

ENGINEERING REPORT
MINOR CONSTRUCTION
MODIFICATION APPLICATION

For the NCE-FM Facilities of

WTPG.C – Weston, OH
CH205A – 88.9 MHz
Facility ID No. 122008

Construction Permit File No.
BNPED-20071022DXR

Site Change, Directional Antenna Change,
Increase in Class and Operating Power
& Change in City of License to
Whitehouse, OH

June, 2011

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Spacing Requirements	(none)
Grandfathered Short-Spaced Requirements	(none)
Contour Protection Requirements	(none)
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- Exhibit 23.1 - Contour Protection Toward CIMX-FM – Windsor, ON Canada

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- Exhibit 24.1 - RF Compliance Study

(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 this minor construction permit modification application for NCE-FM station WTPG.C, Weston, OH, Construction Permit File No. BNPED-20071022DXR. WTPG.C is authorized to operate on CH205A (88.9 MHz) with Class A operating parameters of 3.0 kW at a COR of 285 meters AMSL employing a directional antenna pattern. This minor modification application seeks Class B1 operating parameters of 11.0 kW at a COR of 282 meters AMSL from a new site location. A new directional antenna pattern will be employed. In addition, a change in cities of license to Whitehouse, OH is requested.

The proposed site for the Class B1 operation meets all the contour protection requirements towards other domestic stations in the allocation. A tabulation of the proposed protections to each of the other relevant stations is found in **Exhibit 18.1**. There are five (5) other facilities, WHEI.L – Tiffin, OH; WXUT.L – Toledo, OH; WYSZ.L – Maumee, OH; WJTA.L – Glandorf, OH; and WXTS-FM.L – Toledo, OH deemed close enough to require further study. An FMCommander™ map of the relevant protected and interference contours toward each of the relevant facilities has been supplied in **Exhibit(s) 18.2** to **Exhibit(s) 18.6**. It is believed there is sufficient clearance to preclude the need for further study with respect to the other domestic protected stations shown in the allocation study. Tabulations for each contour employed will be supplied to the FCC upon request.

The transmitter site is located within 320 km of the common border between the United States and Canada. The proposed WTPG(FM) facility will remain short-spaced to one Canadian facility, CIMX-FM – Windsor, ON, CH204C1. Contour overlap with CIMX-FM will exist, however full protection will be afforded this Canadian concern over Canadian soil as noted in **Exhibit 23.1**.

The Transmitter site is not located within the affected radius of any domestic Channel 6 television facility; therefore no further TV-6 protection studies are believed required.

The proposed service contours have been calculated in accordance with the Rules, and the data obtained has been tabulated and plotted in this report. The plotted service contour is found as **Exhibit 15.4** of this report. This exhibit shows the overall service that is provided by the 1.0 mV/m contour of the facility. The tabulation of the distances to the respective contours 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 15.4** are based on the use of a full 360 terrain radials. The applicant would like to note the use of the NED 03 Second Terrain Database for all allocation, contour and HAAT calculations contained here-in.

The antenna will be mounted on the existing tower bearing Antenna Structure Registration Number 1270580. As this proposal will not increase the overall tower height, the FAA need not be notified. A copy of the existing ASR has been included in **Exhibit 15.1**. A vertical antenna plan depicting the placement of the antenna on the tower has been included in **Exhibit 15.2**.

Discussion of Report (continued)

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

RADIATION PROTECTION: The Commission requires an engineering study regarding compliance with the guidelines for human protection from radiofrequency radiation. This report section is in response to that provision of the Rules. The current Federal Communications Commission guidelines for RF radiation protection are set forth in OET Bulletin No. 65 (Edition 97-01), and the accompanying Supplement A, (Edition 97-01).

This restricted access FM Broadcast facility proposed in this application is within the controlled and uncontrolled limits as noted in the supplied **Exhibit 24.1** study. The RF radiation will not result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in §1.1310 of the Commission's rules. The restricted access facility will be properly marked with signs, and entry 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 11.0 kW at an HAAT of 81 meters. These distances have been calculated based on the FCC F(50-50) curves.

N. Lat. = 412539.0 W. Lng. = 833630.0 HAAT and Distance to Contour, FCC, FM 2-10 Mi, 51 pts Method - NED 03 SEC						
Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	196.2	85.8	4.4635	6.50	0.637	24.63
045	196.7	85.3	11.0000	10.41	1.000	30.10
090	200.0	82.0	2.2374	3.50	0.451	20.51
135	203.1	78.9	0.4078	-3.90	0.193	12.91
180	205.4	76.6	1.7776	2.50	0.402	18.69
225	206.8	75.2	0.4013	-3.97	0.191	12.58
270	202.6	79.4	2.2374	3.50	0.451	20.18
315	198.2	83.8	9.9275	9.97	0.950	29.15
Ave El= 201.13 M HAAT= 80.87 M AMSL= 282						