



**ENGINEERING STATEMENT**  
**IN SUPPORT OF**  
**MINOR MODIFICATION OF CONSTRUCTION PERMIT**  
**KETV-DT**  
**OMAHA, NEBRASKA**

**Background**

Hearst-Argyle Television, Inc. (Hearst) is licensee of KETV-TV, CH7, Omaha, NE (BLCT-19810527KF, Facility ID # 53903) and also holds a construction permit for KETV-DT, CH20, Omaha, NE (BMPCDT-20030121ACZ). In the early morning hours of July 4, 2003, the KETV tower collapsed. This collapse occurred as Hearst was completing installation of a combination DTV/NTSC antenna to serve both KETV-TV and KETV-DT. Hearst is now seeking a minor modification of its construction permit in order to build the digital station. A new tower will be erected at a site which is approximately 78 meters from the old site.

**Site and Tower**

The site of the proposed tower (41-18-32 NLat. , 96-01-33 WLong. Nad 27) is 78 meters and N090E from the KETV-DT authorized site. The FAA has been notified and Hearst is awaiting issuance of the determination to file a new ASR. The proposed antenna is a Dielectric TFU-28GBH-R 08 omni-directional radiator and will be placed at a height of 386m RCAGL [HAAT of 396 meters which is 13 meters lower than the HAAT of the authorized facility (409 meters)].



### **Effective Radiated Power**

The proposed ERP is 700 kW. The 48 dBu F(50,90) contour from the proposed facility will completely encompass the city of Omaha, NE.

### **Interference**

There are no NTSC interference, DTV interference or Class A issues involved with this proposal based on studies conducted in connection with the preparation of this application.

### **RFR/Environmental**

The proposed construction does not involve any elements which would trigger the requirement for preparation of an Environmental Assessment.

The ground level radiation is calculated to be  $0.00157 \text{ mW/cm}^2$ , which is much less than 1% of the MPE for public exposure at this frequency.

Workers on the tower in the proximity of the antenna could be exposed to fields which exceed the MPE for occupational exposure. To ensure a compliant environment, KETV-DT will reduce power or cease operation as necessary when workers are in the vicinity of the antenna. Workers on the tower will be encouraged to wear personal RFR monitors while working on the tower. Signage will be posted warning of the potential RFR hazard on the tower. The tower will be enclosed by a locked security fence to limit access to authorized persons only.

The licensee will also cooperate with owner/users of nearby towers to reduce power as necessary when workers on those structures may be exposed to high levels of RFR from the KETV-DT antenna.

**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.

January 15, 2004