

CALVARY CHAPEL OF COSTA MESA, INC. – Facility ID 52141, KSDW, Temecula, CA
Engineering Special Temporary Authority Request

ENGINEERING STATEMENT

THE FACILITY PROPOSED IN THE INSTANT APPLICATION SPECIFIES A F(50,50) 60 DBU CONTOUR THAT IS COMPLETELY CONTAINED IN THE LICENSED F(50,50) 60 DBU CONTOUR OF THE LICENSED MAIN FACILITY. SINCE THIS IS AN SPECIAL TEMPORARY AUTHORITY REQUEST FOR A TEMPORARY FACILITY, NO CONSIDERATION IS GIVEN TO OVERLAPPING SECOND OR THIRD ADJACENT CHANNEL FACILITIES, & INTERMEDIATE FREQUENCY IN THE ENGINEERING ANALYSIS.

THE PROPOSED FACILITY IS AS FOLLOWS:

COORDINATES: 33-00-32.1 (N. Latitude) 116-58-20.0 (W. Longitude)

SITE GROUND ELEVATION: 864.4 METERS

RADIATION CENTER ABOVE MEAN SEA LEVEL: 881.4 METERS

RADIATION CENTER ABOUT GROUND LEVEL: 17 METERS

OVERALL STRUCTURE HEIGHT ABOVE GROUND LEVEL: 24.7 METERS

FREQUENCY: 88.9 MHZ (CHANNEL 205)

ERP: 900 WATTS (VERTICAL ONLY)

ANTENNA TYPE: SCALA CLFM-VRM (VERTICAL LOG-PERIODIC) SINGLE SECTION

ANTENNA POWER GAIN: 5.01X

PROPOSED TRANSMITTER POWER OUTPUT: 250 WATTS (ANTENNA GAIN, TRANSMISSION LINE LOSS & BANDPASS FILTER LOSS)

THE F(50,50) 60 DBU CONTOUR OF THE PROPOSED STA FACILITY IS COMPLETELY CONTAINED IN THE F(50,50) 60 DBU CONTOUR OF THE LICENSED FACILITY AS SHOWN BY THE ATTACHED EXHIBIT MAP.

EXTRAORDINARY CIRCUMSTANCES DESCRIPTION

THE APPLICANT HAS EXPERIENCED EXTENSIVE PROBLEMS WITH THE EXISTING TRANSMITTER SITE IN KEEPING IT ON THE AIR. THE LICENSED TRANSMITTER SITE IS LOCATED ON A REMOTE MOUNTAIN TOP WITH TREACHEROUS FOUR-WHEEL-DRIVE ACCESS ON PAUMA TRIBAL LAND. RECENT MUDSLIDES AND OTHER WEATHER-RELATED EVENTS HAVE KEPT THE APPLICANT FROM

ACCESSING THE SITE FOR DAYS AT A TIME. ALSO, THE LICENSED TRANSMITTER SITE HAS NO COMMERCIAL ELECTRICITY AND IS SOLAR-POWERED WITH A GENERATOR FOR RECHARGING BATTERIES FOR ENERGY STORAGE. THE GENERATOR IS FAILING AND DURING CLOUDY TIMES THE STATION FAILS TO STAY ON THE AIR OVERNIGHT AND IN OTHER WEATHER EVENTS. ALSO, THE APPLICANT HAS SPENT SUBSTANTIAL CAPITAL AND EFFORT ATTEMPTING TO MITIGATE THESE ISSUES. THE DURATION OF THE STATION REGULARLY BEING OFF-THE-AIR CAN VARY FROM SEVERAL HOURS-PER-DAY TO SEVERAL DAYS, REQUIRING FREQUENT VISITS TO THE SITE. THIS MAKES MAINTAINING ANY REGULAR LISTENERSHIP OR PUBLIC SERVICE IMPOSSIBLE. THE APPLICANT IS EXPLORING OPTIONS TO RELOCATE THE LICENSED MAIN TRANSMISSION FACILITY. IN THE MEAN TIME, THE APPLICANT REQUESTS THE SPECIAL TEMPORARY AUTHORITY IN ORDER TO KEEP A PORTION OF THE SERVICE AREA SERVED WITH STABLE OPERATION IN THE PUBLIC INTEREST.

ENVIRONMENTAL STATEMENT

THE ANTENNA PROPOSED IN THE INSTANT APPLICATION IS TO BE LOCATED ON AN EXISTING FCC-REGISTERED COMMUNICATIONS TOWER. THE SCALA ANTENNA PROPOSED IN THE INSTANT APPLICATION AT 900 WATTS ERP FROM 17 METERS RADIATION CENTER ABOVE GROUND LEVEL. USING THE RING-AND-SUB OR "OTHER" IN THE FCC'S ONLINE COMPUTER PROGRAM, FM MODEL, USING THE PROPOSED GROUND LEVEL HEIGHT AND THE PROPOSED ERP, THE MAXIMUM RF RADIATION CONTRIBUTION AT 2 METERS ABOVE GROUND IS 127.4 MICROWATTS PER CENTIMETER SQUARED.

THE APPLICANT WILL REDUCE POWER OR OTHERWISE CEASE TRANSMITTING TO PROTECT THE PUBLIC FROM RF RADIATION IN EXCESS OF THE LIMITS SET FORTH IN OET BULLETIN 65.

