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ENGINEERING STATEMENT

for

GOOD LIFE RADIO, INC.

concerning

KGLS-LP CONSTRUCTION PERMIT

INTRODUCTION

McClanathan and Associates, Inc., Professional Electrical Engineers, has been retained by Good Life Radio, Inc. (GLR), Permittee for a Low Power FM construction permit at Tillamook, Oregon, FCC File Number BNPL-20010613AAP, to investigate the possibility of medium wave radio frequency reradiation from a antenna support pole for KGLS-LP located within 3.2 kilometers of AM radio station KMBD utilizing a directional antenna system.

On March 7, 2005 GLR installed the KGLS-LP FM antenna on a steel pole extending just 4.6 meters (15 feet) above the roof of the church building. The top of this pole is 20 meters in height above ground, at the NAD 27 geographic coordinates of North Latitude 45° 27' 26" and West Longitude 123° 50' 09". This pole site is located in a business area at 2610 First Street in Tillamook.

The following engineering study determines that the KGLS-LP FM antenna and support pole have no measurable effect whatsoever on the KMBD nighttime directional antenna radiation pattern. Field strength measurements or partial antenna proof of performance measurements, as described in 47 C.F.R. Section 73.154(a) of the FCC Rules, are not indicated or necessary.

The distance and direction to the KMBD AM directional antenna array is:

KMBD, 1590 kHz, 1.0 kW, DA-N, 2.80 km, N269E.

The Federal Communications Commission (FCC) construction permit for KGLS-LP includes a special operating condition or restriction, paragraph 2, as follows:

"Prior to construction of the tower authorized herein, permittee shall notify the AM station so that, if necessary, the AM station may determine operating power by the indirect method and request temporary authority from the FCC in Washington, DC to operate with parameters at variance in order

to maintain monitoring point field strengths within authorized limits".

The condition continues "Permittee shall be responsible for the installation and continued maintenance of the detuning apparatus necessary to prevent adverse affects upon the radiation pattern of the AM station. Both prior to construction of the pole and subsequent to the installation of all appurtenances thereon a partial proof of performance, as defined by Section 73.154(a) of the Commission's Rules, shall be conducted to establish that the AM array has not been adversely affected and, prior to or simultaneous with the filing of the application for license to cover this permit, the results submitted to the Commission".

Operating parameters for the KMBD directional antenna array, and the monitoring point field strengths, were not changed by the construction of the KGLS-LP pole. Therefore it was not necessary for KMBD to initiate power measurement by the indirect method.

COMPUTER STUDY

Because of the significant distance between the KGLS-LP pole and KMBD, and the short vertical height of the KGLS-LP pole, a MININEC computer study was selected to determine what effect, if any, the KGLS-LP support pole and FM antenna would have on the nighttime directional antenna radiation pattern of KMBD. The following input data was used.

KMBD Antenna Field Parameters				
	Field Ratio	Phase	Spacing	Phys-Ht
	Ratio	Deg	Deg	Deg
Twr 1	1.000	0	0	87.3
Twr 2	0.630	+138.5	135.0	87.3

KGLS-LP Support Pole (Including building height)
Overall Vertical Height = 20 meters AGL which is 0.107 wavelength or 38.4 degrees at 1590 kHz.

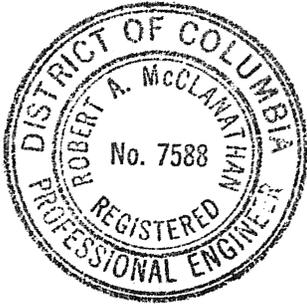
The MININEC operating program assumes the "worst case" condition using a perfectly conducting ground and a 20 meter pole height. The KGLS-LP pole base resistance is calculated to be 5 ohms and the base current, resulting from reception of the KMBD field intensity, is 0.004647 amperes. The calculated KGLS-LP pole reradiation is I^2R or 0.000108 watts.

Figure 8 of 47 C.F.R. Section 73.190 indicates a vertical radiator of 0.107 wavelength height will produce an effective field of 270 mV/m at 1 km. This assumes the worst case of a radiator of height 20 meters AGL and not just the 4.6 meters above the roof. Therefore, the calculated inverse field reradiated from the KGLS-LP pole is 0.089 mV/m at 1 km.

CONCLUSIONS

The computer study described above demonstrates that the construction of the KGLS-LP pole and antenna has no measurable effect on the radiated antenna pattern of Radio Station KMBD and has not compromised the performance of the KMBD directional antenna system array.

Calculations and report prepared by:



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