

TECHNICAL EXHIBIT
APPLICATION FOR MODIFICATION OF CONSTRUCTION PERMIT
FCC FILE NO. BDISDVL-20061114ABY
LOW POWER TV STATION KCSO-LP
FACILITY ID 18998
SACRAMENTO, CALIFORNIA
CH 5 0.3 KW (MAX-DA)

Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of a displacement relief application for modification of the construction permit (CP, BDISDVL-20061114ABY) of Low Power TV station KCSO-LP at Sacramento, California (Facility ID: 18998).

Displacement Relief Justification

The outstanding KCSO-LP CP was filed as a displacement relief application and authorizes KCSO-LP to operate on DTV channel 11 (198-204 MHz) at Sacramento, California with a directional antenna maximum ERP of 0.3 kW and an antenna radiation center height above mean sea level (RCMSL) of 949 meters. However, TV station KNSO at Merced, California (Facility ID 58608) has been allocated channel 11 for its post-transition operation and has been authorized by outstanding construction permit (BPCDT-20080314ACL) to implement its post-transition DTV operation on channel 11. The KNSO DTV channel 11 CP operation is located only 163 km from the KCSO-LP CP operation. In addition, the KNSO DTV channel 11 CP operation is predicted to cause interference to approximately 7% of KCSO-LP's CP service area. Therefore, pursuant to Section 73.3572, KCSO-LP is considered to be displaced and permitted to file a displacement relief application. Thus, it is proposed to operate KCSO-LP on DTV channel 5 from its currently authorized transmitter site location.¹ This application is considered a "minor change" in facilities pursuant to Section 73.3572, as it is a displacement relief application and the proposed 51 dBu contour will overlap a portion of the licensed 74 dBu contour (see Figure 1).

¹ It is noted that channel 5 is KNSO's current pre-transition DTV channel.

Proposed Facilities

It is proposed to operate on DTV channel 5 (76-82 MHz) using a Scala composite, circularly polarized "peanut" directional antenna system. The maximum ERP towards the radio horizon will be 0.3 kW, and the maximum ERP at any horizontal or vertical angle will also be 0.3 kW. The antenna will be mounted at the 114 meter level on an existing 128 meter tower (FCC Tower ID: 1050375).

Response to Paragraph 13

The proposed facility complies with all the following applicable rule Sections, except at noted below: Sections 74.705, 74.706, 74.707, 74.708, 74.709 and 74.710. The proposed facility is calculated to cause 2.4% interference the licensed operation of KNSO on DTV channel 5 at Merced, California (BLCDT-20060705AAX). However, KNSO has agreed to accept any interference caused by KCSO-LP to its operation. A copy of the interference agreement is attached to the instant proposal.

Response to Paragraph 14 - Environmental Protection Act

The proposed KCSO-LP LPTV facilities were evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation."² The calculated power density at the base of the tower was calculated using the appropriate equation of the Bulletin. Using a worst-case vertical relative field value of 1, a maximum total visual effective radiated power of 0.6 kilowatts (circular polarization), the calculated power density at 2 meters above ground level at the base of the tower is 0.0016 milliwatt per square centimeter (mW/cm²), or 0.8 percent of the Commission's

² See *Report and Order* in ET Docket 93-62, FCC 96-326, adopted August 1, 1996, 11 FCC Rcd 15123 (1997). See also *First Memorandum Opinion and Order*, ET Docket 93-62, FCC 96-487, adopted December 23, 1996, 11 FCC Rcd 17512 (1997), and *Second Memorandum Opinion and Order and Notice of Proposed Rulemaking*, ET Docket 93-62, FCC 97-303, adopted August 25, 1997.

recommended limit applicable to general population/uncontrolled exposure areas (0.2 mW/cm² for TV channel 5). Therefore, based on the responsibility threshold of 5%, the KCSO-LP proposal will comply with the new RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with warning signs. Furthermore, as this is a multi-user site, an agreement will be in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

Finally, it is noted that this technical exhibit only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already has been provided to the FCC by the tower owner as part of the tower registration process.

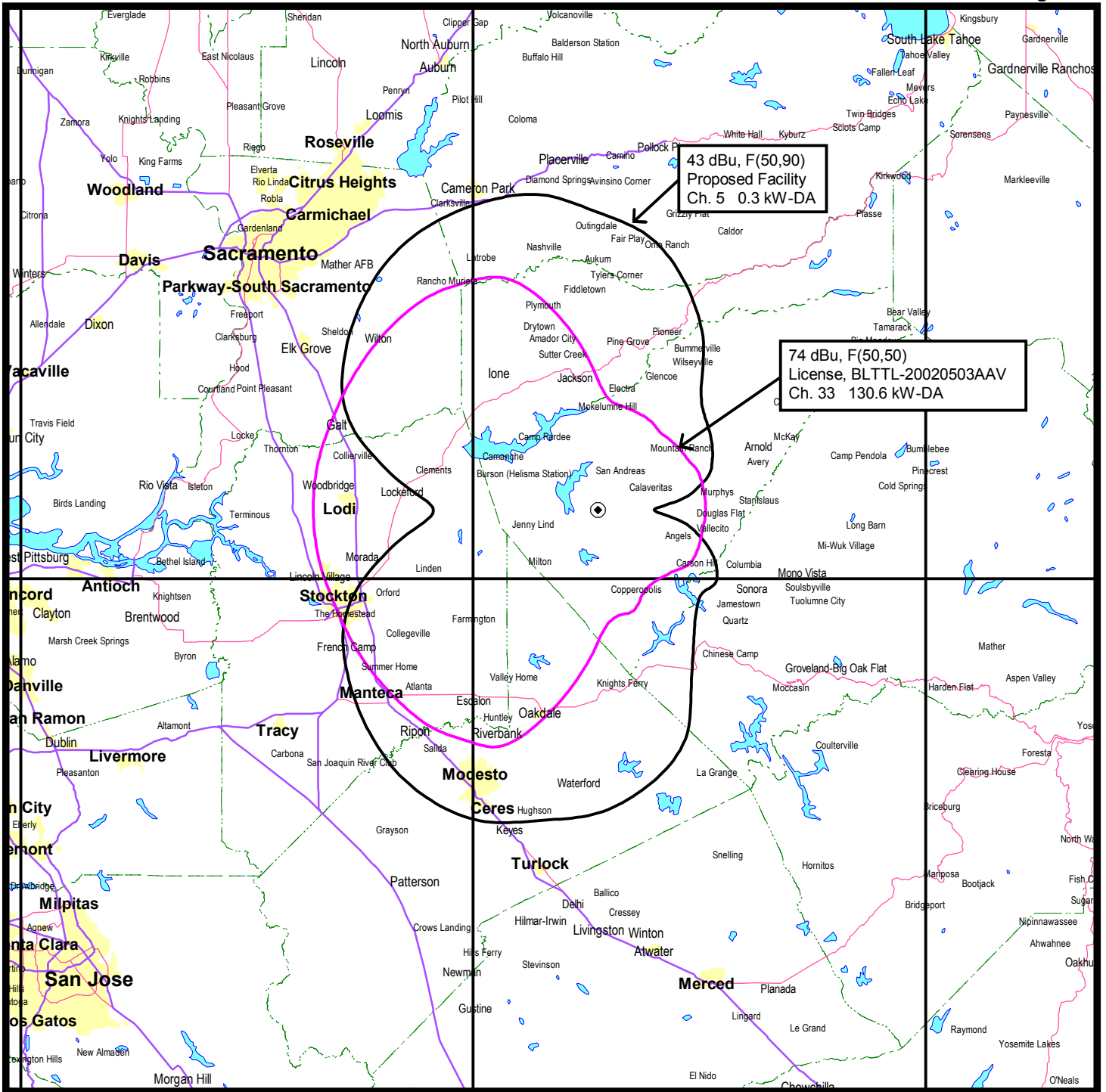


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Figure 1



FCC PREDICTED COVERAGE CONTOURS

STATION KSCO-LP
SACRAMENTO, CALIFORNIA
DTV CH 5 0.3 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida