

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of FRAZIER MEMORIAL UNITED METHODIST CHURCH, current licensee of Low Power Television Station WFRZ-LD, Channel 34 in Montgomery, Alabama, in support of its engineering-based Request for Special Temporary Authority to operate at reduced power, due to a transmitter malfunction. No change in site location, antenna azimuth or elevation pattern or antenna height is proposed herein.

WFRZ-LD is authorized to operate with an effective radiated power of 15.0 kW. It is proposed to operate the station temporarily with an ERP of 5.0 kW, until such time as the transmitter can be repaired. Exhibit B is a map upon which the predicted STA 51 dBu service contour is plotted.

Since the instant engineering Special Temporary Authority proposal specifies only a reduction in operating power and no other change in the station's operating parameters, no interference study is included herein. A detailed power density calculation has been provided in Exhibit C.

Because no change in the overall height or location of the existing WFRZ-LD tower is proposed herein, the Federal Aviation Administration has not been notified of this application. In addition, the Federal Communications Commission issued Antenna Structure Registration Number 1042484 to this tower.

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 "F".

KEVIN T. FISHER

March 22, 2018

POWER DENSITY CALCULATION
PROPOSED WFRZ-LD STA REQUEST
CHANNEL 34 – MONTGOMERY, ALABAMA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Montgomery facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 5.0 kW, an antenna radiation center 152 meters above ground, and the specific elevation pattern of the licensed ERI antenna, maximum power density two meters above ground of 0.00039 mW/cm² is calculated to occur 46 meters from the base of the tower. Since this is less than 0.1 percent of the 0.39 mW/cm² reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 34 (590-596 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.