

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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JUL -9 2019

Bureau / Office

In the Matter of)
)
CHANNEL 51 OF SAN DIEGO, INC.)
)
Request for Waiver and Amendment to a)
Displacement for LPTV Translator)
Application)
)
Temecula, California)

Application No. 0000052518
FCC Call Sign K12PO

To: Michelle M. Carey, Chief
Media Bureau

**REPLY TO OPPOSITION
OF LOS ANGELES COUNTY, CALIFORNIA**

The County of Los Angeles, California ("LA County"), through counsel and pursuant to Section 1.45(c) of the Commission's Rules, hereby submits its Reply to the Opposition submitted by Channel 51 of San Diego, Inc. ("Petitioner") in response to the Petition to Deny submitted by LA County in the above-captioned matter. In support thereof, the following is shown:

I. REPLY

A. LA County's Filing Is Timely

It is Petitioner's contention that LA County's filing is untimely, as Petitioner alleges that the Application was placed on Public Notice by the Commission on April 11, 2018, September 17, 2018 and April 10, 2019, as well as Petitioner sending an e-mail with a copy of the filing to counsel to LA County on April 15, 2019. However, Petitioner fails to note that: (1) its application requests a waiver; (2) it never served a copy of the application and waiver on the licensee; and (3) a waiver was not requested until the April 2019 amendment filing.

Petitioner's failure to serve a copy of a waiver application upon LA County is fatal to Petitioner's argument. Certainly, Petitioner does not expect LA County to every Wednesday search through a mountainous FCC filing document of hundreds of broadcast applications when perhaps a television station not previously co-channel to LA County would ask for co-channel status and request a rule waiver. Rather, it was Petitioner's responsibility to provide service on LA County, which is has still failed to do.

For its part, immediately upon receipt of the courtesy, non-service e-mail on April 15, 2019, LA County contacted the Commission and requested procedures for submitting a response, both in form and in timing. LA County's filing was in accordance with Commission direction. However, to the extent that the Commission believes necessary, LA County respectfully requests that the Commission treat this submission as a Motion to Accept the late filing of the Petition to Deny. It is abundantly clear that the circumstances of the Petitioner's actions, and the public interest in public safety in Los Angeles presents more than good cause for Commission favorable action on such a Motion.¹

B. Petitioner's Proposed Operation Will Cause Interference

It is difficult to reconcile Petitioner's Engineering Exhibit with what LA County actually submitted in its Petition. Specifically, as discussed in the attached Pericle Statement, every allegation by Petitioner about Pericle's Study misstates the facts as to what is included in the Pericle Study. It is abundantly clear that Pericle's Study demonstrates that interference will occur.

Petitioner surmises that LA County's Mount Disappointment site will never be constructed. Without going through the long documentation of how that particular site will be

¹ As noted by Petitioner, the Commission may treat LA County's Petition as an Informal Objection. However, LA County believes that it has complied in all ways with the Commission's Rules, and its filing should be afforded Petition to Deny treatment.

constructed in the coming year, Petitioner completely ignores what was stated in the Petition to Deny. Specifically, LA County stated that it had requested that Pericle conduct a study at a single site to determine whether interference would occur in order to prepare a submission to the Commission as quickly as possible, and to keep costs to a minimum. There is no question that the proposed operation will cause interference at additional LA County transmitter sites. However, the value proposition of conducting an interference evaluation is limited, as Petitioner failed to provide anything other than a flawed engineering study. In addition, Petitioner's "first-in" argument is inconsistent with the facts, as it fails to consider that LA County has already constructed Channel 15 frequencies throughout the area at sites other than Mt. Disappointment.

However, should the Commission request a more detailed study at all licensed sites, LA County would be willing to conduct tests at additional sites, at Petitioner's expense. Further, it must be understood that the LA County radio system is a simulcast system. Thus, interference at a single site disrupts operations at all sites in the same cell.

Petitioner discounts LA County's discussion of interference from analog television stations to land mobile stations is "antiquated and misplaced." However, the opposite is true. In fact, the experience of land mobile licensees (and the Commission) in having to document interference, having to make significant system modifications, etc. is directly relevant to what will reoccur when interference is caused here. It is irrelevant whether all of the expended costs have to do with digital or analog operations, the time and costs remain.

More importantly, the experience in the land mobile industry is that interference from digital systems is more likely to occur. Specifically, since the introduction of digital transmission methodologies into the marketplace have proven that the "digital cliff" effect results in more interference situations, as usable signals propagate further. To compensate, frequency

coordinators have adjusted their practices to require additional distance between co-channel systems in a digital-to-digital or digital-to-analog environment. The Commission's Public Safety and Homeland Security Bureau is well aware of these issues, which will clearly take place here.

LA County's discussion of its current interference issue with the Tijuana television station was never meant to suggest that Petitioner's interference will be cumulative with the Tijuana interference. Rather, it clearly demonstrates the interference that a digital television station can cause to a land mobile station further away than an analog signal can cause. The Commission must consider this reality.

C. The Petitioner Has Alternatives

Petitioner claims that it has no other alternative "... because no other channels are available." However, Petitioner fails to mention that it already operates at least one alternative. Specifically, K12PO's operations are simply a rebroadcast of Petitioner's operation in San Diego. K12PO's operation is merely a signal extension of the San Diego operation. Petitioner fails to document how many Temecula homes cannot receive a usable over-the-air signal from KUSI-TV. More importantly, Petitioner fails to acknowledge that KUSI-TV is readily available via Spectrum Cable (Channel 1243) in Temecula. Such availability will continue, regardless of whether K12PO finds an over-the-air option. Petitioner even fails to document how much of its viewership in Temecula is over-the-air from San Diego, versus over-the-air from K12PO, versus through cable or satellite.

Even if over-the-air and cable options for KUSI-TV's signal in Temecula, there is no right for Petitioner to serve Temecula. The residents of Temecula have many over-the-air television options, in addition to KUSI-TV. Besides KZSW-TV in Temecula, the community is served with a usable signal from: KVCR (San Bernardino), KVMD (Twentynine Palms), KMIR (Palm

Springs) and KESQ (Palm Springs), along with each of these stations' sub-channels, without any consideration of penetration by other San Diego stations.²

II. CONCLUSION

WHEREFORE, the premises considered, it is respectfully requested that the Commission DENY the Waiver Request submitted by Channel 51 of San Diego, Inc.

Respectfully Submitted,

LOS ANGELES COUNTY, CALIFORNIA

By: Alan S. Tilles, Esquire

Its Attorney

Shulman Rogers Gandal Pordy & Ecker, P.A.
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Date: July 9, 2019

² The presence of multiple over-the-air, cable and satellite options mitigates any claim of "public interest" by Petitioner, particularly to the extent that such a claim must be balanced against Petitioner causing interference to a public safety radio system.



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July 3, 2019

Via Email

Mr. Alan Tilles

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Subject: Co-Channel Interference from K15MG-D (Temecula, CA) to Los Angeles County
T-Band Fixed Sites — Opposition to Petition to Deny, dated June 26, 2019

Dear Mr. Tilles:

In the subject filing, the station incorrectly claims that there is sufficient path loss to preclude harmful interference on the Channel 15 to Mt. Disappointment path. Our original calculations provided in our May 20, 2019 report (the "Pericle Study") are correct. We showed that the predicted interference is 16.9 dB above the *de minimis* level and is therefore likely to cause significant harmful interference.

The subject filing includes an interference study (the "CTI Study"). Here are the points where the CTI study went wrong with regard to the Mt. Disappointment path:

- The CTI Study claims that Pericle set a -106.2 dBm *de minimis* threshold for the LA County LMR radios. Not true. We simply defined the noise floor in a 6 MHz bandwidth for a broadcast engineering audience who is comfortable thinking about a 6 MHz signal bandwidth. The LMR radio receiver equivalent noise bandwidth is of course much less (typically 8.5 kHz for P25 radios). Because the TV spectrum is essentially flat (except for the pilot), the interference power in the LMR receiver is directly proportional to the ratio of the two bandwidths. If the author of the CTI Study has difficulty with this concept, it might be helpful to think of the *de minimis* interference threshold as -174 dBm/Hz, independent of receiver bandwidth.
- The CTI Study claims that Pericle used the full station ERP in its calculations although the pattern has a significant null in the direction of Mt. Disappointment. Not true. Pericle is fully aware of the station's azimuth pattern. Our report clearly shows that the effective ERP is 159.3 Watts on the relevant azimuth versus the full ERP of 9 kW.
- The CTI Study claims that Pericle failed to include Fresnel loss (presumably diffraction loss caused by a clearance less than $0.6 F_1$). Not true. The excess path loss (beyond free space loss) is 26.5 dB which includes all diffraction loss, including "Fresnel loss."

- The CTI Study calculations for the Mt. Disappointment path are found on page 36 of the subject filing. The summary shows a "path loss"(base loss) of 142.5 dB. It is not clear what this number represents, but the free space loss (FSL) for the 114.3 km path is 127.2 dB, not 142.5 dB. What is the additional loss? Is it valid for point-to-point path with antennas above the clutter? This is one of the differences between an area study software program like ComStudy and a point-to-point study. If one wants to accurately predict the signal or interference amplitude at a specific point, a point-to-point study is best. The CTI Study summary also implies an LMR bandwidth of roughly 28 kHz. This is not realistic, but it does not matter if we think of the *de minimis* threshold as -174 dBm/Hz (receiver noise figure = 6 dB).
- The correct interference calculation is straightforward (first for a 6 MHz bandwidth):

$$P_r = 52 \text{ dBm (eff. ERP)} + 2.15 (G_d) - 127.2 \text{ (FSL)} - 26.5 (L_d) + 2.15 (G_d) + 8 (G_r) = -89.3 \text{ dBm},$$

which is 16.9 dB above the *de minimis* threshold of -106.2 dBm. Now for a 8.5 kHz bandwidth,

$$P_r = -89.3 \text{ dBm} + 10\log_{10}(8,500/6,000,000) = -117.8 \text{ dBm}$$

which is also 16.9 dB above the *de minimis* threshold for this bandwidth because the threshold for an 8.5 kHz receiver bandwidth is $-174 \text{ dBm/Hz} + 10\log_{10}(8,500) = -134.7 \text{ dBm}$.

Conclusions. Our original calculations are correct. The CTI Study makes several errors, some of which we have highlighted above. We can conclude that a point-to-point path prediction shows significant interference is likely to occur from K15MG-D on the Mt. Disappointment path. Note that the County is already dealing with field-verified interference from XHTJB Channel 15 (Tijuana) to multiple sites, some of which are over 200 km distant from the television station.

If you require further information, you can reach me at (303) 759-5111 or via email at jacobsmeier@pericle.com.

Under penalty of perjury, I declare the foregoing is true and correct.



Jay M. Jacobsmeier, P.E.
Colorado License # 28768
July 3, 2019

CERTIFICATION OF SERVICE

I, Julie Maiello, an administrative assistant in the law firm of Shulman, Rogers, Gandal, Pordy & Ecker, P.A., hereby certifies that on this 9th day of July 2019, I sent a copy of the foregoing Reply to Opposition to Petition to Deny of Los Angeles County, California via United States, postage prepaid regular mail to the following:

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Julie Maiello