

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of ELIJAH MESSAGE MINISTRY in support of its Application for Construction Permit to operate a Low Power FM station on Channel 276 (103.1 MHz) in Vandalia, Illinois.

It is proposed to mount a standard two-bay circularly polarized half-wave-spaced antenna at the 15-meter level of existing 60.6-meter tower. Exhibit B is a map upon which the proposed 60 dBu service contour for the proposed facility is plotted. It is important to note that the proposed location meets all of the Commission's spacing requirements to pertinent co-channel and adjacent-channel full-power, FM translator and LPFM stations. We have also determined that the proposed facility should not cause objectionable interference to the input signal of any existing translator station, based on the information contained in the FCC's CDBS database.

Employing the methods of OET Bulletin No. 65, and based on the elevation pattern of a standard 2-bay half-wave-spaced FM antenna, maximum power density two meters above ground of 0.0090 mW/cm^2 is calculated to occur 6.1 meters from the base of the tower. Since this is only 0.2 percent of the 0.2 mW/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating in the FM band, a grant of this proposal can be considered a minor environmental action with respect to human exposure to non-ionizing electromagnetic radiation. Further the station owner will take whatever precautionary steps are necessary to ensure that workers operating in the vicinity of the antenna are not exposed to RF energy in excess of the Commission's guideline values.

EXHIBIT A

Since no change in the overall height or the location of the existing structure is proposed herein, the FAA has not been notified of this application. In addition, the FCC has issued Antenna Structure Registration Number 1058159 to this tower.

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



KYLE T. FISHER

October 22, 2013

**CONTOUR POPULATION
2010 U.S. CENSUS DATA
8,078**

Proposed Site

Latitude: 38-56-41.80 N
Longitude: 089-06-09.80 W
ERP: 0.10 kW
Channel: 276
Frequency: 103.1 MHz
AMSL Height: 197.99 m
Horiz. Pattern: Omni

SMITHANDFISHER

**60 DBU FCC
CONTOUR**

Fayette

Vandalia

Proposed Site

Scale 1:125,000

0 1 2 3 mi

**PREDICTED SERVICE CONTOUR
PROPOSED LPFM STATION
103.1 MHZ - VANDALIA, ILLINOIS**