



**FCC FORM 301, EXHIBIT 30
ENVIRONMENTAL ASSESSMENT
APPLICATION FOR
CONSTRUCTION PERMIT
EDUCATIONAL MEDIA FOUNDATION
STATION KLVA(FM) MARICOPA, ARIZONA
CH 288C3 25 KW (H&V) 100 METERS**

This environmental assessment was prepared on behalf of Educational Media Foundation (hereinafter EMF), licensee of noncommercial educational FM station KLVA(FM), Maricopa, Arizona, (Facility ID: 2749) in support of a FCC Form 301 application for construction permit.

KLVA is licensed (FCC File Number BMLED-20050311AER) to operate on channel 288C2 (105.5 megahertz (MHz)) using a non-directional antenna, effective radiated power (ERP) of 50 kilowatts (kW), circularly polarized, and antenna radiation center height above average terrain (HAAT) of 150 meters. The instant application proposes to relocate KLVA to a new transmitter site located 33.4 kilometers north west of the licensed site, to downgrade from Class C2 to Class C3, to reduce the ERP to 25 kW, and



decrease the antenna radiation center HAAT to 100 meters.¹ The proposed antenna radiation center height is 44.3 meters above ground level.

Public access to the proposed communications site at which the proposed KLVA antenna and supporting structure will be located will be restricted by a fence with a locked gate. The fence will encircle the transmitter building and the antenna supporting structure. Only authorized personnel will be permitted within the enclosed restricted area.

ENVIRONMENTAL ANALYSIS

KLVA, MARICOPA, ARIZONA

An analysis has been made of the human exposure to Radio Frequency Radiation (RFR) using the calculation methodology described in *OET Bulletin 65, Edition 97-01*, prepared by the FCC Office of Engineering and Technology. A vertical plane relative field factor of 0.15, obtained from

¹ The proposed KLVA transmitter site is located at geographic coordinates 33° 14' 30.3" North Latitude, 112° 12' 05.7" West Longitude referenced to the 1927 North American Datum (NAD27).



the attached manufacturer's theoretical vertical plane radiation pattern for the proposed KLVA Dielectric Communications, type DCR-C3E, transmitting antenna, was used in the calculation of the KLVA power density. The KLVA circularly polarized ERP of 25 kW was used in the calculation of the KLVA power density, and to account for ground reflections, a coefficient of 1.6 was included in the calculations.

At the KLVA operating frequency of 105.5 MHz, the FCC Maximum Permissible Exposure (MPE) level for general population/uncontrolled exposures is 0.2 milliwatt per square centimeter (mW/cm²), and the FCC MPE level for occupational/controlled exposures is 1.0 mW/cm². At a reference point two meters above ground level at the base of the tower supporting the proposed KLVA antenna, the calculated KLVA power density is 0.017 mW/cm², which is 8.3 percent of the FCC MPE level for general population/uncontrolled exposures and 1.7 percent of the FCC MPE level for occupational/controlled exposures.

Pursuant to the provisions of *OET Bulletin 65, edition 97-01*, only those licensees whose transmitters produce power density levels in excess of 5.0 percent of the applicable exposure limit are considered "significant



contributors” and share responsibility for actions necessary to bring the local RFR environment into compliance with FCC exposure limits. Since the calculated power density indicates that the KLVA operation may contribute more than 5.0 percent of the maximum permissible exposure limit for general/uncontrolled exposure at the reference point, KLVA may be a “significant contributor” to the local RF exposure environment. While KLVA may be a significant contributor, there will be no other stations at the site contributing to the overexposure at the site.

KLVA also will be a “significant contributor” to exposure at locations on the supporting structure near the energized KLVA transmitting antenna. If work is done on the tower in an area where overexposure could occur, EMF will take action necessary to prevent the overexposure of workers on the tower, including reducing the KLVA transmitter power or ceasing KLVA operation completely.



CERTIFICATION

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed on January 10, 2007.

Tiffany E. Shaw