



## ***Engineering Statement***

Minor Change to a Licensed Radio Station

KNOF (FM) - St. Paul, MN

This consultant has been retained by Selby Gospel Broadcasting Corp.(Selby) for the purpose of preparing the necessary technical portion of Form 301 in application for a 3 kW to 6 kW power increase for KNOF (FM). The application also seeks authorization to construct a new broadcast tower directly adjacent to the existing KNOF tower and to increase the tower height to 84.7 meters. The FAA has given preliminary approval for the height increase and upon the receipt of the determination of No Hazard Form 854 R will be filed.

### **Short Spacing**

Exhibit 1 of this report is a full search of the Commission's September 12, 2002 CDBS database which shows that KNOF (FM) is short spaced to two other radio stations, KRDS-FM in New Prague, MN and WGMO in Shell Lake, WI. KNOF was authorized under the previous, 3 kW, Class A rules and became short spaced with the first adjacent channel radio station KNOF upon the revision to 47 CFR 73.207 with the adoption of the second R&O in MM Docket 88-375. Selby has entered into an agreement with the licensee of KRDS-FM, Radio Southern Minnesota, LLC, wherein they agree to accept each others interference and each station will upgrade from 3 kW to 6 kW ERP<sup>1</sup> in accordance with the provisions of 47 CFR 73.213 (c) 2.

The short spacing with WGMO arose as a result of WGMO's own modification. WGMO recognized the short spacing and sought authorization under 47 CFR 73.215. As such, in accordance with 47 CFR 73.215, the actual WGMO technical parameters were used for the purposes of demonstrating the lack of prohibited contour overlap rather than the 25 kW at 100m HAAT model C3 facilities.

3718 W 52<sup>nd</sup> Terrace  
Shawnee Mission, KS 66205  
(913) 362-7282

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<sup>1</sup> Radio Southern Minnesosta, LLC is filing a Form 301 in application for its upgrade to KRDS-FM simultaneously with this application.

Exhibit 2 of this report is a digitally generated map which shows that lack of prohibited overlap between KNOF and WGMO. The WGMO 40 dBu interfering Contour does come quite close to the proposed KNOF 60 dBu protected contour and, as such additional exhibits were prepared. Exhibit 3 is a 1:500,000 scale digitally generated detail map which graphically shows the lack of prohibited overlap and Exhibit 4 is a FMOver study which predicted the interfering signal level at the proposed KNOF 60 dBu contour. As shown in Exhibit 4, at no point does the interfering WGMO interfering contour exceed 39.8 dBu.

Exhibit 5 of this report is the tabulated distance to the proposed KNOF operation's protected and interfering contours.

### **Proposed Operation**

The proposed KNOF upgrade will be accomplished by constructing a new tower structure which is directly adjacent to the existing tower. Although the tower is in an urbanized area it will not be illuminated with high intensity strobe lighting and the tower represents no more of an environmental impact than does the existing structure. Exhibit 6 of this report is an analysis of non ionizing RF radiation which demonstrates that the proposed operation will produce non ionizing RF radiation levels well below the maximums set forth in OST Bulletin 65.

### **Certification**

All information contained in this report is true and accurate to the best of my belief. Having had numerous matters before the Commission, my qualifications are a matter of record.

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September 18, 2002

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R. Lee Wheeler