

**WHHL(FM) ENGINEERING NARRATIVE IN SUPPORT OF APPLICATION FOR LICENSE  
MODIFICATION TO CLASS C2 FM LICENSE BLH-20080110ABC  
104.1 MHz 50 kW DA 139 M HAAT FACILITY ID 74578 HAZELWOOD, MISSOURI  
CONSTRUCTION PERMIT FILE NUMBER 0000210680  
NOVEMBER 2023**

Audacy License, LLC (“Audacy”) licensee of commercial FM broadcast station WHHL(FM), herein submits its application for license. Construction has been completed and the facility is believed to be operating in compliance with the terms of the construction permit. Special operating conditions which require submission prior to program tests are addressed below:

1. Attached is a complete proof-of-performance performed by the antenna manufacturer, Electronics Research (“ERI”), dated November 14, 2023.
2. The ERI Proof specifies an antenna orientation of 6 degrees with respect to True North. Attached is the certification of William Berthold, Registered Land Surveyor, dated November 1, 2023, which certifies the azimuth of 6 degrees east of Geodetic North.
3. Attached is the affidavit Jay Pierce, Director of Technical Operations for Audacy St. Louis, dated November 15, 2023, certifying that 1) the antenna was installed in accordance with the ERI installation drawing and 2) providing qualification as an engineer familiar with ERI antenna installation.
4. Map Figure 1, attached, depicts the community boundary of Hazelwood, Missouri and the 70 dBu F(50,50) contour, based on the measured ERI test range composite pattern, which covers 100% of the community boundary.
5. The ERI proof demonstrates that neither the horizontally or vertically polarized measured components exceeds the FCC envelope pattern. The measured patterns do not exceed the principal minima ERP of 16.5 kW at 190 degrees.
6. There is one other FM station licensed to use the site, KXBS, CH 238C3, Bethalto, Illinois which is licensed under FCC file BLH-20121203AQQ. That facility is no longer in place. FCC file number 0000215760 specifies a replacement facility, but that application has not been granted. KXBS was granted a license for a new auxiliary facility earlier this year under FCC file number 0000325867 and is believed to be operating at that site. Since KXBS is not operational at the WHHL tower site it is not possible to conduct intermod measurements at this time. At such time as a KXBS CP, for the WHLL site specified herein, is granted Audacy will cooperate fully with the KXBS licensee as they undertake the required measurements.

Utilizing the FCC FM Model online calculator with an ERI SHPX series antenna, EPA type 3, six bay, 0.5 lambda spaced antenna, with 50,000 watts ERP H & V on CH 281, RC 142 M AGL, the maximum calculated power density is 1.017 microwatts per centimeter squared which is 0.5% percent of the 200 microwatts public exposure guideline. Based on this analysis, it is believed that the proposed facility follows OET-65 Public Exposure Guidelines. The applicant will reduce power or cease transmission as required to meet FCC OET-65 worker Guidelines.

The foregoing was prepared on behalf of Audacy License, LLC by Clarence M. Beverage of Communications Technologies, Medford, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements he believes them to be true and correct.



By \_\_\_\_\_

**Clarence M. Beverage**  
*for* Communications Technologies  
Medford, New Jersey  
November 30, 2023