

**ENGINEERING EXHIBITS**  
**FOR**  
**GOLD COAST BROADCASTING, LLC**  
**LICENSEE OF FM STATION KCAQ**  
**IN SUPPORT OF**  
**MINOR CHANGE**  
**TO APPLICATION FOR CONSTRUCTION PERMIT**  
**TO**  
**CHANGE COORDINATES**  
**INCREASE ERP**

**SEPTEMBER 2004**

**BY:**  
**BEEM CO.**  
**ARCADIA, CA**  
**(626) 446-3468**

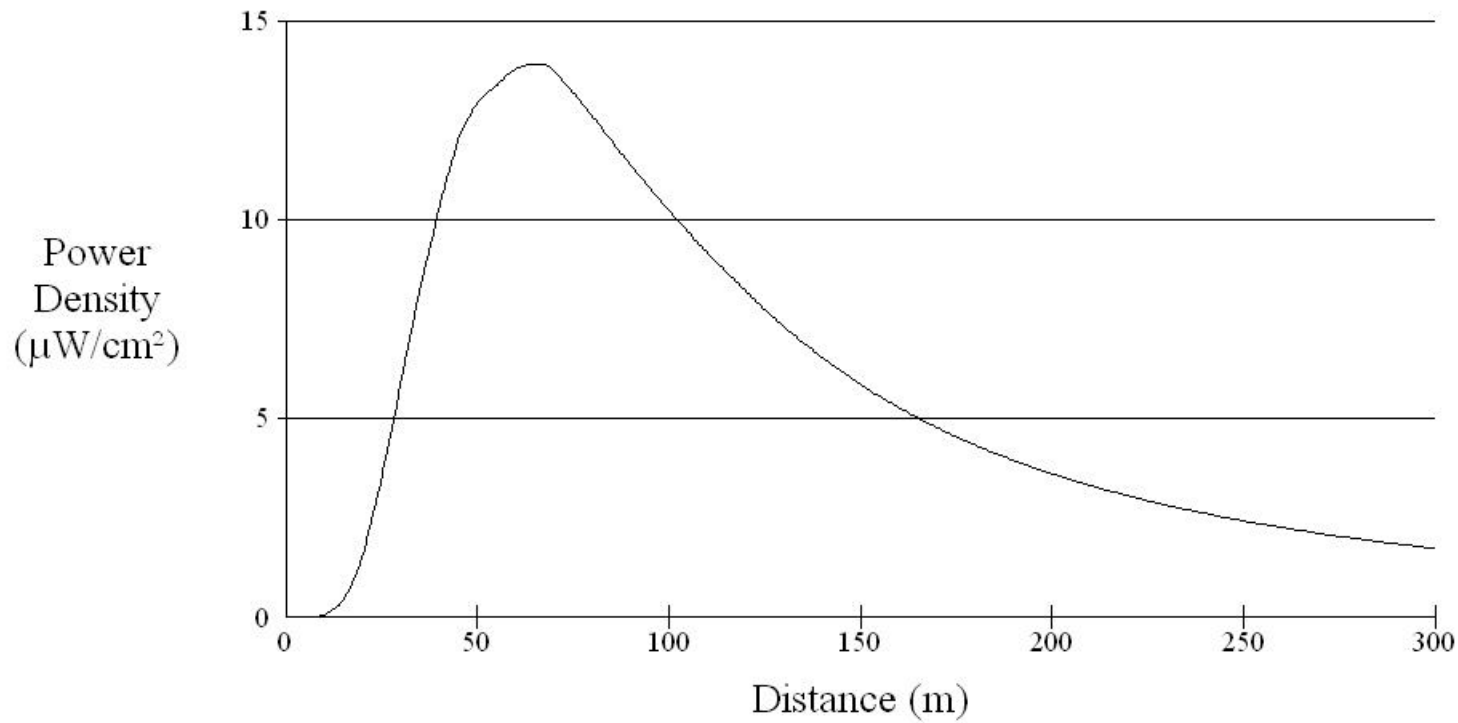
## **ENGINEERING STATEMENT OF JOEL T. SAXBERG**

This minor change to application for construction permit (FCC Form 301) was prepared for Gold Coast Broadcasting, LLC, licensee of FM station KCAQ, CH 284B, Oxnard, CA, by Broadcast Engineering and Equipment Maintenance Company, "(BEEM CO.)".

Gold Coast Broadcasting proposes to relocate its transmitter site, which will increase the ERP and change transmitter site coordinates. The antenna center of radiation will be 24 meters AGL with a HAAT of 150 meters. The ERP will be increased from 20 kW to 50 kW. The proposed antenna will be a six-element "rototiller" type antenna with 0.926 wavelength spacing.

Radiofrequency Electromagnetic Fields – At the proposed transmitter site there will be two FM stations, KCAQ, CH 284B, and KOCP, CH 240A. KCAQ will have an ERP of 50 kW (H & V) and KOCP will operate with an ERP of 2.4 kW (H & V). KCAQ will use a six-element 0.926 wavelength spaced antenna and KOCP will use a two-element one-half wavelength spaced model. OET FM Model program was run for each facility and the resultant power density levels were summed. The sum of the radiofrequency electromagnetic fields was shown to be less than 0.2 mW/cm<sup>2</sup> around the tower base. The tower base and transmitter building will be fenced for security purposes. When necessary for tower workers to go aloft, KCAQ and KOCP will reduce power or terminate transmissions, in order that, tower personnel will not be exposed to radiofrequency fields in excess of FCC guideline levels.

## Power Density vs Distance



Office of Engineering and Technology

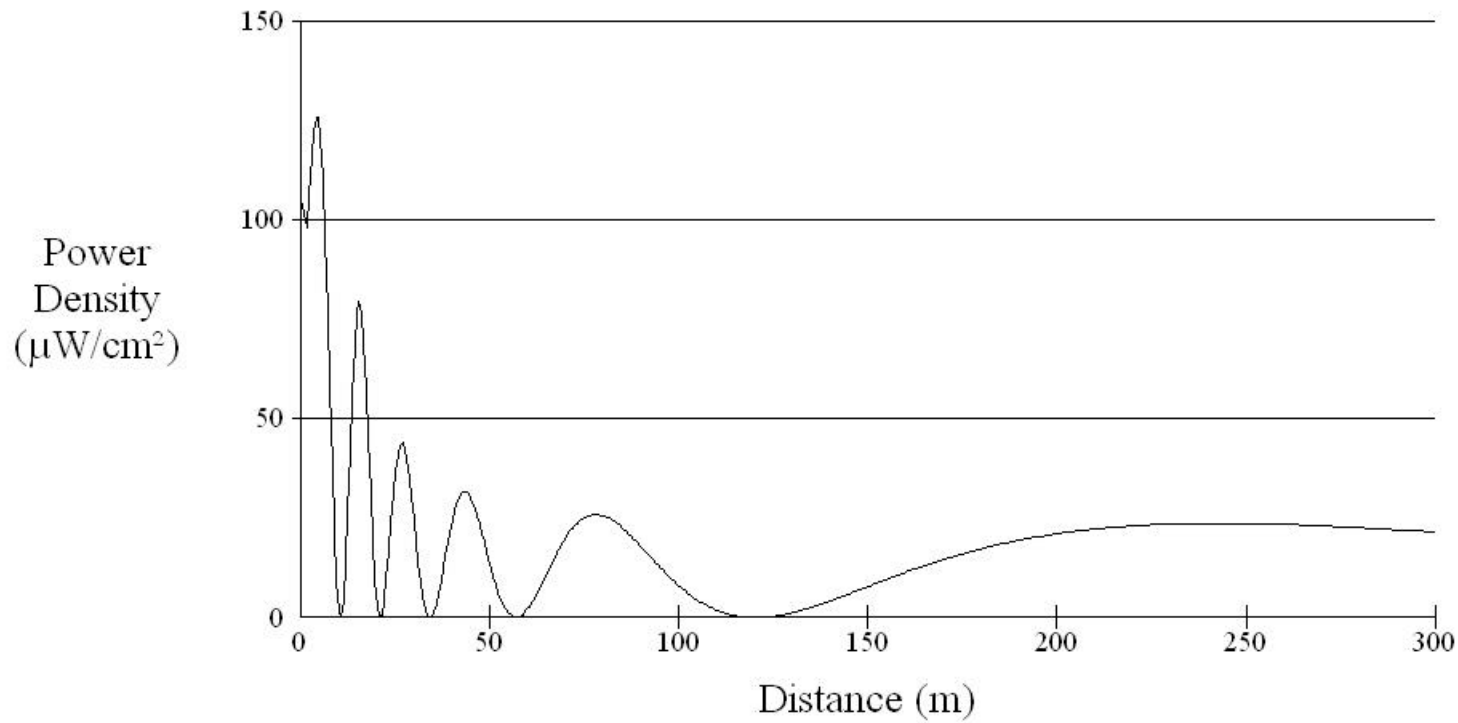
Distance (m):  Antenna Type:

Horizontal ERP (W):  Number of Elements:

Vertical ERP (W):  Element Spacing:

Antenna Height (m):

## Power Density vs Distance



Office of Engineering and Technology

Distance (m): 300 Antenna Type: ERI or JAMPRO JBCP "Rototiller" (EPA)

Horizontal ERP (W): 50000

Vertical ERP (W): 50000

Antenna Height (m): 24

Number of Elements: 6

Element Spacing: .926

[illegible]

 State Borders
  Lat/Lon Grid