



**ENGINEERING STATEMENT**  
OF  
**JOHN F.X. BROWNE, P.E.**  
IN SUPPORT OF AN APPLICATION FOR  
**MINOR MODIFICATION OF A POST-TRANSITION CONSTRUCTION PERMIT**  
**WBGU-DT**  
**BOWLING GREEN, OH**

**Background**

Bowling Green State University is the licensee of WBGU-DT which has been authorized to operate its post-transition DTV facility on Channel 27 (BPEDT-20080225AHC) at Bowling Green, OH, with an ERP of 110 kW at an HAAT of 320m. The tower is located at the following coordinates:

(NAD27)  
41° 08' 12" N  
83° 54' 24" W

WBGU now wishes to "maximize" the post-transition facility ERP to 153 kW. All other facility parameters will remain the same.



### **Site**

The proposed facility is located within the Canadian border zone and coordination with the Canadian government is requested to the extent necessary in light of the FCC's ongoing negotiations with the Canadian administration.

### **Antenna System and Tower**

WBGU proposes to operate with its existing broadband analog/digital Dielectric TUF-04-14/56 H-1-TR omni-directional antenna (which will be used for post-transition operation). The antenna is installed on a tower (ASR#1016071) that has an overall height of 553.7m AMSL (with appurtenances). The antenna has a center-of-radiation of 545m AMSL (with a calculated HAAT of 320m). No modifications to the tower or antenna system are necessary to effect the proposed change in ERP.

### **Coverage**

The entire principal community of Bowling Green, OH is well within the predicted F(50,90) 48 dBu contour based on the proposed 153 kW ERP.

### **Interference**

Studies were conducted with the proposed parameters using software that emulates the software used by the FCC (OET-69 analysis). The results of the study indicate that there are no post-transition domestic stations that would receive more than 0.5% new interference.

### **Environmental/RFR**

The proposed construction does not require preparation of an Environmental Assessment as it does not involve any of the factors listed in Section 1.1306.



The additional ground level RFR contributed to the site by this proposal in public areas is calculated to be  $0.000485 \text{ mW/cm}^2$  which is less than 5% of the MPE for public exposure ( $0.37 \text{ mW/cm}^2$ ) at the proposed frequency and, therefore, the proposal is excluded from further consideration.

WBGU agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access. Workers will be encouraged to wear personal RFR monitors when on the structure. The tower base is enclosed by a locked security fence and appropriate signage warning of RFR hazards is posted.

### **Certification**

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.

A handwritten signature in black ink, appearing to read 'John F. X. Browne', written in a cursive style.

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John F. X. Browne, P.E.  
June 11, 2008