2018 JUL 31 PM 2: 05 Santa Clarita Organization for Planning and the Environment

TO PROMOTE, PROTECT AND PRESERVE THE ENVIRONMENT, ECOLOGY AND QUALITY OF LIFE IN THE SANTA CLARITA VALLEY

> POST OFFICE BOX 1182, SANTA CLARITA, CA 91386 www.scope.org

July 22, 2018

Marlene H. Dortch, Secretary Federal Communications Commission Office of the Secretary 445 12th Street, SW Washington, DC 20554 Received & Inspected

JUL 3 0 2018

FCC Mailroom

RE: KQRU-LP Santa, Clarita, CA Facility ID: 196118 Request for Engineering STA

Dear FCC:

KQRU-LP Santa Clarita wishes to submit a request for an Engineering Special Temporary Authority (STA). Due to unforeseen circumstances concerning the availability of electrical power at the licensed site, the facility needs to temporarily relocate until a permanent site can be found and authorized. The reasons for this request and a proposal follows.

Sincerely

Lynne Plambeck President, SCOPE lynne@scope.org 661-255-6899

cc: Dale Bickle, Audio Division, Media Bureau



# Engineering Special Temporary Authority KQRU-LP Santa Clarita, CA

### Engineering STA Request

#### Extraordinary Circumstances:

KQRU-LP faces an unusual situation that can be remedied with an Engineering STA. Crown Castle Communications recently purchased the broadcast site from AT&T Towers that KQRU-LP is located at but did not purchase the right-of-way for power to this site. This requires the licensee to run electricity to the site at its own expense which is cost-prohibitive. The station is currently operating with a generator as a temporary solution.

Normally, a minor change application would remedy the situation. However, there are two engineering parameters that prevent re-location.

(1) Facility is short spaced from the East by 19.7 km from K300CZ, preventing any move to the East. In the other direction, KSXS-LP minimum spacing prevents any move to the South or West.



(2) At 100-watts ERP, the facility imparts a second adjacent U/D interference overlap with KLVE (FM) of 140.3 meters. The small open wedge that it could theoretically move to consists of close-spaced housing tracts which would not allow sufficient interference protection. In fact, there are few relocation opportunities in Santa Clarita even if KQRU-LP was not short-spaced by K300CZ. Therefore, the facility is locked to its current location in terms of requests for minor changes.

*Request:* K300CZ, which is the translator limiting the facility from moving, has CP BMPFT-20170809ABJ that was granted 08/25/2017 for a move to Bakersfield, CA. Assuming K300CZ is granted a license to cover for its requested site, this would enable KQRU-LP to relocate. In the meantime, licensee requests permission to temporarily relocate transmitter/antenna until a new permanent broadcast site is found after K300CZ finalizes its move.

*Public interest*: The requested accommodation will allow KQRU-LP to continue broadcasting to its audience. A request to go silent is undesirable because of loss of its current listener base and programmers would be discouraged. This would have a negative impact with regard to income and programming and would also undermine community confidence in the service. The loss of a LPFM facility would not be in the public interest.

*Duration:* Duration is dependent upon how soon K300CZ relocates. Licensee is hoping BMPFT-20170809ABJ will build and become licensed within the next year. A six month engineering STA is requested, but this may need to be extended if K300CZ does not license within six months.

Engineering STA Proposal Effective Date: July 27, 2018

# Proposed Site Engineering

Coordinates:	34 27 32.0 N 118 31 38.8 W	NAD 27
	34 27 32.04 N 118 31 42.14 W	NAD 83
Ground Elevation:	445 meters	
Antenna Center of Radiation:	15 meters	
Total Height:	15.7 meters	
COR:	460 meters	
Power:	4 watts	



Proposed 60 dBu Red contour above demonstrates proposed site; Blue contour represents LPFM maximum licensed contour in Section 73.818 (100 watts). No new outgoing interference proposed.

TOWAIR

DETERMINATION Results						
Structure does not require registration. There are no airports within 8 kilometers (5 miles) of the coordinates you provided.						
Your Specifications						
NAD83 Coordinates						
Latitude	34-27-32.0 north					
Longitude	118-31-42.1 west					
Measurements (Meters)						
Overall Structure Height (AGL)	15.7					
Support Structure Height (AGL)	3.5					
Site Elevation (AMSL)	445					
Structure Type						
B - Building						

# Second Adjacent Waiver Compliance

Contour protection to 2nd-adjacent stations is provided using the ratio method. The F(50,50) contour of KLVE Los Angeles, CA is 74 dBu at the proposed LPFM site. Using the appropriate U/D ratio of 40dB, the "worst-case" interfering contour of the proposed LPFM is therefore 114 dBu. At the proposed 4 watts ERP, this contour would extend to a distance of 31.4 meters from the antenna. However, the field strength of the proposed antenna system falls quickly at depression angles below the horizon. The proposed 1-bay, Dominator NWE-34 antenna would be mounted 15 m AGL. Using elevation pattern data provided by the manufacturer, the distance to the 114 dBu contour at various depression angles is tabulated on the chart below. The interference area extends to 3.9 meters above ground. The interference is contained completely above the signal story structure. Therefore, there are no populated areas within the interference zone. By passing the *Living Way* criteria, the applicant requests a second adjacent channel waiver.

#### **Clearance at Depression Angles**

MAX ERP	DEPRESSIO N ANGLE BELOW HORIZON	RELATIVE FIELD	dB FROM RELATIVE	ERP	ANGULAR DISTANCE TO 114 dBu CONTOUR	VERTICAL DISTANCE (below antenna)	HORIZONTA L DISTANCE TO 114 dBu CONTOUR	CLEARANC E OF CONTOUR ABOVE GROUND
4	5	0.989	-0.096	3.91	27.6	2.4	27.4	12.6
4	10	0.966	-0.300	3.73	27	4.6	26.5	10.4
4	15	0.931	-0.621	3.47	26	6.7	25.1	8.3
4	20	0.885	-1.061	3.13	24.7	8.4	23.2	6.6

4	25	0.829	-1.629	2.75	23.1	9.7	20.9	5.3
4	30	0.766	-2.315	2.35	21.4	10.6	18.5	4.4
4	35	0.687	-3.261	1.89	19.2	11	15.7	4
4	40	0.625	-4.082	1.56	17.4	11.1	13.3	3.9
4	45	0.551	-5.177	1.21	15.4	10.8	10.8	4.2
4	50	0.477	-6.430	0.91	13.3	10.1	8.5	4.9
4	55	0.406	-7.829	0.66	11.3	9.2	6.4	5.8
4	60	0.338	-9.422	0.46	9.4	8.1	4.7	6.9
4	65	0.275	-11.213	0.30	7.6	6.8	3.2	8.2
4	70	0.216	-13.311	0.19	6	5.6	2	9.4
4	75	0.161	-15.863	0.10	4.5	4.3	1.1	10.7
4	80	0.107	-19.412	0.05	2.9	2.8	0.5	12.2
4	85	0.051	-25.849	0.01	1.4	1.3	0.1	13.7
4	90	0.03	-30.458	0.00	0.8	0.7	0	14.3

# **Environmental Compliance**

A worst-case scenario emitter antenna was used to gauge the maximum RF for the proposal in OET program FM Model for Windows demonstrating a peak exposure of 1.6  $\mu$ W/cm<sup>2</sup> at 2.7 m (horizontally) 12 meters under the antenna (as 15 meters is the ground, and <3 meters above ground being the human being occupancy space). This is 0.8% of the FCC Maximum Permissible Exposure (MPR) for 200  $\mu$ W/cm<sup>2</sup>. 47 CFR 1.1307(b)(3) exempts applicants from preparing an Environmental Assessment when the predicted exposure levels would be less than 5% of the FCC limit.



# TECHNICAL CONSULT CERTIFICATION

# TECHNICAL CONSULT CERTIFICATION

I declare under penalty of perjury, that the technical content of this Engineering STA request is true and accurate to the best of my knowledge and belief. I further certify over 10 years experience in submitting engineering exhibits before the FCC, 20 years performing broadcasting engineering work associated with radio facilities, a degree in Engineering from the University of California, Davis, and familiarity with FCC regulations.

07/22/2018

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