

New Bern, North Carolina  
Application for Modified Facilities for FM Translator W239BC  
On Channel 239  
by  
Conner Media Corporation

Exhibit 17  
Nonionizing Radio Frequency Radiation Analysis

June 2013

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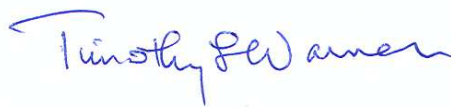
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Declaration

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 Exhibit 17, Nonionizing Radio Frequency Radiation Analysis, for Conner Media Corporation, 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.



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25 June 2013

### Narrative

This Exhibit supports an application for modified facilities for FM translator W239BC, New Bern, North Carolina. The application proposes fill-in service for station WMGV, Newport, North Carolina.

This Exhibit shows that the proposed operation is in compliance with nonionizing radiation regulations.

### Radio Frequency Radiation Evaluation

The proposed W239BC facilities, when evaluated under worst case methods in OET-65<sup>1</sup>, will create 0.0004 mW/cm<sup>2</sup> two meters above ground level. The worst case power density is less than 0.2% of the maximum permitted 0.20 mW/cm<sup>2</sup> for general population/uncontrolled exposure. This level is de minimis, and below the threshold of responsibility.

A two bay ERI LPX-2E-HW antenna is proposed which reduces the power density at ground level.

### Other users of Site

There are two other translators authorized at the same site. W290CB is licensed with 38 Watts ERP at 70 meters Above Ground Level. W280ED is licensed with 38 Watts ERP at 70 meters AGL, with a construction permit for 100 Watts ERP at 70 meters above ground. Assuming that the W280ED construction permit is completed, those combined translators

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<sup>1</sup>Cleveland, Robert F., Jr., Sylvar, David M., and Ulcek, Jerry L., *Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*, OET Bulletin 65, Edition 97-01.

would produce a worst case power density of  $0.0019 \text{ mW/cm}^2$  at 2 meters above ground, or 1.0% of the uncontrolled/public exposure limit.

If the worksheet method of combining total power at the lowest elevation is used, the worst case power density is  $0.006 \text{ mW/cm}^2$  at 2 meters above ground, or 3% of the uncontrolled/public exposure limit, and still less than the threshold of responsibility.

### Nearby Facilities

There are no other facilities within 60 meters of the proposed site. At 1.35 kilometers there is a nondirectional AM station, and also a construction permit for an FM translator. At 1.46 kilometers there is a tower which is the construction permit site for three low power television facilities. None of those facilities are close enough to warrant study.