

**WLII/WSUR LICENSE PARTNERSHIP, G.P.**  
**WKAQ-FM**  
**Channel 284 B**  
**SAN JUAN, Puerto Rico**  
**APPLICATION FOR CONSTRUCTION PERMIT**

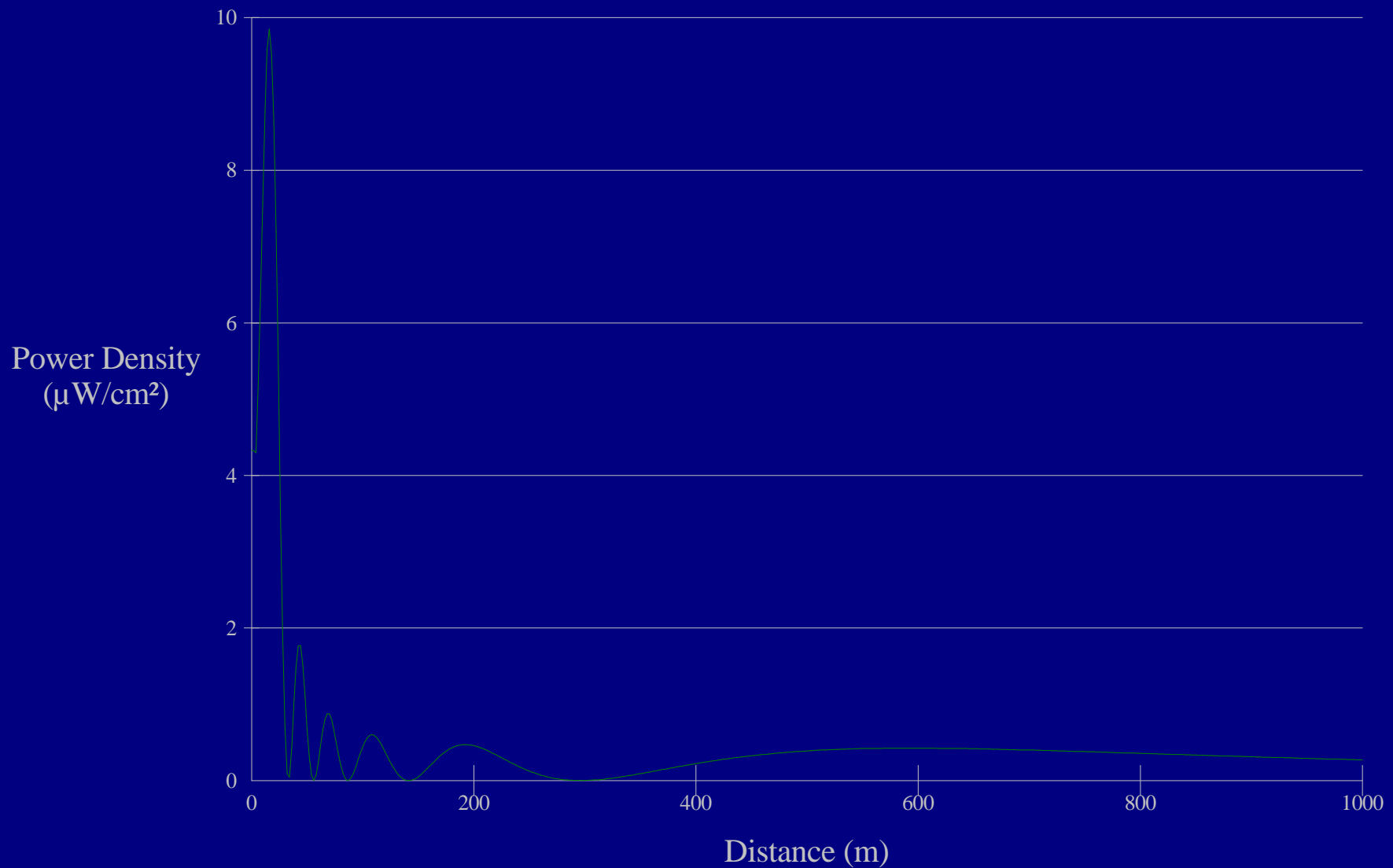
**PURPOSE OF APPLICATION**

WLII/WSUR License Partnership, G.P. proposes to construct an auxiliary facility for WKAQ-FM. The facility proposed in this instant application will utilize an antenna at an existing site on an existing tower. The proposed auxiliary will operate with an effective radiated power of 5400 Watts Horizontal and 5400 Watts Vertical at the height of 52 meters above ground level and 341 m HAAT. The proposed antenna is an ERI 6 Bay full wave spaced, EPA type 3. The predicted 60 dBu 50-50 contour of the proposed auxiliary will not exceed the 60 dBu 50-50 contour of the licensed main.

**ENVIRONMENTAL**

The proposed antenna will be located on an existing tower with other users in an area of multi-user towers. The proposed site is fenced to a distance of 12 meters. The proposed operation was studied using the Commission's OET FM Model software. Based on the EPA type 3 antenna mounted at 52 meters above ground level, the maximum radiation at 2 meters above ground level will be 9.58 microwatts/cm<sup>2</sup>. This is 4.9% of the maximum for general population, uncontrolled exposure level and exempts the facility from further study as an insignificant contributor. As this facility is for auxiliary purposes only, and will only be utilized when the WKAQ FM main is unavailable. See the following page for a graph from the FM Model program.

## Power Density vs Distance



Horizontal ERP (W): 5400  
Vertical ERP (W): 5400  
Antenna Height (m): 52

Antenna Type: ERI or Jampro "Rototiller" EPA Type 3  
Number of Elements: 8  
Element Spacing: 1