

ENGINEERING STATEMENT
OF
JOHN F.X. BROWNE, P.E.
IN SUPPORT OF
APPLICATION FOR MINOR MODIFICATION
OF CONSTRUCTION PERMIT FOR
WBGU-DT
Bowling Green, OH

Background

Bowling Green State University (BGSU) is the licensee of WBGU-TV, CH27, serving Bowling Green, OH and also holds a construction permit for WBGU-DT, CH56, (BPEDT-20000103ACA, Facility ID. # 6568). This construction permit calls for the omni-directional DTV antenna to be side mounted on the tower at an HAAT of 306m. BGSU now wishes to utilize a broadband panel antenna placed on top of the tower in the same aperture as the NTSC antenna. This antenna will be used for both the NTSC and DTV stations.

Site

The site is the same as specified in the construction permit and requires no modification.

Antenna System and Tower

BGSU will use the same tower specified in the construction permit. This tower is registered (ASR# 1016071). The new broadband panel antenna will fit in the same aperture as the previously authorized analog antenna and, therefore, no notification to the FAA is needed; likewise no modification of the ASR is required. The new antenna is a Dielectric TUF-04-14/56 H-1-T-R omni-directional broadband panel antenna. The HAAT of the new antenna (320m) will be higher than that specified in the original DTV construction permit. The ERP is being reduced from 200 kW to 190 kW so that the interference contour toward Canada will remain the same as produced by the facilities specified in the original DTV permit.

Coverage

The entire principal community of Bowling Green, OH is well within the predicted F(50,90) 48 dBu contour using the proposed 190 kW ERP.

Interference

Studies were made at the proposed parameters using software that emulates the software used by the FCC. Those studies indicate that there are no DTV or NTSC stations that would receive more than the de minimis interference as described in OET-69, nor are there any problems with Class A stations. The ERP has been lowered from 200 kW to 190 kW so that the predicted distance to interfering contour (F50,10 19.5 dBu) toward Canada will remain the same as produced by the authorized facilities (depicted by Figures 1-3). The interfering contour level was determined from the US-Canada LOU.

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 ground level RFR contributed to the site by this proposal in public areas would be less than that originally proposed due to the higher radiation center and the lower ERP. This would make the exposure level in public areas even lower than that calculated for the present authorization (less than 5% of the MPE); therefore, this proposal is also excluded from further consideration.

BGSU agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a complaint environment for worker access. Workers will also 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 in place.

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.

John F.X. Browne, P.E.
June 10, 2003