

MINOR CHANGE APPLICATION
RADIO LICENSE HOLDINGS, LLC
KABC AM RADIO STATION
790 kHz - 6.8/6.6 kW - DAN
LOS ANGELES, CALIFORNIA
November 2015

EXHIBIT #4

Radio Frequency Assessment

A study has been made to determine whether this proposal is in compliance with 47 C.F.R. §1.1307 of the Commission's rules and with OET Bulletin #65, dated August 1997 ("Bulletin"), regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. This study considers all nearby stations and utilizes the appropriate formulas contained in the OET Bulletin.¹ Co-located with KABC, 790 kHz, are KWKW, 1330 kHz; the new AM station in Culver City, 1500 kHz; and KFOX, 1650 kHz.

At the KABC frequency of 790 kHz, the towers are 105.8° (0.294 λ) in electrical height. Each tower is fenced at a minimum distance of 5.0 meters (16.4 feet) from the radiating structure. It is assumed the full power of the station is radiated from each structure. Based on the guidelines of the OET bulletin, at the KABC proposed power of 6.8 kilowatts², calculations indicate that 56.6 V/m and 0.36 A/m will be present at the fence perimeter. Since the frequency is below 1340 kHz, the electric and magnetic field limits are the same for controlled and

-
- 1) The contributions of the FM facilities were calculated using the FMModel program. A single bay EPA dipole antenna was used for calculation purposes. In cases where the number of bays of the antenna was known, this data was used in the FMModel program.
 - 2) The highest of day/night proposed power - considered worst case.

uncontrolled environments. These calculated values represent 9.2% of the electric field limit of 614 V/m and 22.1% of the magnetic field limit of 1.63 A/m. In this case, the magnetic field contribution to uncontrolled environments of 18.9% is considered as the worst case contribution.

At the KWKW frequency of 1330 kHz, the towers are 178° (0.494λ) in electrical height. Each tower is fenced at a minimum distance of 5.0 meters (16.4 feet) from the radiating structure. It is assumed the full power of the station is radiated from each structure. Based on the guidelines of the OET bulletin, at the KWKW proposed power of 5.0 kilowatts, calculations indicate that 137.3 V/m and 0.082 A/m will be present at the fence perimeter. Since the frequency is below 1340 kHz, the electric and magnetic field limits are the same for controlled and uncontrolled environments. These calculated values represent 22.4% of the electric field limit of 614 V/m and 5.0% of the magnetic field limit of 1.63 A/m. In this case, the electric field contribution to uncontrolled environments of 22.4% is considered as the worst case contribution.

At the new Culver City frequency of 1500 kHz, the towers are 200.8° (0.558λ) in electrical height. Each tower is fenced at a minimum distance of 5.0 meters (16.4 feet) from the radiating structure. Based on the guidelines of the OET bulletin, at the new Culver City power of 0.18 kilowatt, calculations indicate that 29.6 V/m and 0.016 A/m will be present at the fence perimeter. Since the frequency is above 1340 kHz, the electric and magnetic field limits are different for controlled and uncontrolled environments. These calculated values represent 4.8% of the controlled access electric field limit of 614 V/m, 5.4% of the uncontrolled access electric field limit of 549.3 V/m and 1.0% of the controlled access magnetic field limit of 1.63 A/m,

1.1% of the uncontrolled access magnetic field limit of 1.46 A/m. In this case, the electric field contribution to uncontrolled environments of 5.4% is considered as the worst case contribution.

At the KFOX frequency of 1650 kHz, the towers are 220.8° (0.613λ) in electrical height. Each tower is fenced at a minimum distance of 5.0 meters (16.4 feet) from the radiating structure. Based on the guidelines of the OET bulletin, at the KFOX power of 10.0 kilowatts, calculations indicate that 242.4 V/m and 0.132 A/m will be present at the fence perimeter. Since the frequency is above 1340 kHz, the electric and magnetic field limits are different for controlled and uncontrolled environments. These calculated values represent 39.5% of the controlled access electric field limit of 614 V/m, 48.5% of the uncontrolled access electric field limit of 499.4 V/m and 8.1% of the controlled access magnetic field limit of 1.63 A/m, 9.9% of the uncontrolled access magnetic field limit of 1.46 A/m. In this case, the electric field contribution to uncontrolled environments of 39.5% is considered as the worst case contribution.

Combining the contributions of KABC, KWKW, the new AM in Culver City, and KFOX, a worst case total of 98.4% of the limit for uncontrolled environments is reached at 2.0 meters above the ground at the fence perimeter at the base of the tower. Since this contribution level is less than the ANSI limits, it is believed the proposed KABC facility is in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. RLH will also insure that warning signs have been posted in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, RLH will reduce the power of the facility or cease operation in cooperation and coordination with other tower users, as necessary, to protect persons having access to the site, tower, or antenna from radio frequency radiation in excess of FCC guidelines.