

Engineering Statement
of
John F.X. Browne, P.E.
in support of
Minor Amendment to Pending Application
for
WGTE-DT
Toledo, OH

Background

WGTE-DT (Facility ID# 66285) has pending before the Commission an application for authority to maximize its DTV facility (BPEDT-20000329AAT); the application requests facilities of 200 kW omnidirectional at the allotment site. These operating parameters were rejected by the Canadian Government even though predicted interference to CIII-TV, operating on Channel 29 (Class C, co-channel) at Sarnia-Oil Springs, Ontario is less than 2% as calculated under the LOU. WGTE-DT proposes herein to amend its pending application to meet "checklist" parameters; this can be accomplished by a simple power reduction to 48.8 kW based on pattern and height above average terrain.

Site / Antenna

There are no changes proposed in antenna, site or height data.

ERP

Operation with an omnidirectional antenna limits power (RMS) to the minimum specified in the allotment envelope as follows:

Allotment Power 50 kW (max)

Adjusted for pattern minimum of 0.985 relative field

$$(0.985)^2 \times 50 \text{ kW} = 48.5 \text{ kW (omnidirectional)}$$

Adjusted for height per Section 73.622(f)

Allotment HAAT 314 meters

Application HAAT 313 meters

$$\text{ERP adj.} = 20 \log 314/313 \text{ dB}$$

$$= 0.0277 \text{ dB}$$

$$= 1.006 \text{ power adjustment factor}$$

Therefore, the allowable ERP is 48.8 kW.

Interference

No interference analysis is required as this is a checklist application.

Environmental / RFR

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

The additional ground level RFR contributed to the proposed site by the WGTE-DT antenna in public areas is calculated to be significantly less than 1% of the MPE for public exposure at this frequency.

A master plan is in-place which governs all users / tenants on the tower relative to worker access to the tower. WGTE-DT is a party to that agreement and agrees to comply with the Commission's requirements regarding power reductions or cessation of operation as may be necessary for a compliant worker environment. The tower is enclosed with a locked security fence to prevent unauthorized access and appropriate signage is in-place warning of the RFR hazard on the tower.

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.
May 14, 2002