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**A & D Broadcasting, Inc.  
FM Translator W273DN  
Louisburg, NC**

## **ENGINEERING NARRATIVE STATEMENT**

### **PURPOSE OF APPLICATION:**

**WYRN needs to change authorized frequency from Channel 273D (102.5 MHz) to Channel 295D (106.9 MHz) due to heavy received interference well within its 60 dBu service contour during tests, from a full service station. This narrative supplements the electronic LMS form data.**

### **RULE WAIVER REQUIRED:**

**A waiver of the "3 up, 3 down" channel change criteria is requested for minor change processing under the minor change regulations. "In accordance with Section 1.3 of the Commission's rules, (a) waiver is appropriate when special circumstances warrant a deviation from the general rule and such deviation will serve the public interest" (Northwest Cellular Telephone Co. v. FCC, 897 F 2d 1164, 1166 (D.C. Cir., 1990). The applicant submits such special circumstances occur with its facility.**

### **PROPOSED SITE:**

**No change is proposed for W273DN's tower location or antenna height. The translator antenna is mounted on the WYRN-AM tower with the center of radiation 150 ft (45.7 m) AGL or 400 ft (121.9 m) AMSL. The tower is fenced with locked gate for WYRN-AM, and the presence of the translator antenna is no additional NIEMR issue. The AM station and FM translator will be shut down for maintenance on the tower or its appurtenances.**

### **FREQUENCY ALLOCATION:**

Exhibit 1 contains a table of the affected stations within plus or minus 3 channels of the proposed 106.9 (Ch. 295D) channel, with ERP and HAAT data to and from each listed facility. NGDC 30 second terrain data used for all HAAT calculations. At the proposed W273DN ERP of 140 watts (H/V), no unauthorized interference exists to any known licensed or proposed facility listed. Full service adjacent channel FM station WFXC (Ch. 296C3) at Durham NC limits the proposed translator power to 140 watts ERP. Non-directional operation is proposed.

### **SUPPLEMENTARY ATTACHMENTS:**

Exhibit 1: Table, Frequency allocation at proposed site

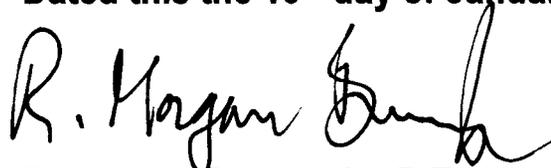
Exhibit 2: Map, Received Interference Locations

### **CONCLUSION:**

It is believed no further information is necessary to conform this application and waiver request. The Exhibit 2 interference locations plotted on a USGS map was prepared by Gary Saber of Raleigh NC, technical consultant to WYRN. This map clearly shows the town of Louisburg NC and the noted interference areas. W273DN will supply additional information if necessary on request by Commission staff.

R. Morgan Burrow Jr., P.E. declares and states under penalty of perjury that he examined all of the attached material and performed the frequency allocation calculations. He believes the above information is accurate and true to the best of his knowledge.

Dated this the 10<sup>th</sup> day of January, 2020



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VA registration 17424