-meter level of the existing 556.5-meter KTBS-TV tower. The effective radiated power for the proposed facility continues to be 1000 kW in the horizontal plane.

Since the facility proposed herein specifies the same coverage parameters and service contour of the licensed KTBS-TV facility, no interference study is included herein. A power density calculation appears as Exhibit B.

Since no change in the overall height or location of the existing KTBS-TV tower is proposed herein, the Federal Aviation Administration has not been notified of this application. In addition, the FCC issued Antenna Structure Registration Number 1020877 to this tower.

I declare under penalty of perjury that the foregoing statements and the attached exhibits 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 26, 2022

POWER DENSITY CALCULATION  
PROPOSED KTBS-TV  
CHANNEL 28 – SHREVEPORT, LOUISIANA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Shreveport facility. Employing the methods set forth in *OET Bulletin No. 65* and considering an elliptically-polarized main-lobe effective radiated power of 1000 kW in the horizontal plane, an antenna radiation center 547 meters above ground, and the specific elevation pattern of the proposed Dielectric TFU-30GTH/VP-R O4 antenna, maximum power density two meters above ground of  $0.00018 \text{ mW/cm}^2$  is calculated to occur 584 meters from the base of the tower. Since this is significantly less than 0.1 percent of the  $0.37 \text{ mW/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 28 (554-560 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.