

ENGINEERING REPORT

MINOR CHANGE APPLICATION Modification of Nighttime Facilities

**WNWI(AM) – Oak Lawn, IL
1080 kHz**

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TABLE OF CONTENTS

Table of Contents
Discussion of Report

Exhibit 10 - Broadcast Facility

Exhibit 10.1 - Description of Proposed Antenna System
Exhibit 10.2 - Vertical Plan of Proposed Antenna System
Exhibit 10.3 - Topographical Map Showing Proposed Site
Exhibit 10.4 - Horizontal Plan of Proposed Antenna System
Exhibit 10.5 - Photographs of Proposed Site
Exhibit 10.6(a-c) - Present & Proposed Nighttime Interference Free Contours

Exhibit 11 – Community Coverage (see discussion)

Exhibit 12 – Main Studio Location (see discussion)

Exhibit 13 – Main Interference Section (see discussion)

Exhibit 14 – Groundwave Protections (see discussion)

Exhibit 15 – Skywave Protections

Exhibit 15.1 - Tabulation of Stations Studied

2.6 kW Operation (Protecting WTIC-DA)

Exhibit 15.2 - Determination of Class B Nighttime Limits

Exhibit 15.3 - Tabulation of Proposed Directional Pattern

Exhibit 15.4 - Plot of Horizontal Plane Directional Pattern

Exhibit 15.5 - Tabulation of Proposed Nighttime Limitations and Vertical Sections of Radiations

Exhibit 15.6 - Nighttime Points Study Towards WTIC-NDA - Hartford, CT 1080 kHz (Class A)

Exhibit 15.7 - Nighttime Points Study Towards KRLD - Dallas, TX 1080 kHz (Class A)

Exhibit 15.8 - Nighttime Points Study Towards KAAJ - Little Rock, 1090 kHz AR (Class A)

0.650 kW Operation (Protecting WTIC-NDA)

Exhibit 15.9 - Determination of Class B Nighttime Limits

Exhibit 15.10 - Tabulation of Proposed Directional Pattern

Exhibit 15.11 - Plot of Horizontal Plane Directional Pattern

Exhibit 15.12 - Tabulation of Proposed Nighttime Limitations and Vertical Sections of Radiations

Exhibit 15.13 - Nighttime Points Study Towards WTIC-DA - Hartford, CT 1080 kHz (Class A)

Exhibit 15.14 - Nighttime Points Study Towards KRLD - Dallas, TX 1080 kHz (Class A)

Exhibit 15.15 - Nighttime Points Study Towards KAAJ - Little Rock, 1090 kHz AR (Class A)

Exhibit 16 – Critical Hours Study (none required)

Exhibit 17 – RF Radiation Study

Exhibit 19 – Supplemental Nighttime Operating Parameter Information

DISCUSSION

This firm was retained to prepare this engineering report in support of a minor change application for the facilities of AM broadcast station WNWI, 1080 kHz, Oak Lawn, IL. Currently WNWI holds a license for 3.0 kW of daytime non-directional power and 0.9 kW of nighttime directional power. This application seeks a two step nighttime operation. The existing tower array will be used with a new set of operating parameters. It is proposed to operate with 0.650 kW of nighttime power into a new set of parameters until Class A station WTIC - Hartford, CT switches to its nighttime directional operation at sunset of Class A station KRLD – Dallas, TX. WTIC operates with its non-directional, daytime facilities until sunset at Dallas. Therefore, dual protection to WTIC is required. Upon the WTIC switch to nighttime operation, WNWI nighttime power will be increased to 2.6 kW. Both the 0.650 kW and 2.6 kW power levels will utilize the same set of operating parameters. The data and exhibit numbering contained herein is responsive to Section III-A of FCC Form 301.

This application complies with all of the requirements of the Commission's Rules and Regulations, except that it does not protect the nighttime portion of two pending applications. One pending application is File No. BMJP-20000127ADR, for a major change in the facilities of AM Broadcast Station WOAP. This station is presently licensed to Owosso, MI and is proposing to move to Waverly, MI, change daytime facilities and add nighttime operation. To the extent that such protection is required by the provisions of 47 C.F.R. Section 73.3571(h)(1)(ii) a waiver of that rule is respectfully requested. The night facilities proposed in the WOAP application fail to protect the nighttime operations of Class A stations WTIC, Hartford, CT and KRLD, Dallas, TX. Therefore, to the extent that the application contemplates nighttime operation, it is innately flawed and cannot be granted. That being so, it should not present an impediment to a grant of this instant application. The second pending application is File No. BNP-20000201AFR for a new AM Broadcast Station at Iron Mountain, MI. Again, to the extent that such protection is required by the provisions of 47 C.F.R. Section 73.3571(h)(1)(ii) a waiver of that rule is respectfully requested. This applicant was mutually exclusive with the first application at Waverly and the two parties have entered into an agreement to dismiss the Iron Mountain application. Legal counsel will be filing a petition, formally requesting each waiver and supplying additional public interest reasons why the waivers should be granted.

Broadcast Facility. The broadcast facility remains in compliance with all applicable rules contained in *C.F.R. Chapter 47, Part 73, Subpart A*. The WNWI antenna system will consist of four towers. Details of the antenna array system are located in **Exhibit(s) 10.1-5**. The FCC TOWAIR program has been consulted and Antenna Structure Registration is not required. No changes in daytime operation are proposed. Present and proposed 1.0 V/m "Blanket" Contours for nighttime operation have been included in **Exhibit 10.4**. The present and proposed nighttime Interference Free Contours have been included as **Exhibit(s) 10.6(a-b)**.

Community Coverage. Community coverage remains in compliance with the requirements of §73.24(i). Daytime operation will remain unchanged. Oak Lawn, IL will continue to receive Nighttime Interference Free Service as seen in **Exhibit 10.6(b)**.

Main Studio Location. The main studio location remains in compliance with the requirements of §73.1125. Studios for WNWI will remain unchanged from the present facilities, which are located at the transmitter site.

Groundwave Interference. The proposed allocation remains in compliance with the requirements of §73.37. The daytime operation will remain unchanged.

Skywave Interference. The proposed allocation remains in compliance with the requirements of §73.182. The proposed power of 0.650 kW will remain in effect until Class A Station WTIC switches to nighttime operation. Upon this switch, the 2.6 kW parameters proposed in this instant application will take effect for the balance of each night. **Exhibit 15.1** is a listing of all co-, 1st and 2nd adjacent channel stations employed in the nighttime channel study. A complete nighttime study has been conducted on all co- and 1st adjacent channel stations. In response to FCC attempts to streamline the application process, 1st adjacent channel and foreign nighttime protections in which the proposed operation will have a negligible effect have been omitted to reduce paperwork. A complete list of all protections will be supplied upon request. Based on the proposed radiation pattern, three (3) of these stations are believed to require a more detailed study. Individual studies for co-channel Class A stations WTIC - Hartford, CT and KRLD - Dallas, TX have been prepared as **Exhibit(s) 15.6** and **15.7**. An individual study for 1st adjacent Class A station KAAY - Little Rock, AR has been included as **Exhibit 15.8**. Analysis of the complete studies has concluded the proposed operation will not interfere with any protected operation. Tabulation of proposed limitations and vertical sections of radiation have been supplied as **Exhibit 15.5**. Similar Exhibits supporting the 0.650 kW portion of nighttime operation protecting the WTIC non-directional operation have been included in **Exhibit(s) 15.9** to **15.15**.

Critical Hours Interference. The proposed allocation is not subject to compliance with the requirements of §73.187. No critical hours are required for this allocation.

Environmental Protection Act. The proposed allocation is in compliance with OET Bulletin No. 65. Full protection is afforded by the proposal. An RF Radiation study has been included in **Exhibit 17**.