

Engineering Statement
CBS Broadcasting Inc.
WBBM-TV(Aux) Chicago, Illinois
Facility ID 9617
Ch. 12 14 kW (Max-DA) 464 m

CBS Broadcasting Inc. (Paramount) proposes to increase the ERP of an existing auxiliary antenna license for WBBM-TV Chicago, IL.¹ The provided antenna pattern also corrects a typographical error in the 240-degree relative field value. No physical changes are proposed.

The attached coverage map (**Figure 1**) shows that the proposed service contour will not extend beyond that of the WBBM-TV licensed antenna as required by FCC Rule §73.1675. As there are no AM transmitter sites within 3 kilometers of the proposed facility, FCC Rule §1.30002 will not be triggered. The nearest FCC monitoring station is 160 km distant at Allegan, MI, well beyond the protection radius specified in §73.1030(c). It is therefore believed that the proposed facility satisfies all allocation matters.

The proposed operation was evaluated for human exposure to radiofrequency energy using equation ten (10) from the Commission's OET Bulletin No. 65 using a worst-case, 100 percent relative-field value. Calculations show that the proposed facility would contribute a maximum power density of 2.2 $\mu\text{W}/\text{cm}^2$ or 1.1 percent of the FCC's 200 $\mu\text{W}/\text{cm}^2$ "uncontrolled/general population" exposure limit for VHF Channel 12 (207 MHz) at ground-level. According to §1.1307(b)(3), facilities at locations with multiple emitters are categorically excluded from responsibility for taking corrective action in areas where their contribution is less than five percent of the limit.

Access to building rooftop and any tower locations that may exceed exposure limits will continue to be strictly controlled by the building owner. Paramount will participate in the building owner's RF exposure safety program that, in cooperation with other broadcasters, includes restriction of access, power reduction, or shutdown of facilities when predicted or measured RF exposure would otherwise be exceeded.

¹ Paramount wishes to modify WBBM-TV auxiliary antenna license (file 0000197218) while retaining auxiliary antenna license (file 0000189452).

