

CENTRAL COAST MEDIA EDUCATION FOUNDATION  
KPCR-LP, FCC Facility ID 195593  
PROPOSED MINOR CHANGE OF LOW POWER FM FACILITY

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Channel	225	[Channel Change per §73.870(a)(1) -- see below]
New Location:	37 12 58.1 N, 121 57 37.1 W	
Antenna AGL	9 m	
Antenna Ground	245 m	
Antenna COR	254 m	
HAAT	-50 m	[Calculated from FCC website -- see below]
Power	100 w	

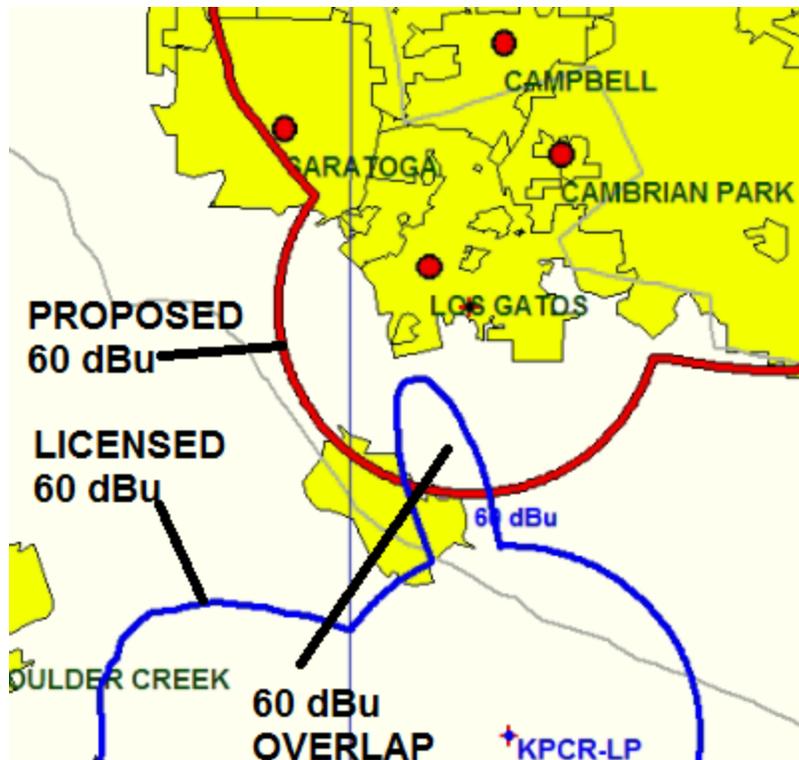


Figure 1: Proposed 60 dBu F(50,50) (RED) with licensed KPCR-LP 60 dBu (BLUE) Minor change move demonstrated.

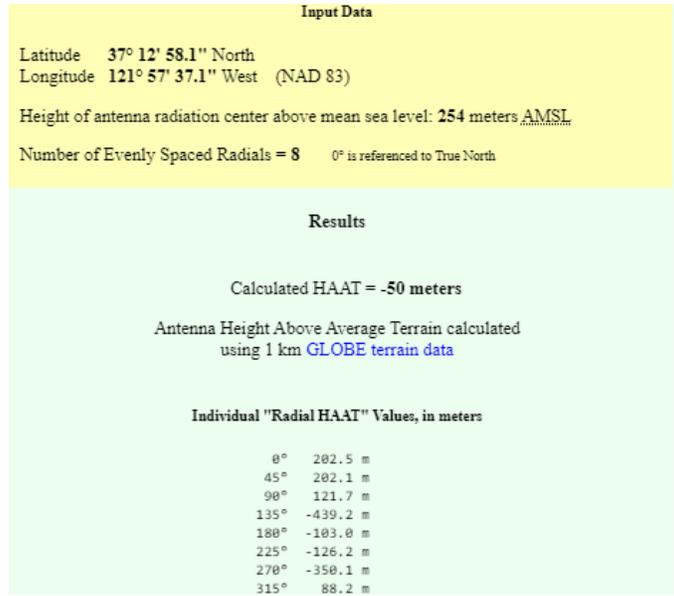


Figure 2: HAAT Calculation

**REQUEST FOR REPLACEMENT CHANNEL**

§73.870(a)(1) permits LPFM channel change "upon a technical showing of reduced interference, to any frequency". KPCR-LP is currently plagued by first-adjacent channel interference from first adjacent channel KCDU (FM). Figures 3 through 5 demonstrate interference of KPCR-LP on Channel 270.

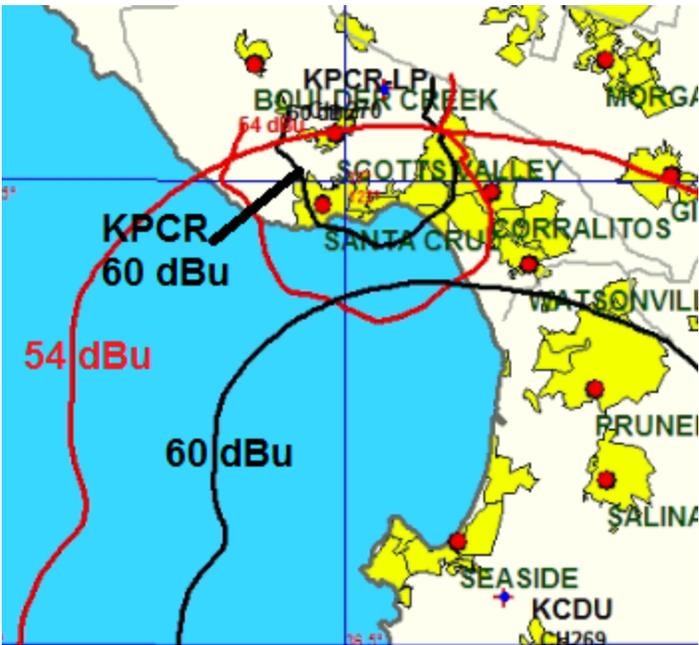


Figure 3: KPCR-LP vs KCDU (FM) 54 dBu interfering contour

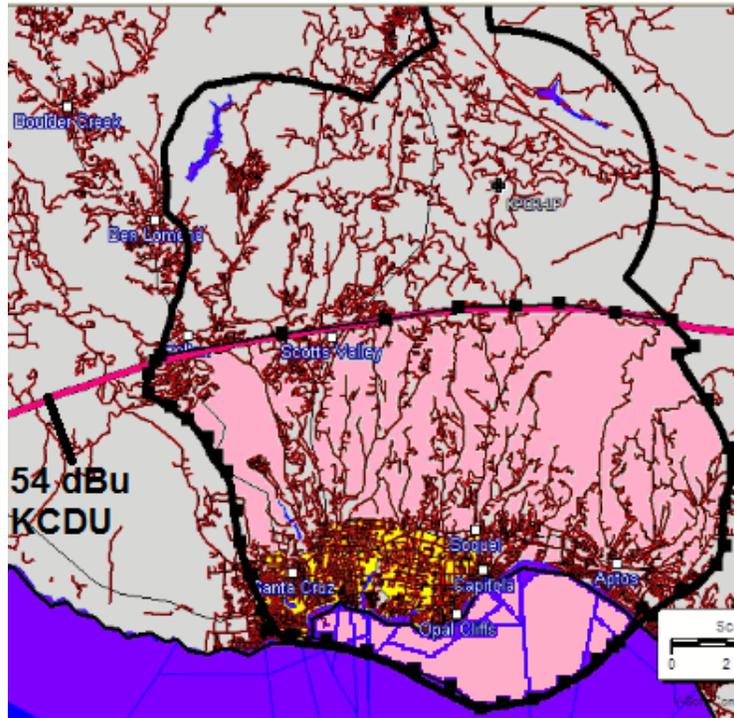


Figure 4: Licensed Facility: 56% of the KPCR-LP 60 dBu (87.8% of the population) is within the 54 dBu KCDU interference area (shaded pink above)

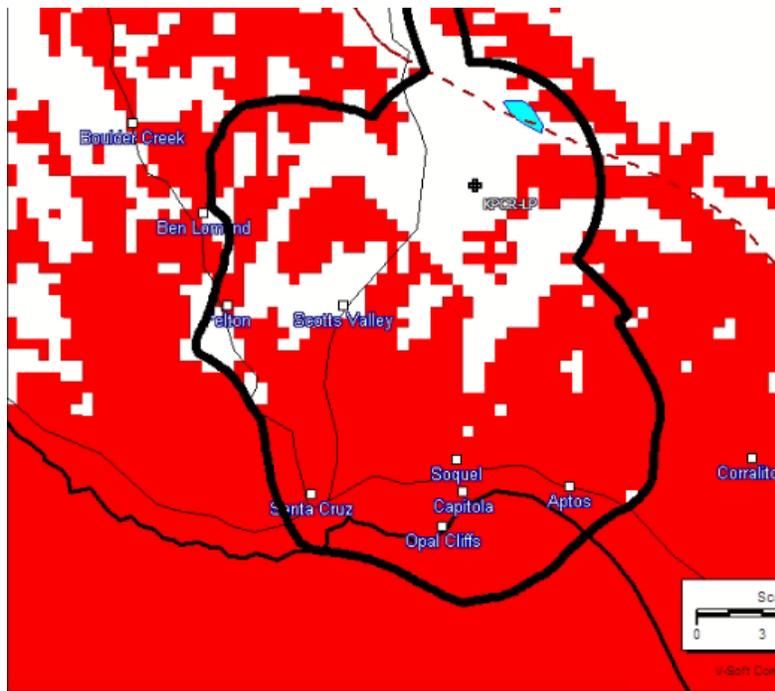


Figure 5: Licensed Facility: KPCR-LP 60 dBu FCC contour and Longley-Rice first adjacent interference (red) from KCDU (using standard FCC ratios)

KPCR-LP proposes moving to Channel 225. Figures 6 and 7 demonstrate interference on Channel 225 is less than current channel.

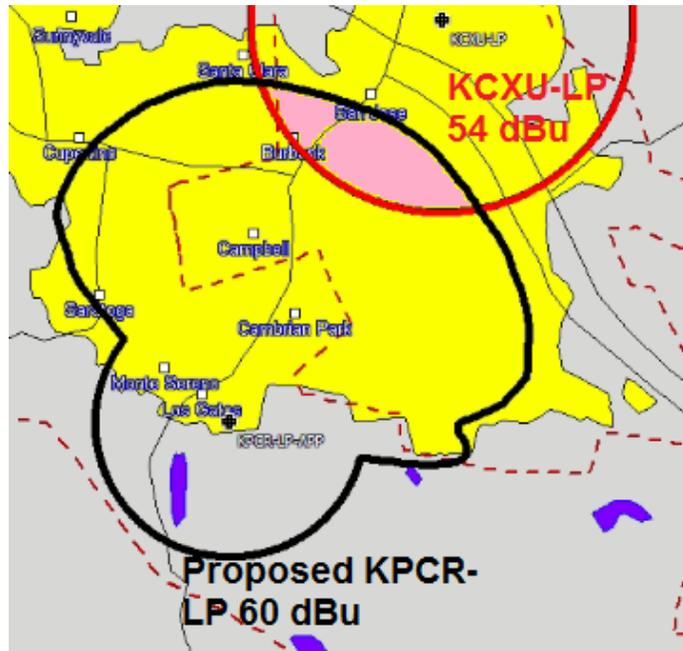


Figure 6: Above - Proposed KPCR-LP: KPCR 60 dBu with 8.5% of its 60 dBu area (12.1% population) receiving first adjacent interference from within KCXU-LP's 54 dBu.

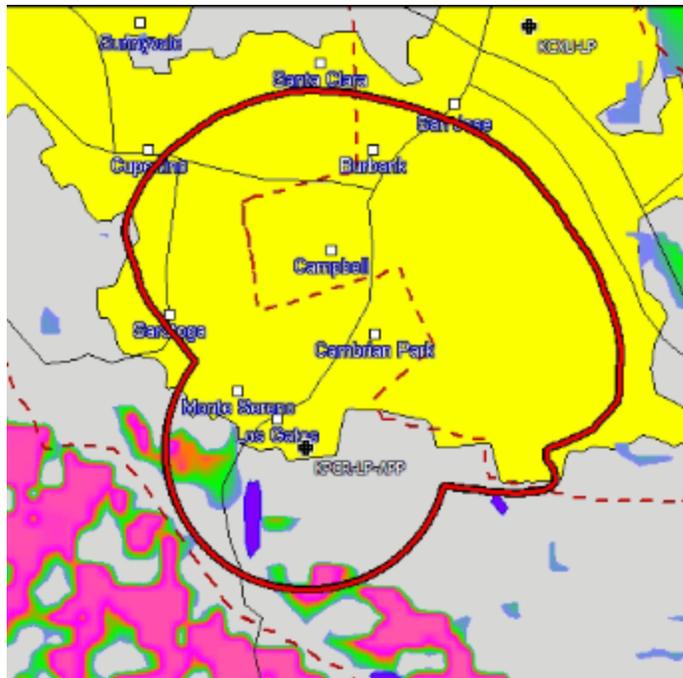


Figure 7: Above: Proposed KPCR-LP: KPCR-LP 60 dBu FCC contour with Longley-Rice plot of signal from first-adjacent channel KTOM-FM (pink is >60 dBu, red > 54 dBu, green >47 dBu). Interference is de minimis due to mountain-terrain blocking of KTOM-FM.

Conclusion: There is significantly less interference on the proposed Channel 225 compared to the current Channel 270, qualifying for channel change under §73.870(a)(1).

**SPACING**

Central Coast Media Education Foundation

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REFERENCE                                     DISPLAY DATES
37 12 58.10 N.                               CLASS = L1      DATA 09-10-21
121 57 37.10 W.                             Current Spacings to 2nd Adj. SEARCH 09-25-21
----- Channel 225 - 92.9 MHz -----
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Call	Channel	Location	Azi	Dist	FCC	Margin
(*1)DKQEK-LP CP	225L1	Cupertino	CA 308.7	12.29	23.5	-11.2
(*2)DK226CQ APP-D	226D	Gilmore	CA 137.1	24.02	27.5	-3.5
KRZZ LIC	227B	San Francisco	CA 321.5	67.05	66.5	0.55
KCXU-LP APP	224L1	San Jose	CA 27.0	14.37	13.5	0.9
KCXU-LP CP	224L1	San Jose	CA 27.0	14.37	13.5	0.9
KTOM-FM LIC	224B1	Marina	CA 168.3	75.21	73.5	1.7
KCXU-LP LIC	224L1	San Jose	CA 27.5	18.89	13.5	5.4
K225CX CP -D	225D	Palo Alto	CA 332.6	33.57	25.5	8.1
KREV APP-Z	224A	Alameda	CA 325.5	67.50	55.5	12.0
KREV LIC-Z	224A	Alameda	CA 325.5	67.50	55.5	12.0
K225CK LIC-D	225D	Union City	CA 356.8	40.99	25.5	15.5
KOSO LIC	225A	Patterson	CA 61.5	91.91	66.5	25.4
KXSM LIC-N	226A	Chualar	CA 144.9	102.58	55.5	47.1

All separation margins include rounding

(\*1) Application for license (File No. BLL-20150518APL) dismissed/Petition for reconsideration concerning dismissal of modification application (File No. BMPL-20180705AAQ) dismissed as moot. call letters deleted by 3/28/2019 letter 1800B-IB. Subsequent contests by licensee were dismissed. FCC sent licensee cease operation order 1800B3-IB 4/16/2020.

(\*2) Construction permit BNPFT-20171220ABI for new FM translator station K226CQ expired 07/30/2021 without being constructed even with extension; with 58 days elapsed any reconsideration has expired. Regardless, the translator construction permit contours did not conflict with the proposed LPFM (see Figure 8 below), and by any chance the translator permit can be reconsidered a waiver is requested in the public interest due to no FCC interference.

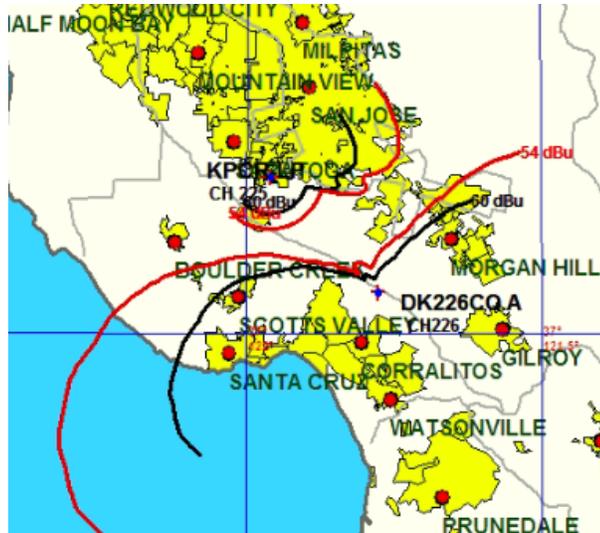
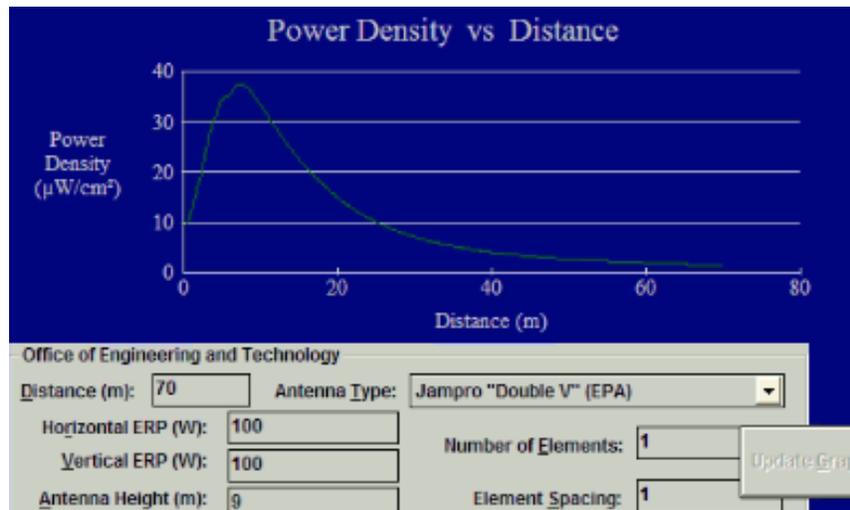


Figure 8

### NIER ANALYSIS



Power for the proposed will be 100 watts mounted on a tree. The OET program FM Model was used to determine the maximum predicted RF exposure.

The settings used were:

- Antenna: Jampro Double V
- Horizontal ERP (W): 100
- Vertical ERP (W): 100
- Antenna Height (m): 9

Number of Elements: 1  
Element Spacing: 0

Using these settings, the maximum predicted RF exposure for a human standing on the ground would be  $35.7 \mu\text{W}/\text{cm}^2$  at 7.1 m. This represents 18% of the Maximum Permissible Exposure (MPE) of  $200 \mu\text{W}/\text{cm}^2$  for uncontrolled environments. There are no significant other sources of RF energy on the structure (other broadcasters).

The site will have a sign regarding RF exposure hazards to tower climbers posted. If any work needs to be done around the structure the RF power will be temporarily shut off.