

APPENDIX TO ENGINEERING REPORT COVERING
REQUEST FOR CONSTRUCTION PERMIT
TECHNICAL NARRATIVE IN SUPPORT OF CITY OF LICENSE CHANGE
ON BEHALF OF CATHOLIC RADIO NETWORK, INC.
FOR KQOH(FM) 91.9 MEGAHERTZ
FAIR GROVE, MISSOURI

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STATEMENT

This technical narrative and accompanying engineering exhibits have been prepared on behalf of Catholic Radio Network, Inc. (“CRN”), licensee of non-commercial educational (“NCE”) station KQOH(FM) Marshfield, Missouri, in support of an application for construction permit. The minor modification application includes a request to change city of license from Marshfield, Missouri to Fair Grove, Missouri.

As can be seen in Figure 1A, the facilities specified in the instant modification are mutually exclusive with the KQOH licensed facilities¹. Therefore, this application qualifies for a city of license change and the modification is appropriately requested as a minor modification application. See 47 C.F.R. Section 73.3571(j).

¹ The distance between transmitter sites is 21.95 kilometers.

TABLE OF EXHIBITS ACCOMPANYING THIS NARRATIVE

FIGURE 1A	Map Demonstrating Mutual Exclusivity of License and Proposed Facilities
FIGURE 2A	KQOH 60 dbu Service Comparison
FIGURE 3A	Map of Protected AM Service to Existing Community of License
FIGURE 4A	Map of Protected FM Service to Existing Community of License
FIGURE 5A	Map of City Grade Service to Proposed Community of License
TABLE 1A	Table of AM Stations Providing Service to Existing Community of License
TABLE 2A	Table of FM Stations Providing Service to Existing Community of License

AREA AND POPULATION DATA

The 60 dbu contour population associated with this proposal provides service to 263,084 persons within a land area of 1,757 square kilometers, while the licensed 60 dbu contour provides service to 28,310 persons within a land area of 1,014 square kilometers. The proposed population gain is 234,774 and the land area gain is 743 square kilometers. The proposed population loss is 16,655 and the land area loss is 621 square kilometers. Overall, there is a huge population and area gain within the proposed KQOH 60 dbu contour.²

EXISTING SERVICE

There are 17 stations, 4 AM and 13 FM, excluding KQOH, that provide service to Marshfield³. It is obvious by looking at Figures 3A and 4A that the 60 dbu contour loss area will continue to be well served by numerous other aural services. The proposal to relocate to Fair Grove⁴ will provide Fair Grove with its first local service and not result in the creation of any “white” or “grey” service area. (The service count is based on stations which provide service to at least 80 percent of the area of Marshfield. As per FCC definitions, service for AM facilities is the daytime 2 mv/m contour, and for FM facilities, the 60 dbu contour except for Class B and B1 facilities, which are respectively the 54 and 57 dbu contours.)

² See Figure 2A.

³ See Figures 3A and 4A, Tables 1A and 2A.

⁴ Stations KMRF(AM) and KKLH(FM) are licensed to Marshfield.

COMPLIANCE WITH FCC RULES

Operation from the proposed transmitter site would provide the requisite city grade 60 dbu service to 50% of Fair Grove as per Section 73.515 of the rules. Figure 5A is a map of the city grade service area. The proposed operation would provide 60 dbu service to 100% of Fair Grove.

METHODOLOGY

The AM predicted coverage contours were calculated in accordance with the provisions of 47 C.F.R. Section 73.182. The FM predicted coverage contours were calculated in accordance with the provisions of 47 C.F.R. Section 73.313.

The population within the service contours was calculated using a computer program that utilizes the 2010 U.S. Census database of “population centroids.” The program adds the populations of those U.S. Census designated areas whose centroid lies within each service area. Land areas were calculated using a root mean square algorithm.

CONCLUSION

Granting the request to reassign KQOH to the community of Fair Grove would provide an overall preferential arrangement of allotments that would serve the public interest. Fair Grove will receive its first local service and the community of Marshfield will continue to have copious service from the 17 stations that provide protected service to Marshfield⁵. All of the loss areas would continue to be well-served by five or more aural reception services⁶. Therefore, CRN requests a construction permit for KQOH to specify Fair Grove, Missouri as the community of license, in lieu of Marshfield, Missouri, and to authorize the other technical changes requested in this application.

⁵ See Figures 3A and 4A, Tables 1A and 2A.

⁶ Based on Figures 3A and 4A, it can be safely concluded that in excess of ten stations provide service to the loss areas.