Supplemental Community Coverage Showing

Selby Gospel Broadcasting Corporation

KNOF (FM), Facility ID 59624

Saint Paul, MN

Application for Minor Change

File Number BPH-20120320AFQ

Introduction

On March 20, 2012, Selby Gospel Broadcasting Corporation filed a Construction Permit application for a minor change to its KNOF (FM), FCC Facility ID 59624. That application was assigned File Number BPH-20120320AFQ.

The application relies on Point-To-Point ("PTP") model results to show sufficient coverage of the principal community. In its review of the application, the FCC Staff requested this supplement, showing that the terrain varies widely from the standard Δh assumption used in creating the f(50,50) coverage contours.

A least-squares fit was performed for each radial over the community at five-degree intervals. The distance from the transmitter to the median PTP 70 dBu point was used to create a simulated PTP 70 dBu contour. In every case, the PTP projection differs from the 70 dBu contour distance substantially.

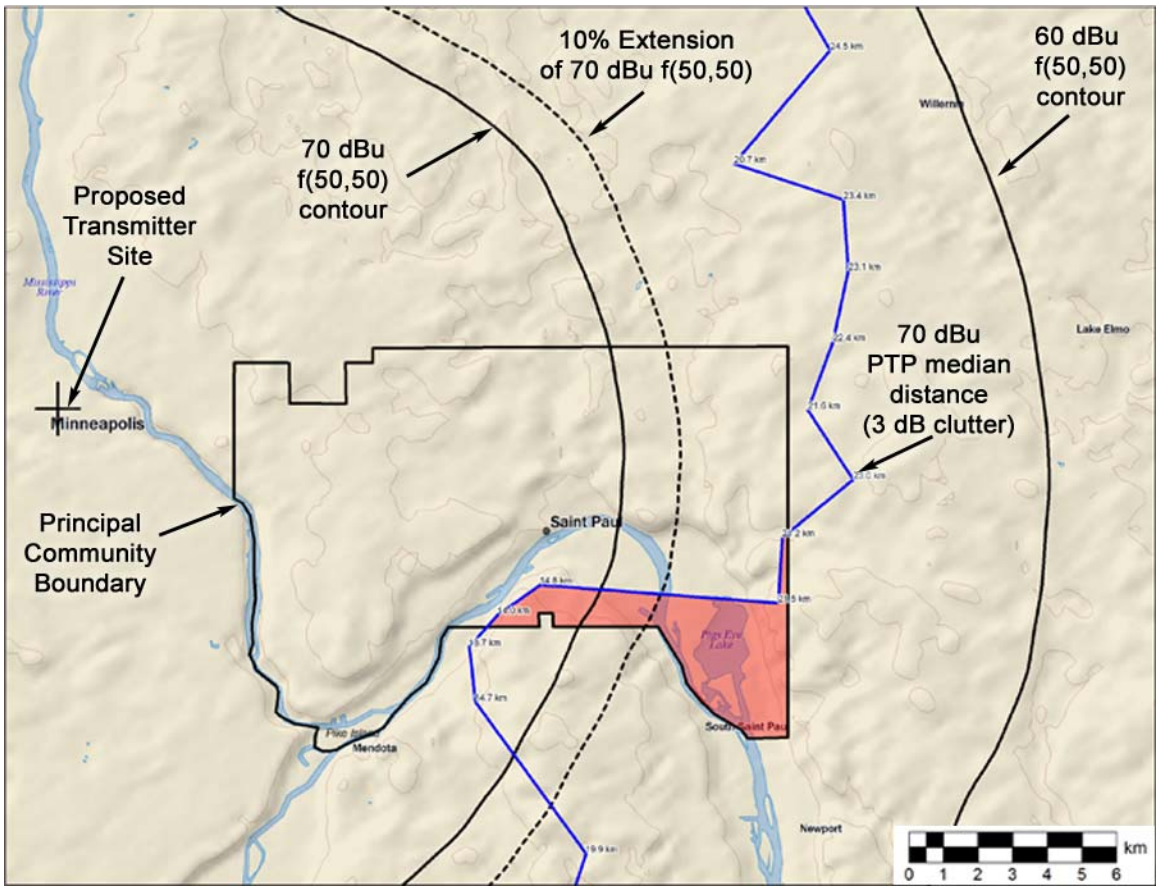
A map and further supporting narrative follow.

Data Sources and Assumptions

Terrain data used throughout this supplement is from the USGS03 terrain dataset.

The PTP model was tested with its internal clutter calculations enabled and defeated. In all cases, very little clutter was added by the model. A uniform 3 dB reduction was applied to the model's results to account for clutter. Despite this conservative approach, the results show very substantial coverage of the community.

Coverage Map



The above map shows the following:

- Proposed transmitter site
- Boundaries of the principal community
- Proposed 70 dBu f(50,50) contour
- Proposed 60 dBu f(50,50) contour
- 10% distance extension of the proposed 70 dBu f(50,50) contour
- 70 dBu PTP median distance contour

The PTP model clearly shows extension well beyond 10 % beyond the 70 dBu contour for most of the city, even with the 3 dB reduction for clutter. For example, the 90 degree radial extends the 70 dBu contour by 34%. Because of a sharp drop in terrain in the southwestern portion of the city, the PTP model shows the median 70 dBu location at substantially less than the 70 dBu contour. Nowhere over the community do they match. 110 and 125 degrees come in with a difference of 9%, and all others exhibit variations – plus or minus – that are substantially more than 10%. This clearly is an anomalous situation in which the f(50,50) curves are inadequate to describe the coverage.

The shaded area within the community represents the area that falls outside the PTP-determined 70 dBu contour. This area consists mostly of lightly-populated or unpopulated river plain, wetlands, and water surface.

Principal Community Coverage

The PTP-determined 70 dBu contour encompasses 88.6% of the area and 95.6% of the population of the principal community.

In the original application, a population-centroid based straight PTP population count indicated that 91.9% of the population would receive at 70 dBu or greater signal.

There is reasonably good agreement between these different computational methods, and both show coverage of more than 90% of the population.

It is respectfully submitted that this is sufficient to show compliance with the principal community coverage rule, §73.315.

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