

TECHNICAL EXHIBIT  
APPLICATION FOR LICENSE  
RADIO STATION WEZN(FM)  
BRIDGEPORT, CONNECTICUT  
CH 260B    27.5 KW    204 M

Technical Statement

This Technical Exhibit, of which this statement is part, was prepared on behalf of radio station WEZN(FM) on Channel 260B at Bridgeport, Connecticut. WEZN(FM) is requesting a modification of license as it recently replaced its main transmitting antenna. Figure 1 is a tabulation of the system losses and requested new transmitter power output.

Radiofrequency Electromagnetic Field Exposure Analysis

The facility has been evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level in accordance with OET Bulletin No. 65, *Evaluating Compliance with FCC Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*.<sup>1</sup> The power density at the base of the tower was calculated using the appropriate procedure contained in Section 2, Supplement A, *Additional Information for Radio and Television Broadcast Stations*, of the Bulletin.

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<sup>1</sup> OET Bulletin 65, Second Edition 97-01, August, 1997.

For the calculation for each station, a combined horizontal and vertical polarized ERP of 55 kilowatts is employed with a radiation center of 128 meters (420 feet) above ground level. A "worst-case" downward relative field value of 1.0 was assumed. It is therefore calculated that the power density will not exceed  $0.116 \text{ mW/cm}^2$  at ground level for each station. This is less than 60 percent of the Commission's guideline value for an uncontrolled environment for a FM radio station.<sup>2</sup>

Access to the transmitting site is restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radiofrequency radiation will not exceed the FCC guidelines.

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<sup>2</sup> The FCC maximum guideline for a FM broadcast station in an uncontrolled environment is  $0.2 \text{ mW/cm}^2$ .

Figure 1

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WEZN(FM) RF Transmission System Specifications

Description	System
Transmitter Power Output (22 kW):	13.4 dBk
<i>Andrew</i> Transmission Line Loss (HJ8-50B) 467 feet:	0.7 dB
<i>ERI 1183-3CP</i> Antenna Gain (1.5 Power Gain):	1.7 dB
Effective Radiated Power (27.5 kW):	14.4 dBk