

Forest City, North Carolina  
Long Form Application for a New FM Translator BNPFT-20180130ADU  
On Channel 298  
for  
WAGY, INC.

Exhibit 17  
Nonionizing Radio Frequency Radiation Analysis

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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 thirty years of experience in the engineering of broadcast and other communications systems, that I am familiar with the Federal Communications Commission's Rule found in the Code of Federal Regulations Title 47, that I have prepared or supervised the preparation of the attached Exhibit for WAGY, INC. and that all 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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Narrative

This Exhibit supports a long form application in response to a filing window for FM translator file number BNPFT-20180130ADU, on 298 in Forest City, North Carolina.

This exhibit shows that the proposed operation is in compliance with nonionizing radiation regulations. This translator will be associated with WAGY-AM (facility ID 70700) in Forest City, North Carolina.

### Radio Frequency Radiation Evaluation

The proposed facilities for File number BNPFT-20180130ADU. When evaluated using the Commissions FM Model program generates  $3.25 \mu\text{W}/\text{cm}^2$  of exposure at 10 meters (32.8 feet) from the tower base which is less than 2.6% of the general population/uncontrolled limit.

This figure is less than 5.0% of the applicable FCC exposure limit at all locations extending out from the base of the tower. Section 1.1307(b)(3) excludes applications when the calculated level is predicted to be less than 5% of the applicable exposure limit. It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

AM Evaluation

The proposed tower is used for WAGY-AM, with details tabulated below.

Call Sign	WAGY
Facility ID	70700
Frequency	1320
Power (kw)	1
Tower Height (degrees, wavelength)	96.6°, 0.227 $\lambda$

Supplement A to OET-65 tabulated safe distances to fences for AM facilities for different powers, wavelengths and frequencies. Table 2 provides distances for .25 wavelength towers. At the frequency and wavelength of WAGY, the safe distance for 1 kilowatt are 2 meters respectively. The installed fence is at all points at least 8 feet (2.5 meters) from the tower, establishing compliance with OET-65 for AM operation.