

**TECHNICAL EXHIBIT  
KLPX(FM) HD RADIO FACILITY  
TUCSON, ARIZONA**

**TRANSMITTER POWER OUTPUT**

This exhibit concerning the activation of the KLPX HD Radio (IBOC) digital facility seeks to clarify that low-level combining is not the method being used. A common antenna is being fed through a split level combined system, which entails separate amplification. Although this combining technique utilizes two transmitters, the analog and digital systems are not separate. Therefore, the digital notification form indicates the combined transmitter power output.

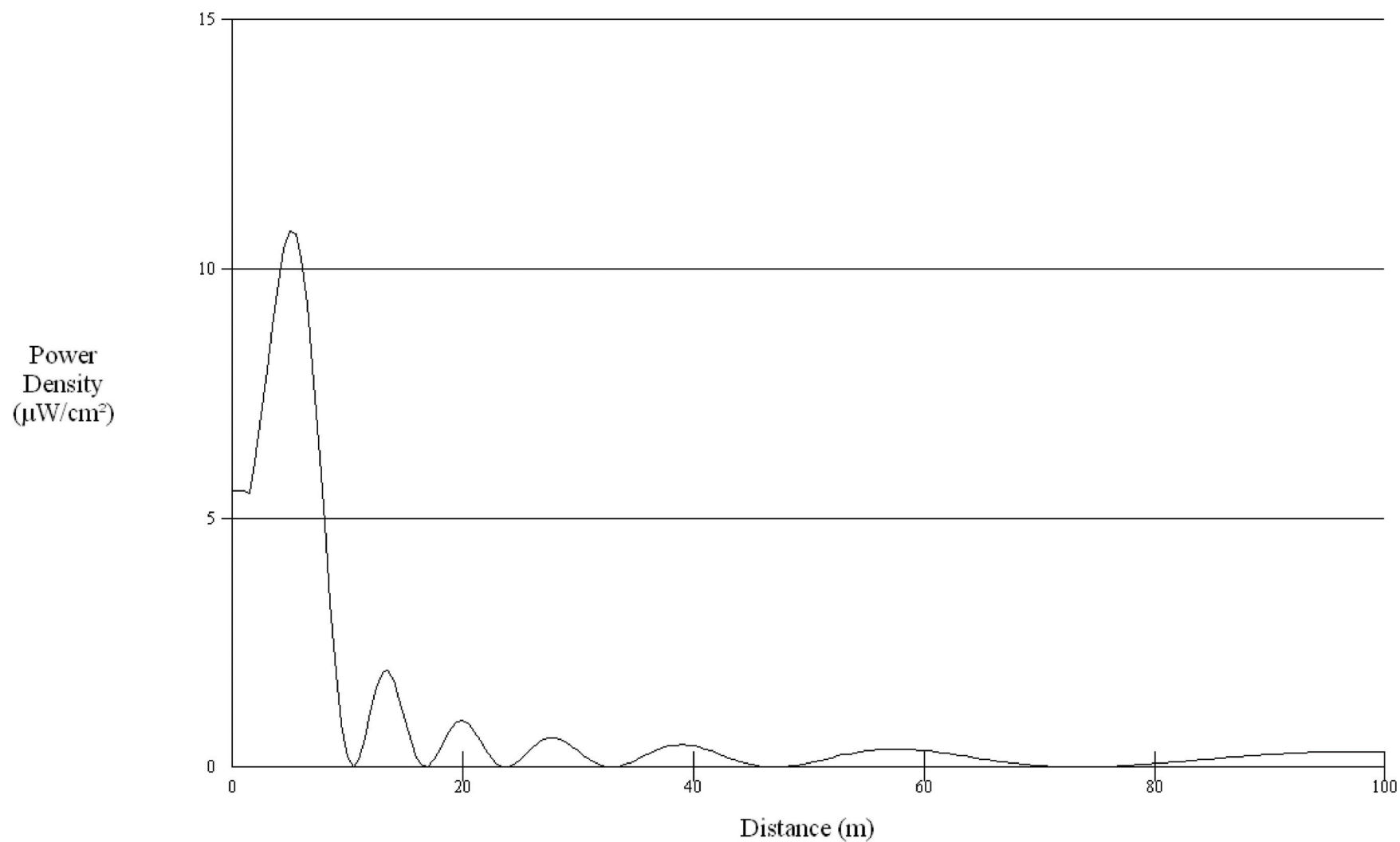
**ENVIRONMENTAL COMPLIANCE**

The aforementioned common antenna is supported by an existing FCC registered tower. The criteria outlined in Section 1.1307(a) for certain types of facilities that may significantly affect the environment and for which additional environmental processing is required does not apply to antenna collocation on an existing structure. As indicated below, this interim digital operation is in full compliance with the rules for limiting human exposure to radio-frequency (RF) energy in Section 1.1307(b).

The type of antenna that is being used is an 8-bay ERI Rototiller Series FM antenna (EPA Type 3) with full-wave spacing. Using the FM Model software to calculate ground-level exposure, it was determined that the maximum exposure value is 10.8 uW/cm squared. A power density versus distance graph is provided as an attachment. Considering that access to the existing tower location is controlled and the above exposure level is not more than 5% of the maximum limit set forth in Section 1.1310 for controlled environments, the interim digital operation complies with the RF exposure rules and is categorically excluded from environmental processing by Section 1.1306. In addition, the transmitter site is a remote mountaintop location and there are suitable warning signs posted throughout the site.

With regard to persons that are authorized to access the transmitter site, exposure will be limited in accordance with the recommendations in OET-65. All maintenance and other related work to be performed at elevations higher than 2 meters above ground shall be coordinated to prevent exposure to RF fields in excess of the controlled limit. Such preventative steps shall include reducing power or shutting down the facility.

Power Density vs Distance



Office of Engineering and Technology

Distance (m):	<input type="text" value="100"/>	Antenna Type:	<input (epa)"="" rototiller"="" type="text" value="ERI or JAMPRO JBCP "/>
Horizontal ERP (W):	<input type="text" value="1000"/>	Number of Elements:	<input type="text" value="8"/>
Vertical ERP (W):	<input type="text" value="1000"/>	Element Spacing:	<input type="text" value="1"/>
Antenna Height (m):	<input type="text" value="21"/>		