



ENGINEERING STATEMENT
OF
JOHN F.X. BROWNE, P.E.
IN SUPPORT OF APPLICATION
FOR
MINOR MODIFICATION OF CONSTRUCTION PERMIT
WCMV-DT
CADILLAC, MI

Background

Central Michigan University (CMU) is the licensee of non-commercial television broadcast stations WCMV-TV at Cadillac, MI, and WCMW-TV at Manistee, MI. CMU also operates two other television stations at Mt. Pleasant, MI (WCMU-TV) and Alpena, MI (WCML-TV). The Cadillac station serves the Traverse City – Cadillac DMA. In its Sixth Report and Order in the Advanced Television (DTV) Proceeding, the Commission made the following DTV allotments:

WCMV-DT	Cadillac	Channel *58
WCMW-DT	Manistee	Channel *17

CMU has received FCC construction permits for both facilities specifying maximum ERP levels of 200 kW at Cadillac and 50 kW at Manistee. Subsequently, CMU petitioned the Commission in a rule making proceeding to make the following changes to the allotment table:

WCMV-DT	Cadillac	Channel *17
WCMW-DT	Manistee	Channel *58



The proposed changes included the following parameters:

Channel 17 – Cadillac

Max ERP	500 kW, DA
HAAT	399 m
Site	44-44-53 N
	85-04-08 W

Channel 58 – Manistee

Max ERP	200 kW, DA
HAAT	104 m
Site	44-03-57 N
	86-04-08 W

The rule making petition was granted July 7, 2003 (RM-10373). CMU is hereby seeking to modify the WCMV-DT construction permit (BPEDT-20000403AAS Facility ID # 9922) to conform to the parameters specified in the amended allotment. This is a “checklist” application.

Site and Tower

The site is the same as specified in the allotment and the tower is registered (ASR # 1006720). The antenna that is proposed will be mounted in such a way so as not to exceed the overall height of the tower and, therefore, neither notification to the FAA nor changes to the Antenna Structure Registration are needed.

Antenna and Power

The directional antenna specified in the allotment will not be used so that a panel antenna can be utilized. CMU plans to share this antenna with commercial broadcast stations WGTU-TV and WGTU-DT. This panel antenna has a different radiation pattern than the antenna used



in the allotment. The proposed power of 338 kW and the proposed HAAT of 393 meters are lower than the maximum HAAT and ERP specified in the allotment. The antenna's (Dielectric TFU-P4-12/48 H-1) azimuth and elevation patterns and tables are included as Exhibits E1 a-d and a relative field/dBk table that depicts both the allotment antenna's and the proposed antenna's data is included as Table #1. It can be seen from Table #1 that the ERP of the proposed station does not exceed that of the allotment in any direction.

The 48 dBu F(50,90) contour from the proposed facility will completely encompass the principal city of Cadillac MI.

Interference

An interference study is not necessary as this is a "checklist" application.

Environmental/RFR

This construction does not involve any of the conditions that require an Environmental Assessment as specified in 47 CFR Section 1.1311, therefore, further consideration is not required.

The additional ground level RFR contributed to the site by this proposal in public areas is calculated to be 0.000825 mW/cm^2 , which is less than 1% of the MPE for public exposure (0.327 mW/cm^2) at the proposed frequency and, therefore, the proposal is excluded from further consideration.

CMU 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 also be encouraged to wear personal RFR monitors when on the structure. A locked security fence encloses the tower base 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.
July 23, 2003