

# **ENGINEERING STATEMENT**

OF

JOHN F.X. BROWNE, P.E.

**IN SUPPORT OF** 

MINOR AMENDMENT TO PENDING APPLICATION

**KAVU-DT** 

Victoria, TX

# **Background**

Saga Broadcasting Corporation (Saga) has filed an application for KAVU-DT, Channel 15 (19991021ACQ Facility ID # 73101), specifying an omni-directional pattern with an ERP of 900 kW at a HAAT of 311.0 meters from a tower located at:

(NAD27)

28-50-26 NL

97-07-47 WL

Saga now wishes to relocate to a new site/tower and use a directional antenna.

### **Site**

The proposed tower construction location is approximately 19 km west of Victoria. The proposed facility is located within the Mexican Border Zone and coordination with the Mexican administration is requested. However, a review of the US-Mexico Letter of Understanding regarding DTV allotments does not indicate any Mexican facilities which would receive



interference from the revised proposal. The Antenna Structure Registration Number of the tower is 1238711 and the proposed site coordinates are:

(NAD27) 28-50-42 NL 97-07-33 WL

# **Antenna System and Tower**

KAVU-DT will be co-located with KAVU-TV (Channel 25), KVCT-TV (Channel 19), and KVCT-DT (Channel 11). KAVU-DT, KAVU-TV, and KVCT-TV will employ a common broadband transmitting antenna. The proposed Dielectric directional antenna (TUA-O4SP-14/55H-1-T-R) will be top-mounted on a newly constructed tower at the specified coordinates. The tower will have a height of 317 meters AGL (with appurtenances) and the antenna will have a center of radiation of 351 meters AMSL with an HAAT of 312 meters. The maximum ERP with this transmitting antenna will be 900 kW.

#### Coverage

The entire principal community of Victoria, TX is well within the predicted F(50,90) 48 dBu contour using the proposed 900 kW ERP and directional antenna pattern.

### Interference

Studies were made at the proposed parameters using software that emulates the software used by the FCC. Those studies indicate that there are no DTV stations that would receive more than the 0.5% <u>de minimis</u> interference described in OET-69. The current application for KAVU-DT is mutually exclusive with KHCE-DT (2000428ACF) due to interference, but it is predicted that the use of the directional antenna will correct this interference. The studies also indicate that the proposed site does not meet the contour



overlap requirements of Section 73.613 with respect to KHPZ-CA (20020408AAC). However, the present application for KAVU-DT also does not meet the overlap requirements. The proposed KAVU-DT facility, as amended, reduces the predicted contour overlap to KHPZ-CA compared to the present application. Since the pending application for KAVU-DT was timely filed, it is an eligible "maximization" application and according to Section 73.623(c)(5) it is exempt form the overlap requirements. An OET-69 interference analysis was also conducted to determine the predicted interference from the proposed site to KHPZ-CA. The interference was calculated to be 0.00% indicating that the proposed facility will cause no new interference to KHPZ-CA. Given the above, no further consideration of KHPZ-CA is required.

### **Environmental/RFR**

The proposed construction does not require preparation of an Environmental Assessment as it does not involve any of the factors listed in Section 1.1306.

The additional ground level RFR contributed to the site by this proposal in public areas is calculated to be 0.00307 mW/cm<sup>2</sup> which is less than 5% of the MPE for public exposure (1.61 mW/cm<sup>2</sup>) at the proposed frequency and, therefore, the proposal is excluded from further consideration.

Saga agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a complaint environment for worker access. Workers will also be encouraged to wear personal RFR monitors when on the structure. The tower base will be enclosed by a locked security fence and appropriate signage warning of RFR hazards will be posted.

### **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.