

FEDERAL COMMUNICATIONS COMMISSION
445 TWELFTH STREET SW
WASHINGTON DC 20554

MEDIA BUREAU
AUDIO DIVISION
APPLICATION STATUS: (202) 418-2730
HOME PAGE: www.fcc.gov/mb/audio/

ENGINEER: Ann Gallagher
TELEPHONE: (202) 418-2716
FACSIMILE: (202) 418-1410
E-MAIL: Ann.Gallagher@fcc.gov

August 31, 2010

William H. Fitz
Covington & Burling LLP
1201 Pennsylvania Ave. NW
Washington, DC 20004-2401

Re: WRTO(AM), Chicago, IL
Facility Identification Number: 11196
License application: BMML-20100517AFU

Dear Counsel:

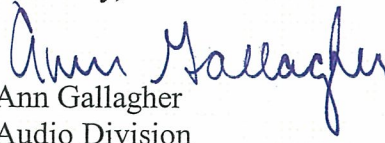
Our review of the subject license application shows the following deficiencies.

1. The physical portion of the moment method model does not comply with Section 73.151(c)(1)(i) of the rules, which gives guidelines for the radii of the wires used to represent the towers. For example, at its base each tower has a 3.66-meter (12-foot) face, which corresponds to an equivalent cylindrical radius of 1.75 meters. The rules permit the use of radii between 80 and 150 percent of the equivalent value. The radius of the wire used in the model for the bottom segment of each tower is 1.164 meters, which falls outside the tolerance specified in the rule. There is a similar violation at the top of the first and second segments of each tower.
2. According to Section 73.151(c), the specification of the physical characteristics of the AM antenna may not violate the internal guidelines for the method of moments software used to model the array. In this case, the segment length-to-radius ratio violates the software's guidelines for the lower four wire segments used to model each tower.
3. There are six towers on the WRTO site. Towers 1, 2, 3, and 4 are used for the daytime array, while all six towers are used at night. The moment method model for the daytime array shows the unused towers as driven elements, which does not correspond to the actual operation of the array. The engineering statement must describe the treatment of the unused towers, whether detuned or floating, and the model must accurately reflect such treatment.
4. The engineering exhibit includes base network calculations which are applied both to the measured tower impedances, and to the operating parameters. The base network calculations for tower 2 in the daytime array are incorrect, failing to account for the fact that this is a negative power flow tower.

5. Section 73.151(c)(2)(i) requires that the sampling devices be disconnected and calibrated with a common reference signal to verify their performance. These measurements must be submitted.
6. As the Media Bureau's October 29, 2009, *Public Notice*¹ stated, the moment method proof should include a certificate or statement verifying that the antenna monitor is properly calibrated, as Section 73.69(3) requires.

Further action on the subject license application will be withheld until an amendment addressing the deficiencies described above is submitted. Failure to respond within 60 days from the date of this letter may result in dismissal of the application pursuant to 47 CFR Section 73.3568(a)(1).

Sincerely,


Ann Gallagher
Audio Division
Media Bureau

Cc: Charles W. Staples

¹ "Media Bureau Clarifies Procedures for AM Directional Antenna Performance Verification Using Moment Method Modeling," Public Notice, DA 09-2340 (2009).