

ENGINEERING REPORT

Requesting a Minor Construction
Permit Modification for FM Station CP

WCWB(FM) – Coldwater, MI
Construction Permit
No. BMPED-20060601BCP
Channel 211 (90.1 MHz)

July, 2008

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Interference Requirements

Contour Overlap Requirements

Exhibit 16.1 - Tabulation of Allocation

Spacing Requirements	(none)
Grandfathered Short-Spaced Requirements	(none)
Contour Protection Requirements	(none)

TV Channel 6 Protection Requirements

Exhibit 19.1- TV-6 Protection Study Towards WLNS-TV, Lansing, MI

RF Radiation Study Requirement (See Discussion)

(Exhibit Numbering is in response to FCC Online Form 340, Section VII)

DISCUSSION OF REPORT

This firm was retained to prepare the required engineering report in support of a minor change to construction permit application BMPED-20060601BCP for Non-Commercial FM station CP WCWB(FM), Coldwater, MI. BMPED-20060601BCP authorizes operation on Channel 211B1, 90.1 MHz with 6.2 kW vertical and 0.001 kW horizontal at 93 meters HAAT utilizing a non-directional antenna with elliptical polarization. This proposal requests a new transmitter location and decrease in power to 0.250 kW vertical only at 19 meters HAAT employing a non-directional antenna. The facility will continue to serve Coldwater, MI.

The proposed operation will not result in prohibited contour overlap to any other authorized or protected facility. A tabulation of the proposed allocation is found in **Exhibit 16.1**. It is believed there is sufficient clearance to preclude the need for further study with respect to other protected stations shown in the allocation study. Tabulations for each contour employed will be supplied to the FCC upon request.

The proposed service contour has been calculated in accordance with the Rules, and the data obtained has been tabulated and plotted in this report. The present and proposed service contours are shown in **Exhibit 13.4**. The proposed contour overlaps the present contour as required for a minor change application. This exhibit shows the overall service that is provided by the 1.0 mV/m contour of the proposed facility. The applicant would like to note the proposal covers 99.8% of the community of license. Community coverage exceeds the minimum allowable 50% threshold. The tabulation of the distances to the proposed service contour shown in this discussion is based on the use of the standard eight cardinal bearings, which were also used for the computation of the HAAT. However, the plotted contours shown in **Exhibit 13.4** are based on the use of a full 360 terrain radials and the NGDC 30 Second Terrain Database.

The transmitter site is located within 320 km of the common border between the United States and Canada. Full protection will be afforded all Canadian concerns as noted in the **Exhibit 16.1** allocation study. The transmitter site is located within the affected radius of Channel 6 television station(s) WLNS-TV – Lansing, MI. Full protection will be afforded WLNS-TV and shown in **Exhibit 19.1**.

The antenna will be mounted on the existing tower bearing Antenna Structure Registration Number 1264195. As this proposal will not increase the overall tower height, the FAA need not be notified. A vertical antenna plan depicting the placement of the antenna on the tower has been included in **Exhibit 13.2**. A copy of the existing ASR has been included in **Exhibit 13.1**.

The remainder of the information in this report and exhibit numbering are responsive to the Rules of the Commission, and provide the data for FCC Form 340.

DISCUSSION OF REPORT (continued)

The FM broadcast facility proposed in this application is within the limits as set forth in the FCC Form 340 Worksheet #7 (RF Exposure Compliance), issued March, 2001. As this facility complies with Worksheet #7, no RF study need be supplied. Entry to the facility will be restricted by means of fencing with locked doors and/or gates. Any other means as may be required to protect employees and the general public will be employed.

In the event work would be required in proximity to the antenna such that the person or persons working in the area would be potentially exposed to fields in excess of the guidelines set forth in OET Bulletin No. 65 (Edition 97-01), the transmitter power will be reduced or the station will cease operation during the critical period.

DISTANCES TO CONTOURS: The table below shows the distances to the 1.0 mV/m contour from the proposed facility using an ERP of 0.250 kW at an HAAT of 19 meters. These distances have been calculated based on the FCC F(50-50) curves.

N. Lat. = 415624.0 W. Lng. = 850247.0						
HAAT and Distance to Contour - FCC Method - NGDC 30 SEC						
Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	286.4	21.6	0.2500	-6.02	1.000	7.09
045	294.5	13.5	0.2500	-6.02	1.000	7.09
090	302.6	5.4	0.2500	-6.02	1.000	7.09
135	306.0	2.0	0.2500	-6.02	1.000	7.09
180	288.2	19.8	0.2500	-6.02	1.000	7.09
225	275.7	32.3	0.2500	-6.02	1.000	7.33
270	277.4	30.6	0.2500	-6.02	1.000	7.15
315	280.1	27.9	0.2500	-6.02	1.000	7.09
Ave El= 288.86 M HAAT= 19.14 M AMSL= 308						