

WPVM-LP

Mountain Area Information Network

Asheville, North Carolina

Engineering Exhibit

RF Exposure

June 2006

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Timothy L. Warner, Inc.
Post Office Box 8045
Asheville, North Carolina 28814-8045
(828) 258-1238
twarner@tlwinc.net

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Declaration

I declare, under penalty of perjury, that I am a technical consultant to broadcasting and other communications systems, that I have over twenty-five years of experience in the engineering of broadcast and other communications systems, that I am familiar with the Federal Communications Commission's Rules found in the Code of Federal Regulations Title 47, that I am a Professional Engineer registered in North Carolina, that I have prepared or supervised the preparation of the attached Engineering Exhibit: RF Exposure for Mountain Area Information Network, and that all of the facts therein, except for facts of which the Federal Communications Commission may take official notice, are true to the best of my knowledge and belief.



Timothy L. Warner, P.E.
Post Office Box 8045
Asheville, North Carolina 28801
(828) 258-1238
twarner@tlwinc.net
22 June 2006

Narrative

This exhibit support a request for Minor Modification for WPVM-LP. The minor modification proposes operation from an existing tower approximately 120 meters from the authorized tower. The tower supports WJJV-LP and television translator W08BP.

The worksheet for Form 318 assumes that an LP100 station such as WPVM-LP operates with an ERP of 100 watts. The licensed and proposed Height Above Average Terrain (HAAT) are such that the licensed Effective Radiated Power (ERP) and the proposed ERP are 1 watt each in horizontal and vertical polarization. Therefore the minimum distances in the worksheet for 100 watts are overly conservative.

OET-65

Using the worst case assumptions in OET-65¹ the proposed WPVM-LP facilities of 1 watt each in horizontal and vertical polarization produce a power density of 0.0003 mW/cm², or less than 0.03% of the permitted occupational exposure or 0.15% of the maximum permitted value for uncontrolled/public exposure. According to the worksheet instructions for Form 318, LPFM stations are exempt from more detailed showings if the exposure contribution is less than 5% of the maximum permitted value. The exposure due to WPVM-LP is clearly less than the threshold.

¹ Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields, Edition 97-01, released August, 1997, and Supplement A: Additional Information for Radio and Television Broadcast Stations

FM Model

The RF exposure was also evaluated using the computer program FM Model developed by the FCC and the EPA. The graphical output is shown below. FM Model predicts a slightly lower power density than does OET-65.

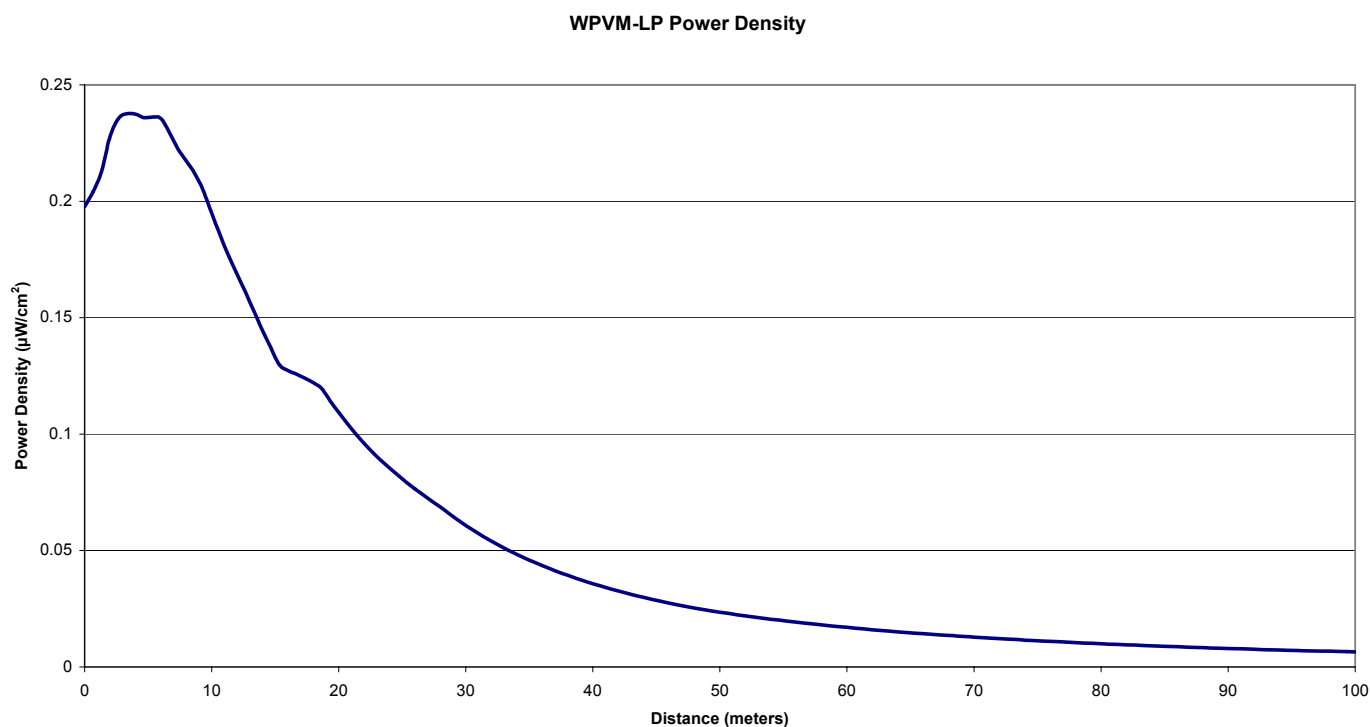


Figure 1: Graphic output from FM Model

