



ENGINEERING STUDY

Minor License Modification

KREV (FM), Alameda, CA

Fac ID # 36029

Bankruptcy Estate of Golden State Broadcasting, LLC

December 2023

License Modification KREV (FM)

Alameda, CA

December 2023

TECHNICAL STATEMENT

This technical statement and attached exhibits were prepared on behalf of the Bankruptcy Estate of Golden State Broadcasting, LLC in support of a modification of the license for FM radio station KREV (FM) on Channel 224A, Facility ID#36029, licensed to the community of Alameda, CA

Golden State wishes to relocate to a tower approximately 6.8km northwest of the currently licensed site. Although the KREV trustee and the proposed buyer of KREV have attempted to extend the lease which expires at the end of 2023, the tower owner has been unwilling to do so. Therefore, due to the impending lease cancellation as of January 1, 2024, Golden State respectfully requests expedited processing of this application so that KREV may continue to operate.

TECHNICAL PARAMETERS

Facilities Proposed

Location (NAD83)	37° 45' 19" N Latitude, 122° 27' 10" W Longitude
Channel	224A (92.7MHz)
Tower Overall AGL Height-	297.7m
Tower ASR	1001289
Proposed Antenna	2-bay, ½ wave spaced non-directional
Antenna AGL Height-	60 m
Site AMSL Height-	254.2m
COR AMSL Height	314.2m
HAAT	275m
ERP	0.79kW

47 CFR § 73.213(a)(4) Grandfathered 2nd Adjacent operation

KREV, (224A) is 3rd adjacent to KRZZ (227B). These two stations have been continuously short spaced since 1964. As such, there are no distance separation or interference protection requirements between them and this 3rd adjacent short spacing is allowable under 73.213(a)(4) of the Commission's rules.

47 CFR § 73.207 COMPLIANCE

Exhibit A demonstrates that as a Class A FM facility, KREV will be fully compliant under 73.207 spacing (except for KRZZ as noted above).

Calculation of HAAT and ERP

KREV will be located on Sutro Tower in San Francisco. This location has large water bodies to the East and to the West. In calculating the eight radial HAAT of the proposed antenna, since the 225deg, 270deg, and 315-degree radials extend over the Pacific Ocean, those radials are truncated for those HAAT calculations as specified in 73.313(d)(2). Based on the preceding, the HAAT of the Proposed antenna Center of Radiation is 275 meters.

Based upon the above, using the FCC "FM Power" calculator¹ the ERP of KREV from the proposed facility will be 790 Watts.

COMMUNITY COVERAGE

As demonstrated in Exhibit B, although the proposed FCC f50,50 70dBu FCC contour does not cover 80% or more of the community of license, using a supplemental showing with appropriate Longley-Rice parameters, the facility will cover 100% of Alameda, CA in area and population. To

¹ <https://www.fcc.gov/media/radio/fmpower>

analyze the Longley-Rice 70dBu contour, the program parameters were set with the receiver height of 9.1m, 3-second terrain database, and land cover attenuation including 5dB for urban clutter. The resulting 70dBu contour using 1-degree spaced radials is displayed on the map. The contour shown is based on the Mean 70dBu occurrence as calculated using V-Soft Probe 3.

ENVIRONMENTAL CONSIDERATIONS

The proposed antenna will be attached to an existing tower. The tower is owned by Sutro Tower, Inc and contains most of the San Francisco full-power television and several full-power FM stations.

The attachment of the proposed antenna will not alter the existing proposed tower structure for purposes of the Nationwide Programmatic Agreement and the NHPA Section 106.

KREV proposes operating with an EPA Type 3, Opposed U Dipole, 2-level halfwave spaced non-directional antenna at 60 meters above ground. Based upon the FCC “FM Model”² Power Density vs. Distance calculator the maximum power density at 2m AGL contributed by the proposed antenna is expected to be 1.4 μ W/cm² or 0.7% of the permitted 200 μ W/cm² limit for uncontrolled exposure. Because the predicted exposure will be well under 5% of the MPE for public exposure, this antenna can be considered separately from the other stations operating from the tower.

Based upon the preceding evaluation, it is believed that the proposed antenna will be excluded from further Environmental Assessment under 47CFR 1.1306 and 1.1307.

Sutro Tower maintains a detailed and comprehensive operating plan for NIER exposure for both public and occupational safety. The KREV facility will be integrated into that plan. The proposed FM station along with other users at the site will reduce power or cease operation during periods of

² <https://www.fcc.gov/general/fm-model>

maintenance near the KREV antenna to avoid potentially harmful exposure of personnel to non-ionizing RF radiation.

Respectfully Submitted

A handwritten signature in cursive script, reading "Bert Goldman". The signature is written in dark ink and is positioned above the printed name and title.

Bert Goldman
Technical Consultant

EXHIBIT A- ALLOCATION STUDY (LMS) Per 73.207

ComStudy 2.2 search of channel 224 (92.7 MHz Class A) at 37-45-19.0 N, 122-27-10.0 W.

CALL	CITY	ST CHN CL	DIST	SEP	BRNG	CLEARANCE
KREV	ALAMEDA	CA 224 A	6.70	115.00	130.6	-108.3 Existing LIC
KRZZ	SAN FRANCISCO	CA 227 B	7.75	69.00	168.5	-61.3 Grandfathered 3rd Adj
KCXU-LP	SAN JOSE	CA 224 LP100	68.69	67.00	133.2	1.7
KTOM-FM	MARINA	CA 224 B1	145.93	143.00	156.1	2.9
KFGY	HEALDSBURG	CA 225 B	116.84	113.00	343.3	3.8
KKDV	WALNUT CREEK	CA 221 A	36.06	31.00	63.2	5.1
KSJO	SAN JOSE	CA 222 B	85.26	69.00	135.3	16.3
KPCR-LP	SANTA CRUZ	CA 225 LP100	74.01	56.00	143.9	18.0
KBEB	SACRAMENTO	CA 223 B	135.88	113.00	38.5	22.9

LMS as of 12/5/23

EXHIBIT B Community Coverage

KREV Community Coverage (Longley-Rice) 70dBu

