

## EXHIBIT ENG

### Amendment to application New Tower Site, ERP, Direction, and Antenna (with this new site this application is not mutually exclusive with New Bakersfield CH-3)

#### ENGINEERING STATEMENT

This Station is in operation under a LPTV STA K02PL Oildale Ca., transmitter site has been moved south to serve Bakersfield ca. The Terrain Shielding Graphs are on file with K02PL and will be sent to the F.C.C when requested.

It is proposed to operate on Television Channel 2 positive offset with an ERP of 44 Watts at 35-03-30, 119-24-40 for the city of Bakersfield CA. The antenna will consist of a HDCA-5 SCALA yagi on an existing 16 meter wooden pole orientated at 80 degrees. The transmitter will be located in a portable steel buildings 10 feet from the pole. There will be no interference from or to KCBS, K02HY, K02OH and KEYT CH-3 as shown by the terrain shielding graphs and charts ( Exhibit ENG ) due to the mountain ranges in the area.

There will be no interference to or from Bakersfield CH-2 and K02OH, in Fresno K02OH pattern is orientated NORTH using a highly directional SCALA antenna system. The proposed Bakersfield CH-2 directional antenna is orientated at 80 degrees. I have calculated that  $(9.3 \text{ watts input} \times 0.006 \text{ power gain}) = 0.05 \text{ watts ERP}$  in the direction of K02OH at 140 km will be in field strength less than .002 mV/m) because of the distance and non overlapping signals the interference levels will be far less than F.C.C limits.

I have calculated that  $(9.3 \text{ watts input} \times 0.05 \text{ power gain}) = 0.4 \text{ watts ERP}$  in the direction of KCBS with over 180 km of distance, addition to the Terrain Shielding (SEE MAPS) from the five mountains and ranges Mt. Gleason, San Gabriel Mountains, San Emigdio Mountains, and Tecuya Mountain there will be no interference with CH-2 at Oildale.

There will be no interference between Bakersfield CH-2 and K02HY because of Scodie Mountains as shown in (Exhibit ENG) Terrain Shielding

#### **Interference Considerations**

Operating as proposed the station will not cause interference to, nor receive interference from, any existing of proposed radio stations or equipment. If any interference should occur to other equipment in This area the applicant will take any and all steps necessary to rectify the Situation, including , but not limited to, the installation of filters in the transmission system.

#### **Environmental Considerations**

With the exception of tower there will be no new construction work, nor any disturbance to the Fauna or Flora of the area. Reference to OST Bulletin number 65 of October 1985 shows that there will be no danger of exposure to non-ionising radiation to personnel on the ground. The applicant has signed, or will sign, an agreement with the owner of this site to the effect that power will be reduced to a safe level, or turned off entirely, in the event that it is necessary for personnel to climb the pole.