

ENGINEERING REPORT

MINOR CHANGE CONSTRUCTION PERMIT APPLICATION **AMENDMENT**

“Nighttime Directional Site Relocation Application”

WIST(AM) – 690 kHz - New Orleans, LA

October, 2007

COPYRIGHT 2007

MUNN-REESE, INC.
Broadcast Engineering Consultants
Coldwater, MI 49036

Table of Contents

Table of Contents
Discussion of Report

Exhibit 11 - Broadcast Facility

Exhibit 11.1 – Description of Existing Daytime & Proposed Nighttime Sites
Exhibit 11.2 – Vertical Plan of Existing Daytime & Proposed Nighttime Sites
Exhibit 11.3 – Horizontal Plan of Existing Daytime & Proposed Nighttime Sites
Exhibit 11.4 – Topographic Map of Existing Daytime & Proposed Nighttime Sites
Exhibit 11.5 – Photograph of Existing Daytime & Proposed Nighttime Sites
Exhibit 11.6 – Present & Proposed Daytime Service Contours
Exhibit 11.7 – Present & Proposed Nighttime Interference Free Service Contours
Exhibit 11.8 – Proposed Daytime & Nighttime 1.0 V/m Blanket Contours

Exhibit 12 – Community Coverage (See Discussion)

Exhibit 13 – Main Studio Location (See Discussion)

Exhibit 14 – Main Interference Section (See Discussion)

Exhibit 15 – Groundwave Protections

Exhibit 15.1 – Map of Present Map M3 Allocation Study
Exhibit 15.2 – Tabulation of Present Map M3 Allocation Study
Exhibit 15.3 – Map of Proposed Map M3 Allocation Study
Exhibit 15.4 – Tabulation of Proposed Map M3 Allocation Study

Exhibit 16 – Skywave Protections

Exhibit 16.1 – Tabulation of Nighttime Allocation
Exhibit 16.2 – Present & Proposed Nighttime RSS Limitations
Exhibit 16.3 – Horizontal Polar Plot of Proposed Nighttime Standard Pattern
Exhibit 16.4 – Tabulation of Proposed Nighttime Standard Pattern, 0° - 60° Vertical Degrees

Exhibit 17 – Critical Hours Study (See Discussion)

Exhibit 18 – RF Radiation Study

Exhibit 18.1 – RF Radiation Study

Discussion

This firm was retained to prepare this engineering report in support of a minor change construction permit application for the licensed facilities of AM broadcast station WIST(AM), 690 kHz, New Orleans, LA. Currently WIST(AM) holds a Class B license for 10 kW of daytime directional and 5.0 kW of nighttime directional power. WIST(AM) wishes to relocate the nighttime operation to an alternate site location and modify the daytime facility to 8.0 kW, non-directional operation. 2.0 kW utilizing a three tower array are requested from a site north of New Orleans for nighttime operation. The data and exhibit numbering contained herein is responsive to Section III-A of FCC Form 301.

Broadcast Facility. The broadcast facility remains in compliance with all applicable rules contained in *C.F.R. Chapter 47, Part 73, Subpart A*. The proposed WIST(AM) daytime antenna array will be reduced from a 4 tower inline array to a single tower non-directional operation. Nighttime operation will be relocated to a new site location. The new nighttime antenna system will consist of a three tower directional array. Details of the proposed antenna system are located in **Exhibit(s) 11.1-5**. Antenna Structure Registration has been obtained for all new nighttime towers and included on the Form 301-AM. Maps depicting the present and proposed day and night service contours have been included in **Exhibit 11.6** to **11.7**. The proposed 1.0 V/m "Blanket" Contours have been included as **Exhibit 11.7**.

Community Coverage. Community coverage remains in compliance with the requirements of §73.24(i). Daytime coverage of New Orleans, LA will remain at 100% as noted in **Exhibit 11.6**. Presently, less than 80% of New Orleans receives primary nighttime service, however the percentage coverage of New Orleans, LA will be increased from 56.79% to 79.31% as a result of this proposal. **Exhibit 11.7** contains the nighttime community coverage study.

Main Studio Location. The main studio location remains in compliance with the requirements of §73.1125. Studios for WIST(AM) will remain unchanged from the present facilities.

Groundwave Interference. The proposed allocation remains in compliance with the requirements of §73.37. **Exhibit(s) 15.1-4** are relevant domestic Map M3 allocation studies for the present and proposed operations. **Exhibit(s) 15.5-8** are the Region 2 allocation studies for the present and proposed operations. A waiver of the Rules concerning *de minimis* coastal contour overlap with KSEV.L, WGES.L, WOKV.L and CMEC, Cuba concerning both given and/or received contour overlap is requested. Waivers of this nature are routinely granted by the FCC. Contour overlaps with the remaining domestic or international concerns have either been reduced or fall completely over the Gulf of Mexico, therefore may be disregarded.

Skywave Interference. The proposed allocation will comply with the requirements of §73.182. **Exhibit 16.1** is a nighttime allocation study for the proposed WIST(AM) operation. In response to FCC attempts to streamline the application process, 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. Analysis of the complete study has concluded the proposed operation will not interfere with any protected operation, however individual studies will be supplied for any station upon request. A tabulation of the proposed limitations has been supplied. The proposed nighttime operation meets the minimum 250 watt and 141 mV/m RMS protection threshold, therefore, the proposal is protected from other full-time stations. The nighttime directional standard pattern polar plot and tabulation have been included in **Exhibit(s) 16.3** to **16.4**.

Critical Hours Interference. The proposed allocation is in compliance with the requirements of §73.187. No changes during Critical hours are proposed in this application. This application proposed new nighttime operating parameters only.

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 18.1**.