

**Engineering Exhibit For
Dodge Point Broadcasting Co., Inc.
Dodgeville, Wisconsin
January 2021**

W245DE Transmitter Power Output Calculation

Frequency = 96.9 MHz

ERP = 250 watts

Antenna gain = 0.5012

400 feet 7/8" foam Helix = 0.7093

TPO = $250 / 0.5012 / 0.7093 =$ **703 watts**

Special Operating Condition Responses

Construction permit BNPFT-20171219ACC contains four special operating conditions, all of which are met. One requires a specific response:

2 This construction permit authorizes the mounting of an antenna on the nondirectional tower of the AM station identified below. During the installation of the antenna, the AM station shall determine operating power by the indirect method (see Section 73.51 of the Commission's Rules). Upon completion of the antenna installation, antenna impedance measurements on the AM antenna shall be made. If the resistance of the AM antenna has changed by more than 2 percent from the licensed value (see Section 73.45(c)(1) of the Commission's Rules), an application for the AM station to return to direct power measurement, including a tower sketch of the installation, shall be filed with the Commission by the AM station licensee using form FCC 302-AM. (See Section 1.30003 of the Commission's Rules.) The permittee must submit confirmation of completion of the requirements of this condition in the application for license to cover this construction permit.

Station WDMP(AM), Dodgeville, WI, 810 kHz

The tower base impedance was measured prior to making any changes on the tower, and again following the installation of the W245DE antenna. No tower construction was involved as the subject translator antenna replaced an existing antenna on the tower, and the new transmission line replaced one which was already run down the quarter-wave isolation section with the WDMP-FM line. This reconfiguration had a minor effect on the tower base impedance which now reads $42 + j123$ ohms, sufficiently different from the current license to require an FCC 302-AM for direct measurement authority which is being filed concurrently with this application.