RF Emissions Analysis:

The applicant proposes to use an existing, authorized and registered tower #1297515. No change is proposed to the height of this tower. There is also an FM station antenna on the tower, KJRN.

It is proposed that KGSW-LD will transmit on channel 22, using a radiated power of 7 kW from an antenna center height above ground of 85.9 meters. The applicant proposes to use three vertically stacked Scala 1469B antennae. This UHF antenna has a relatively high horizontal gain of 11.9 dBd. Using the OET 65 formulas for DTV transmissions, and a standard vertical elevation field toward the nadir for this type of antenna of 0.2, the facility produces 1.33 µW per cm^2at head height, which is 0.38 percent of the maximum for an uncontrolled area.

According to the FCC record for FM station, KJRN's center of radiation for its four sections, SWR FM3, EPA type 2 antenna is located 98 meters above ground. This antenna produces 4.87 µW per cm^2 at head height and that is 2.44 percent of the uncontrolled maximum.

Together both antennas produce 2.82 percent of the maximum for the uncontrolled area. Consequently, taken together, the non-ionizing emission from these two antennas is well below the maximum and no further analysis is required.

The applicant will post all appropriate warning signs at the site and will lower the power or terminate transmission as needed to protect workers on the tower.