

## **ENGINEERING STATEMENT**

This application is submitted to amend FCC File No. 0000068436, a minor modification application to the existing authorized construction permit of WAZT-CD, Facility ID 168449, Channel 20, Woodstock Virginia, FCC File No. 0000055139 (“CP”), licensed to the Applicant herein.

WAZT-CD’ antenna is currently authorized in the CP at 103 meters RCAGL. However, we were asked by the tower owner to go at a lower height at 97.5 meters. Because we are going lower on the tower, we propose to raise our ERP slightly from 10.8 kW to 11.3 kW. The antenna polarization changed from circular to horizontal. We also request a change in the community of license to Vienna, Virginia.

Except for changes referenced above, the technical parameters specified herein are identical to the existing authorized CP. The proposed facility does not expand contours beyond those in the existing authorized CP. The proposed facility on channel 20 was studied using TV Study v2.2.5 using:

Study cell size: 1.00 km  
Profile point spacing: 0.05 km

And the results are as follow:

- Distance to Canadian border: 408.3 km
- Distance to Mexican border: 2302.1 km
- Conditions at FCC monitoring station: Laurel MD  
Bearing: 87.7 degrees Distance: 87.2 km
- Proposal is not within the West Virginia quiet zone area
- Conditions at Table Mountain receiving zone:  
Bearing: 281.5 degrees Distance: 2337.9 km

It is believed that the proposed facility complies with the requirements of Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h) and other applicable parts of the Rules and Regulations of the Federal Communications Commission.

### **National Radio Quiet Zone**

The proposed facility is outside of the National Radio Quiet Zone and therefore coordination and approval from the NRQZ is not required.

### **Land Mobile Protection**

The entire F(50,10) 76 dBu channel 20 adjacent channel interfering contour falls within the channel 20 preclusion area around Washington, DC as specified in Section 74.709(b)(2).

While not all of the entire F(50,10) 52 dBu channel 20 co-channel interfering contour falls within the channel 20 preclusion area around Washington, DC as specified in Section 74.709(b)(2), only sections between 214 and 0 degrees fall outside of the channel 20 preclusion area around Washington, DC as specified in Section 74.709(b)(2). In those directions, channel 19 and 20 are not used for land mobile.

In order to minimize OOBE (Out of Band Emissions), the Applicant will utilize an 8-section sharply tuned cross-coupled mask filter.

### **Digital TV and Class A Station Protection and Interference Acceptance**

The proposed facility causes less than 0.5% interference to surrounding digital and Class A television stations and allotments and facilities (i.e., “*de minimis*”) based on TV Study v2.2.5. It is believed that the proposed operation is in compliance with the spirit and intent of the FCC’s interference standards.

### **Low Power TV and TV Translator Station Protection**

The proposed facility causes less than 2.0% interference to surrounding low power licenses and construction permits (i.e., “*de minimis*”) based on TV Study v2.2.5. It is believed that the proposed operation is in compliance with the spirit and intent of the FCC’s interference standards.

### **Environment Assessment Not Required**

The proposed facility is deemed individually and cumulatively to have no significant effect on the quality of the human environment and are categorically excluded from environmental processing as defined by 47 C.F.R. § 1.1306. The applicant also certifies that it, in coordination with other users of each transmitter site, will reduce power or cease operation as necessary to protect persons having access to each site, transmitter or antenna from radio frequency electromagnetic exposure in excess of FCC guidelines.