

**APPLICATION FOR STATION LICENSE/  
REQUEST FOR PROGRAM TEST AUTHORITY  
SEVEN RIVERS BROADCAST MINISTRY, INC.  
WHGN (FM) RADIO STATION  
CH 220C2 - 91.9 MHZ - 41.0 KW  
CRYSTAL RIVER, FLORIDA  
February 2002**

**TECHNICAL STATEMENT**

This Statement and attached exhibits were prepared on behalf of Seven Rivers Broadcast Ministry, Inc. (SRBM), licensee of radio station WHGN, Channel 220C3, Crystal River, Florida. SRBM holds an outstanding construction permit to make minor changes in the facilities of WHGN (BPED-20000327ABN). This instant application seeks a license to cover this outstanding construction permit. A calculation of the transmission line loss and transmitter power output is attached as Exhibit A1.

The WHGN construction permit has several conditions pertaining to the use of a directional antenna system. Attached as Exhibit A2 is a report from Electronics Research, Inc., regarding their testing of the WHGN directional FM antenna system, as well as the procedures utilized to make the measurements of the system. The report indicates that the directional antenna system is in compliance with the Commission's rules and regulations. It also includes a horizontal plane pattern containing both the horizontal and vertical polarizations, as well as tabulations of the horizontal and vertical polarizations. A review of both polarizations indicates this antenna system complies with the envelope pattern submitted in BPED-20000327ABN.

Attached as Exhibit A3 is a statement from a surveyor registered in the state of Florida attesting to the fact that the ERI MB-4E-DA-HW antenna system is oriented on a true azimuth of 341 degrees, which is in agreement with the ERI report. Finally, Exhibit A4 is a statement from the engineer that was on site during the assembly and installation of the WHGN antenna system attesting to the fact that the antenna was installed according to the manufacturer's instructions.

The remaining condition relates to the reduction in power of the facility for those persons having access to the site for matters related to radio frequency radiation levels at the site. SRBM herein restates that it will reduce the power of the WHGN facilities to ensure that persons having access to the site will not be exposed to radio frequency radiation levels in excess of the rules.

Since all of the conditions on BPED-20000327ABN have been met, SRBM herein requests Program Test Authority at the 41.0 kilowatt power level authorized in its outstanding construction permit. As noted on Exhibit A2, the horizontal gain is slightly higher than the vertical gain. As such, while the antenna is reaching 41.0 kilowatts effective radiated power in the horizontal plane, it is only reaching 39.3 kilowatts in the vertical plane and is, therefore, an elliptically polarized antenna.