

TECHNICAL SUMMARY  
STA REQUEST  
DIGITAL CLASS A STATION KCWT-CD  
LA FERIA, CALIFORNIA  
CHANNEL 23 5 KW (ND)

1. The instant application is for an STA to operate KCWT-CD on channel 23 at La Feria, California from its authorized site ("CP", LMS File No. 0000036094) and antenna height (RCAMSL 292 meters) with a nondirectional antenna maximum effective radiated power (ERP) of 5 kW using the authorized Dielectric model TLP-12A elliptically polarized antenna with 1 degree of electrical beam tilt. There will be no change in the overall structure height of the existing structure (ASRN 1051020).

2. The basis for the STA request is addressed elsewhere in this application.

3. Figure 1 demonstrates that there is no extension of the 51 dBu service contour of the STA beyond that of the CP.

4. RFR Compliance: The proposed facilities were evaluated in terms of potential radiofrequency radiation (RFR) exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna will be located 268.5 meters above ground level. The total DTV ERP is 6.25 kW (5 kW horizontal polarization, 1.25 kW vertical polarization). A worst-case vertical plane relative field value of 1 is presumed for the antenna's downward radiation. The calculated power density at a point 2 meters above ground level is  $2.9 \text{ uW/cm}^2$  which is 8.3% of the FCC's recommended limit of  $351.3 \text{ uW/cm}^2$  for channel 23 for an uncontrolled environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

Access to the transmitting site is restricted and appropriately marked with RFR warning signs. Also, as this is a multi-user site, a formal RFR protection protocol is in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measure will be taken to assure worker safety with respect to RFR exposure. Such measures include limiting the exposure time, wearing protective clothing, reducing power to an acceptable level or termination of transmitter output power all together until workers leave the restricted area.