

ENGINEERING REPORT COVERING
REQUEST FOR CONSTRUCTION PERMIT
ON BEHALF OF MULTICULTURAL RADIO BROADCASTING LICENSEE, LLC
FOR WNYG(AM) 1440 KILOHERTZ
MEDFORD, NEW YORK

MAY 2007

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SUMMARY

The engineering exhibit of which this statement is part was prepared on behalf of Multicultural Radio Broadcasting licensee, LLC, hereinafter referred to as "Multicultural", in support of an application for construction permit to relocate the transmitter site of WNYG(AM) Babylon, New York and change city of license to Medford, New York. Multicultural is the licensee of WNYG. Multicultural proposes power of 1000 watts daytime and 189 watts nighttime on the presently authorized frequency of 1440 kilohertz. A non-directional antenna will be employed for the daytime mode and a directional antenna will be used for the nighttime mode. No other changes are proposed. A technical narrative with associated engineering exhibits in support of the city of license change is submitted as an appendix to this report.

The proposed location is the presently licensed site of WLIM(AM) Patchogue, New York. Diplexing equipment will be installed to enable WNYG and WLIM to diplex at the WLIM site.

DAYTIME ALLOCATION CONSIDERATIONS

The geographic area encompassed by the WNYG daytime allocation study is vast and as a consequence, a conventional allocation map would be hard to read. Accordingly, several maps that provide greater allocation detail in critical areas are provided in lieu of a conventional map.

Primarily due to long salt water conductivity paths, the existing licensed operation of WNYG causes and receives prohibited contour overlap with five stations. The stations are co-channel stations WMVB Millville, New Jersey and WNPV Lansdale, Pennsylvania, first adjacent channel stations WNSW Newark, New Jersey, WCTC New Brunswick, New Jersey and WCUM Bridgeport, Connecticut. The WNYG proposal reduces or eliminates the amount of prohibited contour overlap with all five stations as shown in Figures 1–5. Specifically, overlap caused to WNSW (licensed and proposed) will be eliminated, the overlap caused to WCTC and WCUM is eliminated over land area and received overlap from WMVB is eliminated. There are no other co or adjacent channel stations that impact the proposed WNYG operation. The proposed WNYG daytime operation does not create new prohibited contour overlap with any other authorized station.

NIGHTTIME ALLOCATION CONSIDERATIONS

The protected RSS limits of any North American station will not be increased by this proposal. The presently licensed 38 watt night operation of WNYG is a class D facility and a 25% contributor to the night limit of WVEI Worcester, Massachusetts. Section 73.182(q) of the rules,

footnote 1, requires that the WNYG night proposal not increase radiation toward WVEI. The proposed night operation of 189 watts will continue WNYG's Class D status and not increase the RSS limit to WVEI. The existing WNYG RSS limit to WVEI is 2.37 mv/m and the proposed RSS limit is 2.33 mv/m.

TECHNICAL DATA AND EXHIBITS

A plot of the proposed WNYG nighttime directional antenna pattern is provided in Figure 6 along with a tabulation of horizontal plane radiation. Nighttime vertical plane radiation is tabulated in Table 1.

A map of the city of license service contour for the proposed WNYG daytime operation is shown in Figure 7. The proposed WNYG day operation will provide 5 mv/m city grade service to 95.1% of the area and 98.4% of the population of the proposed city of license, Medford, New York. It is not possible to cover 100% of Medford due to allocation constraints and extremely low soil conductivity, among the worst in the United States. M-3 soil conductivity values in Medford are 0.5 mhos and measured radials through Medford are 0.1 mhos. Figures 9-15 provide graphical analysis of the measured soil conductivities from the proposed site documenting the extremely low soil conductivity. Therefore, if necessary, a waiver of Section 73.24(i) of the rules is requested.

Figure 8 is a map that plots the proposed WNYG daytime 1000 mv/m contour.

All distance to contour calculations used in plotting the various allocation maps were based on M-3 soil conductivity data except measured data was used based on analysis of field measurements conducted from the proposed WNYG site (WLIM) as well as for WCUM and the proposed WNSW site (WPAT) to more accurately define the conductivities involving the salt water paths between the stations. In addition, the field strength measurements taken on WPAT submitted in support of application BP20070117AFN to relocate the WNSW transmitter site to the WPAT site were utilized as well and are incorporated in this application by reference. Tables 2-12 are tabulations of the field measurement data and Figures 9-19 provide a graphical analysis of the data. The reference graphs employed for the measurement analysis are included as Figures 20-22.

The field strength measurements were taken by William L. Smith, who is employed by this firm, under the direction of the undersigned. The meter used for the measurements was a Potomac Instruments FIM-41, serial number 1051, last calibrated January 9, 2007.

ANSI RADIATION GUIDELINES

A study of the proposed facility was conducted with respect to standards set forth in FCC Bulletin OST Number 65, Edition 97-01, regarding human exposure to radiofrequency radiation. In order to represent a worst case scenario, the study was based on the maximum duplex power proposed, 1000 watts for the WNYG daytime antenna system, plus 10000 watts for the WLIM daytime antenna system, each radiating from a single tower. The study calculations were based on data provided in Tables 2 and 3 of Supplement A, "Predicted Distances for Compliance with FCC Limits". Based on Tables 2 and 3, a distance of 2.08 meters from the tower would have to be observed to achieve ANSI radiofrequency compliance.

When it is necessary for workers to be within the hazard area near the towers, an appropriate power reduction or temporary cessation of broadcasting will be implemented. Access to the towers will be prevented by a fence with a locked gate. Signs, warning of a RF hazard, will be conspicuously posted at the site.

DECLARATION

The foregoing was prepared by or under the immediate supervision of Charles A. Hecht of Charles A. Hecht & Associates, Inc., Pittstown, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. All statements herein are true and correct of his knowledge except such statements made on information and belief, and as to those statements, he believes them to be true and correct under the penalty of perjury.

Respectfully submitted,

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