

**ENGINEERING REPORT
MINOR CHANGE APPLICATION**

For FM Station

**WSNI(FM) – CH249A – 97.7 MHz
File No. BLH-20071116AEV**

Minor Change in Community from
Swanzey, NH to Keene, NH
Increase in Power,
and Corrections of COR AMSL,
Coordinates and Ground Elevation

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(Exhibit Numbering is in response to FCC Online Form 301, Section III-B)

DISCUSSION OF REPORT

This firm was retained to prepare the required engineering report in support of a minor change for FM Station WSNI(FM), Swanzey, NH, License BLH-20071116AEV. WSNI(FM) is currently licensed to operate with 1.75 kW ERP (H)&(V) at 187 m HAAT as a Class A facility on CH249A, 97.7 MHz. A change in communities of license from Swanzey, NH to Keene, NH is requested. Corrections of COR AMSL height, coordinates and Antenna Structure Registration are also requested. These corrections allow for modified operating parameters of 2.15 kW (H)&(V) at 169 meters HAAT while serving the community of Keene, NH.

The proposed site for the Class A operation meets all domestic spacing requirements of 47 C.F.R. §73.207 toward other stations in the allocation. A tabulation of the existing and required spacing toward each of the other relevant stations is found in **Exhibit 26.1**. A special reference point is required for this city of license change application. In this instance, the special reference point is also the proposed ASR No. 1034136 operating site as noted on the Form 301-FM and **Exhibit 26.1**. From this location 100% of Keene falls within the Class A city reference arc of 16.2 km as noted in **Exhibit 23.4**.

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 contours are found as **Exhibit 23.4** of this report. This exhibit shows the 70 dBu f(50:50) contour which serves 100% of the community of license, and the overall service provided by the 60 dBu f(50:50) 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 23.4**, are based on the use of a full 360 terrain radials. The GLOBE terrain database as taken off of the FCC's website was employed for calculation of the HAAT value. A copy of the HAAT calculation has been included in **Exhibit 23.5**.

The existing antenna will remain mounted on Antenna Structure Registration Tower 1034136. ASR No. 1034136 is concurrently being modified to correct for noted errors in coordinates and ground elevation, however no physical construction will take place. A copy of the vertical antenna plan has been included as **Exhibit 23.2**.

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 Online Form 301, Section III-B.

DISCUSSION OF REPORT (continued)

The FM Broadcast facility proposed in this application 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. **Exhibit 31.1** 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.

This instant application proposes a change in communities of license, therefore Section 307(b) showings have been provided. As this application proposes an increase in power, there will be changes to the licensed 60 dBu and 70 dBu service contours. A service contour map was previously supplied in **Exhibit 23.4**.

The former and proposed communities of license are considered fully served with no less than five (5) services as noted in **Exhibit 32.2**. A complete listing of all services will be supplied upon request.

The Keene community boundaries shown here-in have been taken from US Census 2000 datum as shown in **Exhibit 23.4**. Keene, NH appears in the U.S. Census 2000 count as a city with a population of 22,563. Information concerning the viability of Keene, as a licensable community has been addressed in **Exhibit 32.1**. Keene, NH is not located within any Urbanized Area, nor does the proposed 70 dBu contour encompass any portion of an Urbanized Area, therefore no Tuck Showings are required.