FCC 301 application for CP for Aux antenna
WZMX fac. Id. 1900
July 21, 2015

ENGINEERING STATEMENT

SPURIOUS EMISSIONS

CBS Radio Stations Inc., the licensee of WZMX, seeks to share an auxiliary antenna with co-owned stations WRCH[1] and WTIC-FM[2]. The underlying application proposes to share the WRCH-FM auxiliary antenna. The system will permit only one station to use the antenna at a time. Therefore, no simultaneous operation will be possible.

ENVIRONMENTAL

An Environmental Assessment is not required as grant of this application would not be considered a major environmental action.

The transmitting antenna is mounted on a tower that has been registered with the Commission (ASR 1041624). The antenna, an ERI, model SHPXA-4BC-HW-SP "AXIOM" 4 bay with 1/2 wavelength spaced elements, will be installed with the center of radiation 122.0 meters above ground. The WZMX ERP is proposed to be 1.8 kW (H+V).

The proposed transmitting facilities will comply with the FCC guidelines limiting human exposure to radio frequency energy. The vertical pattern is typical of a standard ERI SHPX rototiller type antenna. A worst case field factor of .2 at an elevation angle of -50° was considered, based on the manufacturer's theoretical specifications. The maximum power density level at any location at ground level, calculated in accordance with OET Bulletin No. 65 (August 1997), is determined to be less than 5% of the most restrictive applicable limit (Un-controlled General Population). If work is done on the tower in an area where over exposure could occur, the Licensee in coordination with the other users will take necessary action to prevent the overexposure of workers on the tower including reducing the transmitting power or ceasing operation completely.

[1] A pending application is on file with the Commission (BXMLH-20150721AAD) to modify the auxiliary antenna license of WRCH reflecting a permissive antenna replacement.
[2] An application is being prepared and filed for WTIC-FM to also utilize the shared auxiliary antenna.