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ENGINEERING REPORT

KILA-LD, Los Angeles, CA LPTV (Proposing Channel 19)

ENGINEERING STATEMENT

SERVICE

The Applicant plans to deploy ATSC 3.0 for the proposed channel 19 facility.

DISPLACEMENT QUALIFICATION

KILA-LD is currently licensed on channel 8 (with a CP for a site-move also on channel 8). TVStudy analyses for both the KILA-LD licensed and CP facilities predicts to cause the following predicted interference to KFMB, San Diego channel 8:

KILA-LD Licensed channel 8

To KFMB-App: 0.58% increase
To KFMB-Lic: 0.58% increase

KILA-LD CP channel 8

To KFMB-App: 1.43% increase
To KFMB-Lic: 0.95% increase

It is also noted that a displacement to channel 13 was previously granted to KILA-LD (LMS File 54837)—a displacement that the applicant requested by cancelled.

Based on the above levels of predicted increased interference to KFMB and the previously channel 13 displacement CP, KILA-LD qualifies for channel displacement.

INTERFERENCE PROTECTION RESULTS ON NEW CHANNEL

It is noted that the grid (cell size) is 1 km and the increment (step) is 0.2 km for this study and it is requested that the FCC process this application using this TVStudy resolution.

The output from the FCC's current "TVStudy" software is attached demonstrating full compliance with the FCC's protection requirements.

Consent Agreements required for grant of this application: NONE

The applicant accepts any interference that is predicted to exist to the proposed facility by any licensed, authorized or previously proposed primary TV station. The applicant also accepts any interference that is predicted to exist to the proposed facility by any secondary TV facility that is given preferential status by the FCC over the Applicant's herein proposed facility. Additionally, as deemed necessary, the applicant may agree to consent to interference (either by a separate statement submitted with this initial application or by an amendment to this application) from another LPTV displacement application that has been submitted in the same filing window.

It is also noted that the TVStudy results reference the channel 20 land mobile short-spacing. A separate attachment demonstrates that this instant proposal is in full accord with the allowed use of this channel as contemplated by Commission policy stated in Public Notice DA 18-124, released February 9, 2018, at Note 14 to Appendix.

ENVIRONMENTAL STATEMENT

This proposal does not involve a site location specified under Section 1.1307(a) through (a)(8) of the FCC Rules.

The proposed LPTV produces an ERP that is equal to or less than 15 kilowatts. Assuming: (a) a maximum ERP of 30 kilowatts (twice 15 kW for possible circular polarization); (b) a relative field of less than 0.3 in the critical downward angles; and (c) a distance of at least 20 meters from the lowest antenna element to 2 meters above ground level, the maximum power density is calculated as follows:

$$S = 33.4 (F)(F)(ERP) / [(R)(R)]$$

Where, S equals power density in uW/cm²
F equals the relative field factor
ERP equals the effective radiate power in watts
R equals the distance in meters

$$= 33.4 (0.3)(0.3)(30,000) / [(20)(20)]$$

$$= 225.5 \text{ uW/cm}^2$$

225.5 uW/cm² represents less than the uncontrolled power density limit (315.3 uW/cm² for channel 14—channel 14 being the worst-case UHF channel or 200 uW/cm² for VHF). The electromagnetic radiation from this proposed operation will not produce a value in excess of the radiation standard. The electromagnetic radiation from the proposed operation will not combine with other facilities on or near the structure to produce a significant change in value.

If this is a structure that may support various other operations, the applicant will cooperate with the other operators in establishing a plan for work done on the structure in close proximity to the existing antenna.