



**ENGINEERING STATEMENT**  
OF  
**JOHN F.X. BROWNE, P.E.**  
IN SUPPORT OF **APPLICATION FOR CONSTRUCTION PERMIT**  
FOR  
**NEW DIGITAL TRANSLATOR STATION**  
**MT. POWELL, NM**

**Background**

KOAT Hearst-Argyle Television, Inc. (KOAT) is the licensee of television station KOAT, Ch 7, (BPCDT-20080317AEH, Facility ID 53928) at Albuquerque, NM. KOAT proposes to construct a new digital translator on CH 34 at Mt. Powell, NM. The proposal is more than 121 km from the reference coordinates of the top 100 DMAs as specified in DA 09-1487 released by the Commission on June 29, 2009 and, therefore, meets the distance requirement for filing at this time.

**Site and Tower**

The transmitter will be located at the following coordinates:

35° 27' 59" N. Latitude

108° 14' 25" W. Longitude

The antenna will be side-mounted on an existing unregistered tower that has an overall height above ground of 18.7m. The overall height of the tower is less than that required for notification to the FAA and, further, the tower passes the TOWAIR program.



### **Antenna and Power**

The proposed antenna, a Scala SL-8 omni-directional radiator, will be side-mounted at a radiation center height of 16.7m AGL. The proposed ERP is 1 kW.

### **Interference**

An interference study was conducted using the proposed parameters with software that emulates that used by the Commission. A Longley-Rice analysis with that software shows that there would be no new interference exceeding 0.5% to any full-service DTV or Class A station as defined in the Commission's Rules and, also, there would be no predicted interference of more than 2 % to any LPTV or translator station.

### **Environmental/RFR**

This construction does not involve any of the conditions that require an Environmental Assessment as specified in 47 CFR Section 1.1311 and, therefore, further environmental consideration is not required.

The additional ground level RFR contributed to the site by this proposal in public areas is calculated to be 0.019018 mW/cm<sup>2</sup>, which is less than the MPE for public exposure (0.395 mW/cm<sup>2</sup>) at the proposed frequency.

KOAT agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access. Workers will be trained on RFR issues and encouraged to wear personal RFR monitors when on the structure. A locked security fence encloses the tower base and appropriate signage warning of potential RFR hazards will be in place.

**B****Certification**

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.



John F.X. Browne, P.E.

September 4, 2009