



**ENGINEERING STATEMENT**  
**OF**  
**BENJAMIN L. PIDEK, P.E.**  
**IN SUPPORT OF**  
**MINOR MODIFICATION OF CONSTRUCTION PERMIT**  
**KVCT-DT**  
**VICTORIA, TX**

**Background**

Surtsey Media, LLC. (Surtsey) is the licensee of KVCT which has a construction permit to operate its post-transition DTV facility on Channel 11 (BMPCDT-20021107AAS) at Victoria, TX, with an omni-directional ERP of 18 kW at an HAAT of 290m. The tower is located at the following coordinates:

(NAD27)  
28° 50' 42" N  
97° 07' 33" W

The KVCT construction permit specifies the use of an RFS 658-9C omni-directional antenna; however, due to a manufacturer supply problem related to the DTV transition, Surtsey was unable to acquire the antenna during the build-out of the KVCT digital facility. Surtsey elected to purchase an omni-directional antenna from a different manufacturer in order to complete the KVCT digital facility in a timely fashion but, the alternative antenna, an SWR SWDDPD 2-2-2/11, had a lower RMS gain (7.02 dB) compared to the RFS antenna



(9.45 dB) specified in the construction permit. Due to the change in antenna gain, KVCT was no longer able to achieve the ERP specified on the construction permit (18 kW).

In September 2006, Surtsey filed an application (BLCDT-20060914AAK) for a license to cover the KVCT construction permit. Surtsey identified the discrepancies of the as-built facility compared to the construction permit parameters on the KVCT license application including the lower ERP (11.35 kW); however, the FCC staff recently notified Surtsey that the significant change (reduction) in the KVCT ERP could not be made on a license application and that KVCT would need to file for a minor modification of its construction permit to specify the lower ERP.

At the direction of FCC staff, Surtsey is applying for a minor modification of the KVCT construction permit to specify the alternative SWR SWDDPD 2-2-2/11 omni-directional antenna and lower ERP of 11.35 kW. All other KVCT facility parameters will remain the same as authorized in the present KVCT construction permit.

### **Site**

The proposed facility is located within the Mexican border zone; however, the Mexican government has already approved the existing KVCT facility coverage and the proposed KVCT facility parameters will reduce the noise-limited coverage of KVCT. Considering the proposed change, coordination with the Mexican government is not required.

### **Antenna System and Tower**

As mentioned above, KVCT will operate with a side-mounted SWR SWDDPD 2-2-2/11 omni-directional antenna. The antenna has been placed on the tower (ASR#1238711) at the coordinates specified above and has a RCAMSL of 329m. The structure has an overall height of 360.3m AMSL (with appurtenances). Surtsey is not proposing to change the height of the structure and, therefore, neither FAA notification nor changes in the ASR are required.



The facility will have a horizontally polarized ERP of 11.35 kW (no vertical polarization component).

### **Coverage**

The entire principal community of Victoria, TX is well within the predicted F(50,90) 43 dBu contour based on the proposed 11.35 kW ERP. The proposed facility will provide coverage to more than 95% of population predicted to receive coverage from its Appendix B facility.

### **Interference**

No interference studies are necessary for the proposed KVCT facility as the change in parameters to KVCT only involves a reduction in ERP (all other parameters will remain the same).

### **Environmental/RFR**

This report addresses only the conditions specified in 47CFR1.1307 that deal with Radio Frequency Radiation (RFR). Any other non-RFR conditions that might require the preparation of an EA are beyond the scope of this report; however, since the structure is existing and registered, such conditions should not be an issue requiring further consideration as there will be no increase in height or change in width of the tower structure.

The location of the proposed facility is a multi-user site and it is assumed that the site is currently "in compliance" with FCC guidelines for human exposure to RFR (as defined in OET-65). The worst case ground level RFR contributed to the site by this proposal in public areas is calculated to be  $0.001150 \text{ mW/cm}^2$  (assuming a conservative relative field value of 0.5), which is less than 1% of the limit ( $0.2 \text{ mW/cm}^2$ ) for maximum permissible exposure in public areas for a TV facility operating on Ch. 11 (198-204 MHz). The contribution to the



overall RFR from the proposed facility is negligible and, therefore, the site will remain "in compliance" with FCC guidelines.

Surtsey 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. The tower base is enclosed by a locked security fence and appropriate signage warning of potential RFR hazards is 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.

Benjamin L. Pidek, P.E.

John F. X. Browne, P.E.  
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