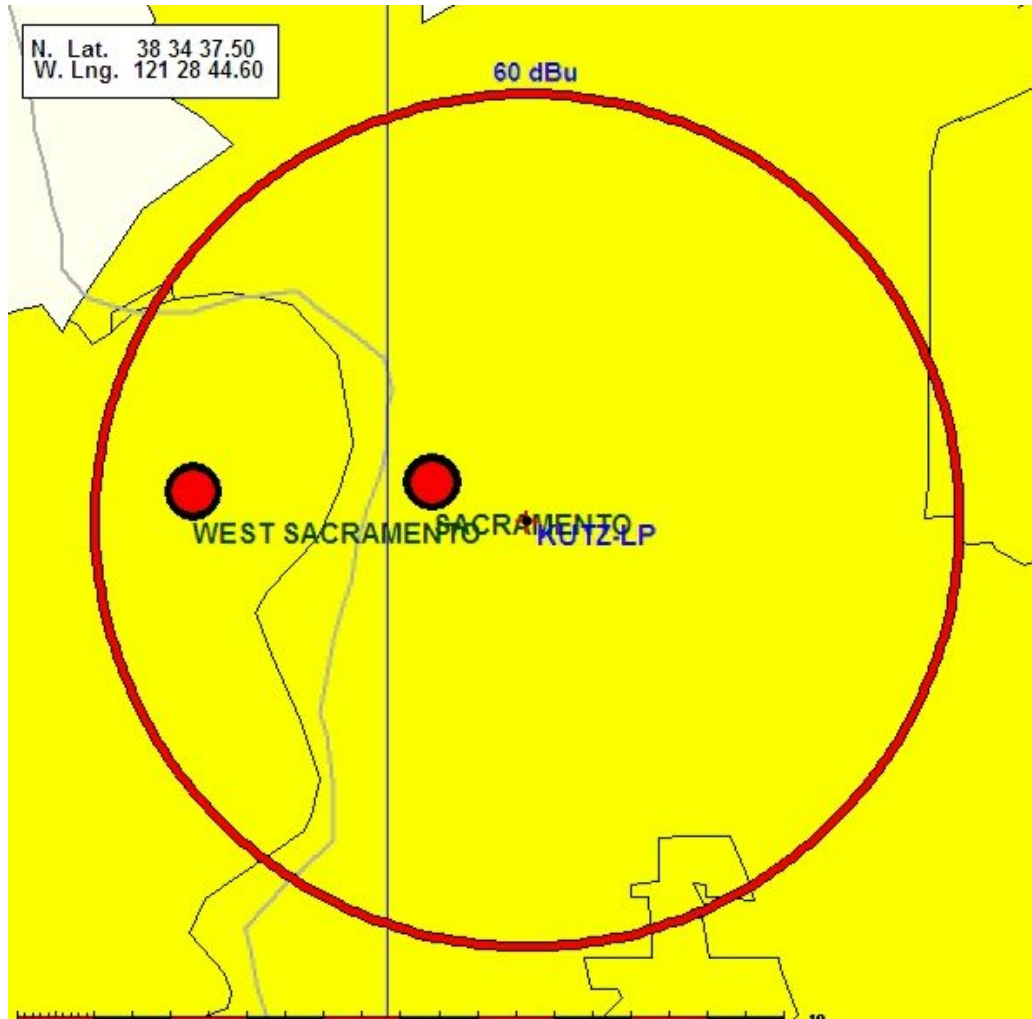


MINOR CHANGE OF LICENSED FACILITY

KUTZ-LP

SACRAMENTO, CALIFORNIA

Channel	276
New Location:	38 34 37.5 N 121 28 44.6 W (NAD 27)
	38 34 37.8 N 121 28 40.8 W (NAD 83)
Antenna AGL	15 m
Antenna Ground	4 m
Antenna COR	19 m
HAAT	9.9 m
ERP	100 w
Antenna:	NCG FM-95SL (Non-D)



Proposed 60 dBu

Midtown Radio

REFERENCE	CLASS = L1	DISPLAY DATES
38 34 37.50 N.		DATA 01-20-20
121 28 44.60 W.	Current Spacings to 2nd Adj.	SEARCH 03-29-20
----- Channel 276 - 103.1 MHz -----		

Call	Channel	Location	Azi	Dist	FCC	Margin
*KHHM	LIC-D 278A	Sacramento	CA 187.1	1.20	28.5	-27.3
K275BH	LIC 275D	Elk Grove	CA 140.7	17.78	14.5	3.3
KZWS-LP	LIC 275L1	Davis	CA 262.0	22.23	13.5	8.7
KKCY	LIC 276A	Colusa	CA 337.2	75.82	66.5	9.3
K275BJ	CP -D 275D	Folsom	CA 77.8	34.52	20.5	14.0
KATM	LIC 277B	Modesto	CA 174.4	111.76	96.5	15.3
ALLO	USE 277B	Modesto	CA 174.4	111.76	96.5	15.3
ALLO	USE 276A	Colusa	CA 327.0	83.39	66.5	16.9
K276EK	LIC-D 276D	Vacaville	CA 237.5	53.20	31.5	21.7
K276EK	LIC-D 276D	Vacaville	CA 237.5	53.22	31.5	21.7
K276EK	CP -D 276D	Vacaville	CA 237.5	53.22	31.5	21.7
KBAA	LIC-N 277A	Grass Valley	CA 38.8	84.49	55.5	29.0
KBLX-FM	LIC 275B	Berkeley	CA 220.6	129.47	96.5	33.0
ALLO	USE 275B	Berkeley	CA 220.6	129.48	96.5	33.0
KBLX-FM	LIC 275B	Berkeley	CA 220.6	129.48	96.5	33.0
ALLO	USE 275C	South Lake Tahoe	CA 64.6	152.62	119.5	33.1
K278CA	LIC 278D	El Dorado Hills	CA 73.5	48.39	7.5	40.9
KWYL	LIC 275C	South Lake Tahoe	CA 58.9	160.42	119.5	40.9
K275BJ	LIC 275D	Placerville	CA 75.0	61.54	14.5	47.0

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Reference station has protected zone issue: AM tower  
All separation margins include rounding  
\* See second adjacent waiver

## SECOND ADJACENT CHANNEL WAIVER

License respectfully requests a "second adjacent channel waiver" with regards to Section 47 C.F.R. Section 73.807 of the FCC rules based upon the "Living Way" precedence (Living Way Ministries, Inc., Memorandum Opinion and Order, 17 FCC Red 17054, 17056, ¶ 5 (2002), recon. denied 23 FCC Red 15070 (2008)). This will be accomplished by using Free Space methodology of calculation.

Using U/D methodology, at the proposed KUTZ-LP transmitter location KHHM has a signal strength of 113.1 dBu. Interference will occur when the KHHM signal exceeds the desired signal by 40 dbu. So the area of predicted interference would then be bounded by the 153.1 dBu contour

The distance to this contour, using free space method:

$D = (7.01 \cdot P^{1/2}) / E$ , where P is power (watts), E is field strength (v/m), and D is distance to contour (meters):

P = 100 w, E = 153.1 dBu D = 1.6 meters

With the antenna proposed 6 meters above the top ceiling of the structure that this is mounted upon, the 1.5 meter radius around the antenna contains an area of zero population. Due to zero population within this radiation radius, this meets the "Living way" Criteria to qualify for a Waiver of 47 C.F.R. Section 73.807. Thus, the applicant requests second adjacent waiver based upon evidence no interference is proposed.

#### ENVIRONMENTAL PROTECTION ACT / NIER ANALYSIS

The applicant proposes mounting a new antenna on a roof at 15 meters above ground. The antenna is 6 meters above the ceiling, or 7 meters (conservatively) to the nearest human (skull-level) on the third floor. See picture below. A one-bay groundplain omnidirectional antenna is proposed. The worst case scenario Phelps Dodge ring stub was used for simulation in FM Model. FM Model predicted a maximum RF exposure of  $160.8 \mu\text{W}/\text{cm}^2$ , at 1.4 meters from the antenna base. This represents 80.4% of the Maximum Permissible Exposure (MPE) of  $200 \mu\text{W}/\text{cm}^2$  for uncontrolled environments.

