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ENGINEERING REPORT

NEW, Redding, CA (Currently 31D) LPTV (Proposing Channel 32)

ENGINEERING STATEMENT

DISPACEMENT QUALIFICATION

This pending LPTV station application proposes channel 31 and is co-channel to K31PS-D (facility 189720), an LPTV that was displaced from channel 35 in a channel displacement filing of April 18, 2019—LMS file no. 71865. The pending Redding LPTV channel 31 application is predicted to cause greater than 20% co-channel interference to the facility of K31PS-D. Therefore, this pending LPTV facility qualifies for channel displacement.

INTERFERENCE PROTECTION RESULTS ON NEW CHANNEL

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.

ENVIRONMENTAL STATEMENT

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

This LPTV produces an ERP that is less than or equal to 15 kilowatts. Assuming: (a) a maximum ERP of 15 kilowatts; (b) a relative field of less than 0.2 in the critical downward angles; and (c) a distance of at least 17 meters from the antenna centerline 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 (0.2)(0.2)(15,000) / [(17)(17)]

= 69.3 uW/cm2

69.3 uW/cm2 represents less than the uncontrolled power density limit (315.2 uW/cm2 for channel 14; the lowest UHF). 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.