

ENGINEERING REPORT

Requesting a Minor Amendment
to Pending Application

BNPED-20071022BAG
NEW CH210A – Hawkeye, IA
Correction of Site Location
and Decrease in Power

April, 2009

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(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 amendment to pending Non-Commercial application BNPED-20071022BAG for NEW CH210A, Hawkeye, IA. Amended operation on Channel 210A, 89.9 MHz with 0.850 kW of circular polarization at 68 meters HAAT is requested. This amendment also requests a corrected transmitter location. The facility will continue to serve Hawkeye, IA.

The proposed operation will not result in prohibited contour overlap with any other authorized or protected facility. A tabulation of the proposed allocation is found in **Exhibit 16.1**. The applicant would like to note the supplied allocation study still lists tentatively dismissed NEW CH210A - Postville, IA application BNPED-20071022ANV which no longer requires protection. Pursuant to Group No. 79, *Threshold Fair Distribution Analysis of 26 Groups of Mutually Exclusive Applications for Permits to Construct New or Modified Noncommercial Educational FM Stations*, Memorandum Opinion and Order, DA 08-1467, 23 FCC Rcd 9934, released June 23, 2008, this Hawkeye proposal was deemed the tentative selectee. This proposal will maintain that preference. There is one other station, existing or proposed, close enough to the transmitter site to require further study. An FMCommander™ map and tabulation of the relevant protected and interference contours toward KWAR(FM) CH210A, Waverly, IA has been included in **Exhibit 16.2**. It is believed there is sufficient clearance to preclude the need for further study with respect to the other protected stations shown in the NCE portion of the allocation, however additional showings will be supplied 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 amended service contour has been shown in **Exhibit 13.4**. This exhibit shows the overall service that is provided by the 1.0 mV/m contour of the proposed facility. 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 proposed facility is within the affected radius of two Channel 6 TV Stations, KAAL(TV), Austin, MN and KWQC-TV, Davenport, IA. Full protection will be afforded both facilities as noted in **Exhibit 19.1**.

The antenna will be mounted on a new tower to be constructed. FAA Form 7460-1 has been filed and Antenna Structure Registration will be filled upon receipt of FAA "Determination of No Hazard". A vertical antenna plan depicting the placement of the antenna on the tower has been included in **Exhibit 13.2**. A copy of USGS topographical mapping showing the site has been included in **Exhibit 13.1**.

DISCUSSION OF REPORT (continued)

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.

The FM Broadcast facility proposed in this application will not produce human exposure to radiofrequency radiation in excess of the applicable safety standards specified in §1.1310 of the Commission's rules. **Exhibit 22.1** provides the details of the study that was made to demonstrate compliance. The 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 the operating parameters as proposed. These distances have been calculated based on the FCC F(50-50) curves.

N. Lat. = 425243.0 W. Lng. = 914936.0						
HAAT and Distance to Contour						
FCC, FM 2-10 Mi, 51 pts Method - NGDC 30 SEC						
Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	353.9	55.1	0.8500	-0.71	1.000	13.10
045	333.0	76.0	0.8500	-0.71	1.000	15.21
090	327.2	81.8	0.8500	-0.71	1.000	15.84
135	341.3	67.8	0.8500	-0.71	1.000	14.37
180	341.8	67.2	0.8500	-0.71	1.000	14.32
225	339.2	69.9	0.8500	-0.71	1.000	14.58
270	348.1	60.9	0.8500	-0.71	1.000	13.71
315	344.5	64.5	0.8500	-0.71	1.000	14.05
Ave El= 341.13 M HAAT= 67.91 M AMSL= 409						