

EXHIBIT 29
FM AUXILIARY ANTENNA
WYXB 4.5 KW 302 M HAAT CH. 289
INDIANAPOLIS, INDIANA

The applicant, Emmis Radio License Corporation, requests authorization to employ an auxiliary back-up antenna for FM broadcast station WYXB, Channel 289B, Indianapolis, IN. The instant application specifies an existing multi-user panel array that is co-located on the same tower as the main antenna. Antenna radiation center height above average terrain will be positioned at 302 meters and effective radiated power will be limited to 4.5 kW to avoid any extension of the main facility's 1.0 mV/m service contour in accordance with Section 73.1675(a)(1). A map that shows the locations of the 1.0 mV/m contours for the main and auxiliary facilities is attached as Figure 1.

The proposal will not to have a significant effect on the quality of the human environment and does not require an environmental assessment. It is categorically excluded from environmental processing by Section 1.1306 of the Commission's rules since it specifies mounting an auxiliary antenna on an existing tower and does not exceed the safety standards for human exposure to radio-frequency (RF) energy in Section 1.1307(b) as described below.

The effective radiated power of 4.5 kW specified for the auxiliary facility will not result in RF contributions exceeding the *RF Radiation Exposure Limits* specified in Section 1.1310 of the Commission's rules. Accordingly, the maximum permissible exposure (MPE) limits for FM frequencies are 200 $\mu\text{W}/\text{cm}^2$ for general (uncontrolled) exposure and 1,000 $\mu\text{W}/\text{cm}^2$ for occupational (controlled) exposure. Compliance with these limits was established based on a "worst case" estimation of ground level power density using the

EPA prediction method adopted by the Commission. The “worst case” ground level power density contribution for the auxiliary facility, assuming 100% antenna field strength, is calculated to be less than $4.0 \mu\text{W}/\text{cm}^2$ at all locations 2 meters above ground. Since this estimated level is less than 5% of the guideline for both controlled and uncontrolled exposure, the applicant is not required to further evaluate the antenna location with respect to other RF contributors.

It has been demonstrated that the specified auxiliary facility will comply with the occupational exposure guideline at any ground level location. However, workers at higher elevations on the antenna structure, closer to the RF source, will be protected from excessive exposure to RF fields in accordance with the methods recommended in *OET Bulletin No. 65, Version 97-01*. The applicant will adopt the coordinated work policy in practice at the multi-user site to protect workers from inordinate exposure to RF levels while work is being performed at higher elevations on the tower. Preventive steps to avoid excessive exposure during scheduled tower work may include shutting the facility down or operating at reduced power. A time averaging strategy may also be implemented.

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FIGURE 1

