

**TECHNICAL EXHIBIT 31**  
**KLQV (FM)**  
**San Diego, California**  
**Facility ID: 51164 Channel 275B**  
**UNIVISION RADIO LICENSE CORPORATION**  
**MINOR MODIFICATION OF LICENSED FACILITY FORM FM301**

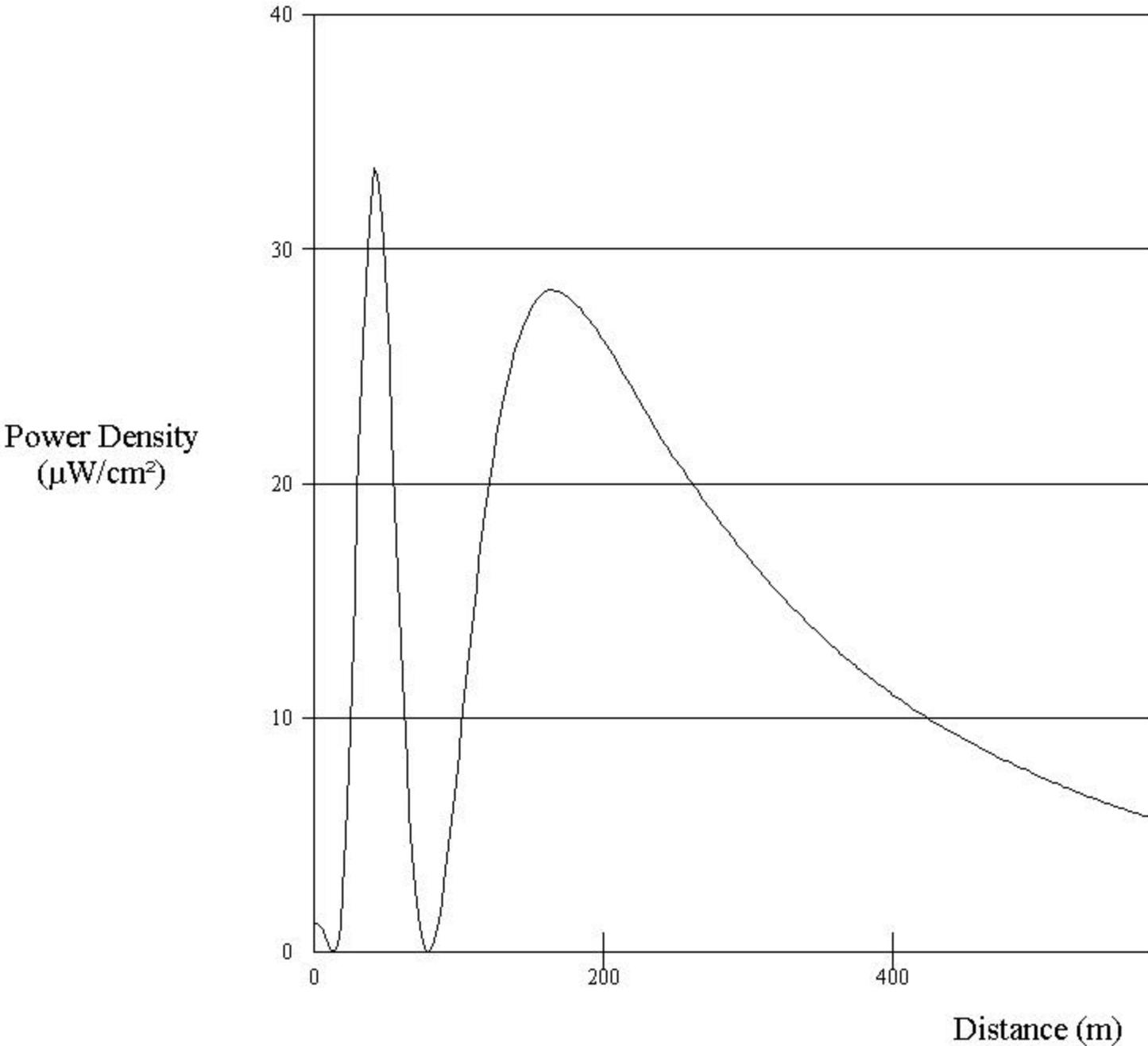
**PURPOSE OF APPLICATION**

Univision Radio License Corporation, (Univision) proposes to relocate the KLQV licensed main antenna 4.75 meters higher on the present, existing tower. The present facility operates with 32 KW horizontal and vertical at 188 meters HAAT. The present three bay .7 wave spaced PSI antenna is mounted at 40 meters above ground level. The new height of 44.75 meters, 192.7 meters HAAT, will require the effective radiated power be reduced to 30 KW horizontal and vertical to stay within the presently licensed maximum contour for a Class B facility. This power and height combination provides equal distance to the existing licensed contours. No other changes are proposed in the instant application. The tower also supports two TV licensees, one Low power and one Class A. A grant of this application will further reduce the levels of non-ionizing electromagnetic radiation at two meters above ground level.

**N.I.E.R. SAFETY**

The antenna was evaluated for worst-case contributions, using the OET FM Model program. It was found the maximum power density level for this antenna (EPA Type 2) and height at two meters above ground level is 33.46 microwatts/centimeter<sup>2</sup>. This maximum occurs at 42 meters from the base of the tower. This is 16% of the maximum for general population, uncontrolled exposure level, and is a worst-case calculated estimate. The two TV facilities were evaluated using the equations found in the OET publication, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields" Supplement A, Edition 97-01 to OET Bulletin 65, Edition 97-01. Using equation (2) found on Page 30 of this publication, assuming .2 **F** and 22% of visual for aural power, it was found that K61GH (K09XM), 39.9 m above ground level, operating on Channel 9 with 2.95 KW visual ERP, contributes a maximum at two meters above ground level of 1.6435 microwatts/centimeter<sup>2</sup>. This is .8% of the maximum for general population, uncontrolled exposure level for this frequency of 200 microwatts/centimeter<sup>2</sup>, and is therefore considered an insignificant contributor. K35DG was evaluated at the licensed power level of 24.1 Kilowatts visual ERP with the antenna at 31.7 meters above ground level, assuming .1 **F** and 22% of visual for aural power, using the same equation mentioned above. It was found to be at worst case a contributor of 5.65 icrowatts/centimeter<sup>2</sup>. This is 1.4 percent of the maximum level for general population at Channel 35. This facility is also an insignificant contributor. Univision believes these worst-case evaluations of non-ionizing electromagnetic radiation at the proposed new antenna location demonstrate compliance with 1.1310. See the following pages for the output of the FM Model Graph.

Power Density vs Distance



Office of Engineering and Technology

Distance (m):	<input type="text" value="1000"/>	Antenna Type:	<input type="text" value="Jampro 'Double V' (EPA)"/>
Horizontal ERP (W):	<input type="text" value="30000"/>	Number of Elements:	<input type="text" value="3"/>
Vertical ERP (W):	<input type="text" value="30000"/>	Element Spacing:	<input type="text" value=".7"/>
Antenna Height (m):	<input type="text" value="44.7"/>		