

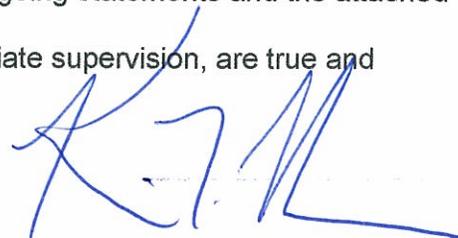
ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of THREE ANGELS BROADCASTING NETWORK, permittee of digital Low Power television station W45DB-D, Channel 45 in Memphis, Tennessee, in support of this Application for Construction Permit to specify digital operation on Channel 50 from a new site. This proposal is being submitted in response to the Commission's assignment of Channel 45 to WKDH-DT in Houston, Mississippi. The site of W45DB-D is located 174 kilometers from that of WKDH-DT, thereby placing this LPTV station in a displacement situation, according to Section 73.3572(a)(4)(iv)(A)(1).

It is proposed to mount a standard ERI omnidirectional antenna at the 359-meter level of an existing 365-meter communications tower. Exhibit B is a map upon which the predicted service contours are plotted. It is important to note that the newly proposed 51 dBu contour encompasses the station's city of license. Operating parameters for the proposed facility are tabulated in Exhibit C. An interference study is provided in Exhibit D, and a power density calculation follows as Exhibit E.

Because no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1057943 to this tower.

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.

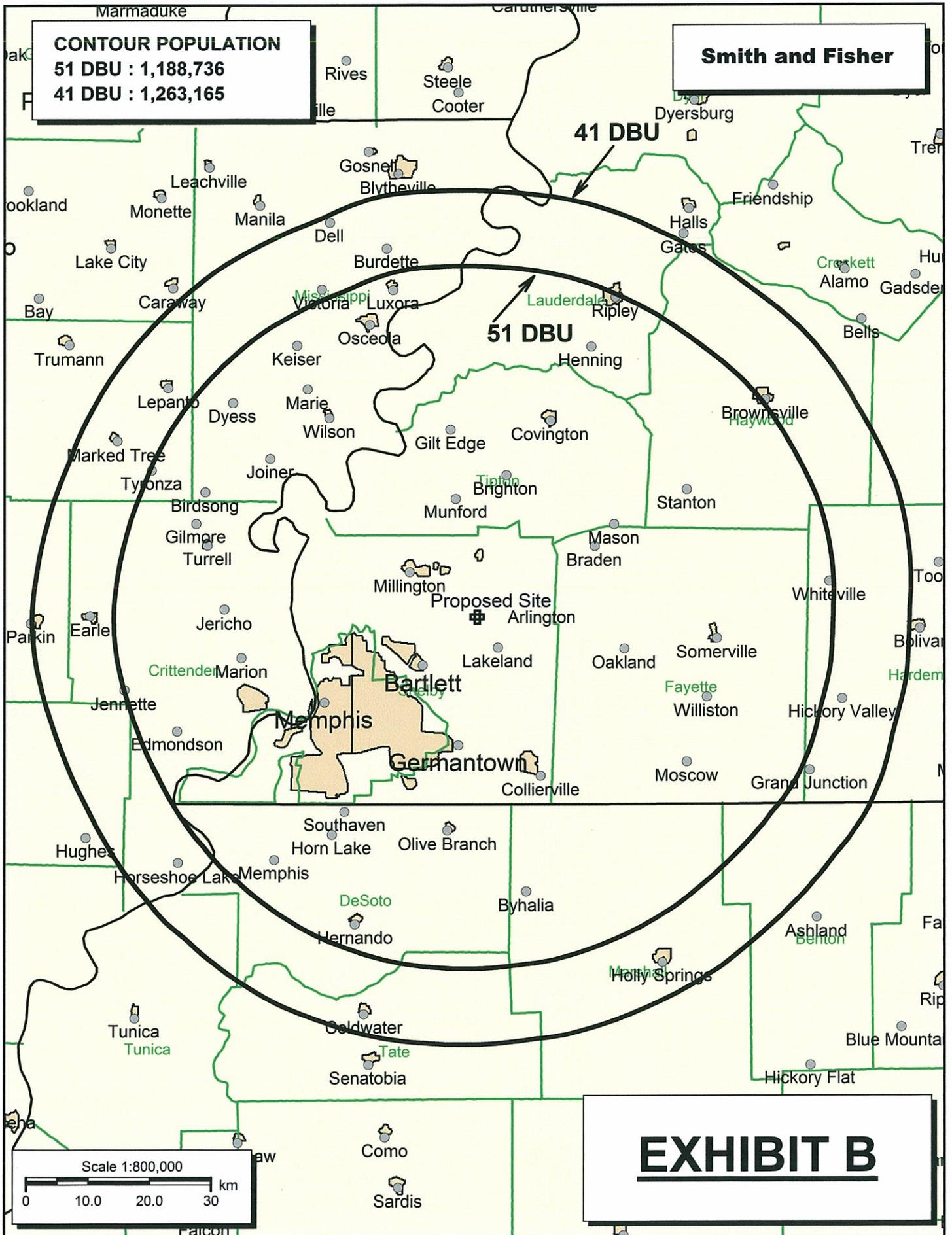


KEVIN T. FISHER

June 24, 2009

CONTOUR POPULATION
51 DBU : 1,188,736
41 DBU : 1,263,165

Smith and Fisher



Scale 1:800,000



EXHIBIT B

PROPOSED OPERATING PARAMETERS

PROPOSED W45DB-D
CHANNEL 50 – MEMPHIS, TENNESSEE

| | |
|--|-----------------|
| Transmitter Power Output: | 3.6 kw |
| Transmission Line Efficiency: | 29.3% |
| Antenna Power Gain – Toward Horizon: | 14.06 |
| Antenna Power Gain – Main Lobe: | 14.06 |
| Effective Radiated Power – Toward Horizon: | 15.0 kw |
| Effective Radiated Power – Main Lobe: | 15.0 kw |
| Transmitter Make and Model: | Type-accepted |
| Transmission Line Make and Model: | Andrew HJ8-50B |
| Size and Type: | 3" air heliax |
| Length: | 1205 feet* |
| Antenna Make and Model: | ERI AL8 |
| Orientation | Omnidirectional |
| Beam Tilt | 1.75 degrees |
| Radiation Center Above Ground: | 359 meters |
| Radiation Center Above Mean Sea Level: | 436 meters |

*estimated

LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED W45DB-D
CHANNEL 50 – MEMPHIS, TENNESSEE

We conducted detailed interference studies using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to all facilities of concern. The software utilizes a 1-square kilometer cell size, calculates signal strength at 1.0 kilometer increments along each radial studied, and employs the 2000 U.S. Census to count population within cells. In addition, the program does not attribute interference to the proposed facility in cells within the protected contour of the station under study where interference from another source (other than proposed W45DB-D) already is predicted to exist (also known as "masking"). The results of these studies are provided in Exhibit D-2. They conclude that the facility proposed herein causes no significant new interference to any of the potentially affected stations.

As a result, it is believed that the proposed W45DB-D facility complies with the requirements of Sections 73.6016, 73.6017, 73.6018, 73.6019, 73.6020, 73.6027 and 74.794(b) of the Commission's Rules.

It is important to note that the availability of Channel 50 in Memphis is due to the fact that analog WPXX-TV (Channel 50 in Memphis) is no longer operational.

INTERFERENCE SUMMARY

PROPOSED W45DB-D
CHANNEL 50 – MEMPHIS, TENNESSEE

| <u>Call Sign</u> | <u>Status</u> | <u>City, State</u> | <u>Ch.</u> | <u>Longley-Rice Service Population</u> | <u>Unmasked Interference From Proposed Facility</u> | <u>%</u> |
|-------------------------------|---------------|--------------------|------------|--|---|----------|
| WPXX-DT BLC DT-20020130ACC | Lic. | Memphis, TN | 51 | 1,459,082 | 705 | <0.1 |

POWER DENSITY CALCULATION
PROPOSED W45DB-D
CHANNEL 50 – MEMPHIS, TENNESSEE

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Memphis 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 359 meters above ground, and the vertical pattern of the ERI antenna, maximum power density two meters above ground of 0.000037 mw/cm^2 is calculated to occur 321 meters from the base of the tower. Since this is less than 0.1 percent of the 0.46 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 50 (686-692 MHz), this proposal may be excluded from consideration with respect to public exposure to nonionizing 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 nonionizing radiation.