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*Consultants in Electronic Media Technology/Management*

**KVMD Licensee Co., LLC**  
**Technical Statement in Support of Request for Waiver:**  
**Station KVMD**  
**Channel 23**  
**Twentynine Palms, CA**  
**File No. BPCDT-20100325ACD**

**Introduction**

This Technical Statement is provided in support of the Request for Waiver of KVMD Licensee Co., LLC (“KVMD”) with respect to the freeze on application processing that was announced by the FCC through *Public Notice* (DA 13-618) on April 5, 2013.

KVMD has had on file since March 25, 2010, its application for a Distributed Transmission Systems (DTS) service to be provided by Station KVMD on Channel 23, in File No. BPCDT-20100325ACD. This DTS service will improve Station KVMD’s reception service in portions of the Los Angeles market that it currently serves.

Evaluation of the application has been favorably completed by the Media Bureau, and it was sent by the International Bureau, in July, 2012, to the Mexican regulatory authorities at the COFETEL for their concurrence. Interchange between the FCC and COFETEL regarding the needed concurrence is ongoing.

**New Service**

Among the benefits of the planned KVMD DTS network is new service to be provided to residents of the High Desert region to the north of Los Angeles. Communities in the area include Victorville, Hesperia, Cajon, and Palmdale, among others. In that region, despite its inclusion within the Predicted Noise-Limited Contours (PNLCs) of a number of Los Angeles full-service television stations, there is little to no television service from those

full-service stations. This result obtains because of the obstruction of the San Gabriel Mountains in the paths from the Los Angeles transmitter sites at Mt. Wilson and Mt. Harvard to the High Desert communities. There is only one full-service television station with a transmitter located in the High Desert area (Station KILM, Barstow, California), and it therefore is the only station easily accessible by the residents of that region.

The KVMD DTS network is designed to provide access to a second full-service television station by the viewers in the High Desert communities. By locating a transmitter at the same site as KILM, the KVMD DTS network will deliver television signals strong enough for indoor reception by over a million people who previously were able to receive such signals from only a single station. The conditions that led to such lack of service to people who theoretically were included in a served area and the network design that alleviates those conditions are discussed next.

### **Service Comparisons**

The Los Angeles television market (as defined by the Nielsen Designated Market Area – DMA) has 26 full-service television stations – the largest number of any market in the United States. Despite the communities of the High Desert being located only 25 – 50 miles from one of the higher transmitter sites in the country (Mt. Wilson is at 5,740 feet above mean sea level – AMSL), signals from the transmitters are obstructed by a 15 – 20-mile-wide band of mountains that reach elevations of 8,000 – 10,000 feet AMSL. While numerous examples could be given (indeed, the signals from 25 of the 26 stations in the market are blocked to the High Desert), a pair will suffice to exemplify the situation – one VHF and one UHF.

In the maps provided at the end of this Technical Statement, Figures 1 and 2 show the predicted field strengths of two stations based on the Longley-Rice terrain-dependent propagation model. Figure 1 depicts the predicted field strength of KTTV, Channel 11, Los Angeles – the station having the strongest VHF signal in the region. It serves as the most optimistic representative of reception potential from full-service VHF stations in the Los Angeles market. In the maps, extremely weak signals are color-coded in cyan, very

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weak signals are in green, weak signals are in purple, and higher level signals never appear in the High Desert region. The black and grey blotches show population density.

In the High Desert region, which is roughly the area encompassed by the purple contour (of the KVMD transmitter at Quartzite Mountain) but extending somewhat further to the west, there are some portions of the region where the signal from KTTV exceeds the theoretical reception threshold, but is nevertheless very weak, would require large receiving antennas mounted high above homes if it is to be received, and certainly would not be strong enough for indoor reception. Moreover, there are large portions of the High Desert region where the signal from KTTV does not even reach the theoretical reception threshold, which itself is known to underestimate the signal level required for reception. Thus, from the perspective of reception of full-service VHF television signals, as optimistically represented by KTTV, they are essentially non-existent in the High Desert area.

Figure 2 depicts the predicted field strength of KNBC, Channel 36, Los Angeles, which has among the best full-service UHF signals reaching any part of the High Desert region. Thus, it is the most optimistic representative of UHF stations in the Los Angeles market with respect to service to the High Desert area. As in the case of KTTV, the KNBC signal that reaches the High Desert is just above the theoretical threshold and thus is very weak, would require large receiving antennas mounted high above homes if it is to be received, and certainly would not be strong enough for indoor reception. Moreover, there are large portions of the High Desert region where the signal from KNBC does not even reach the theoretical reception threshold, which itself is known to underestimate the signal level required for reception. Thus, from the perspective of reception of full-service UHF television signals, as optimistically represented by KNBC, they are essentially non-existent in the High Desert area.

Figure 3, on the other hand, shows the predicted field strength from the KVMD facility at Quartzite Mountain. It is evident that much higher field strengths than those from the VHF and UHF examples of Figures 1 and 2 prevail throughout the High Desert region. Indeed, signal levels in the populated areas of the region generally are predicted to be

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80 dBu or higher, making indoor reception reliably obtainable. Thus, with the expected construction of the KVMD DTS network, on the order of 1 million people who currently receive only a single station that is easily accessible to them will receive a signal from a second station strong enough to be received indoors and on mobile devices – that is, unless the current freeze precludes its construction. Thus, a waiver of the freeze is requested to permit the coordination with Mexico to proceed to conclusion and to permit the construction and licensing of facilities that have been in development for many years and are now close to reaching fruition.

Respectfully submitted,

A handwritten signature in black ink that reads "S. Merrill Weiss". The signature is written in a cursive, flowing style.

S. Merrill Weiss  
Merrill Weiss Group LLC

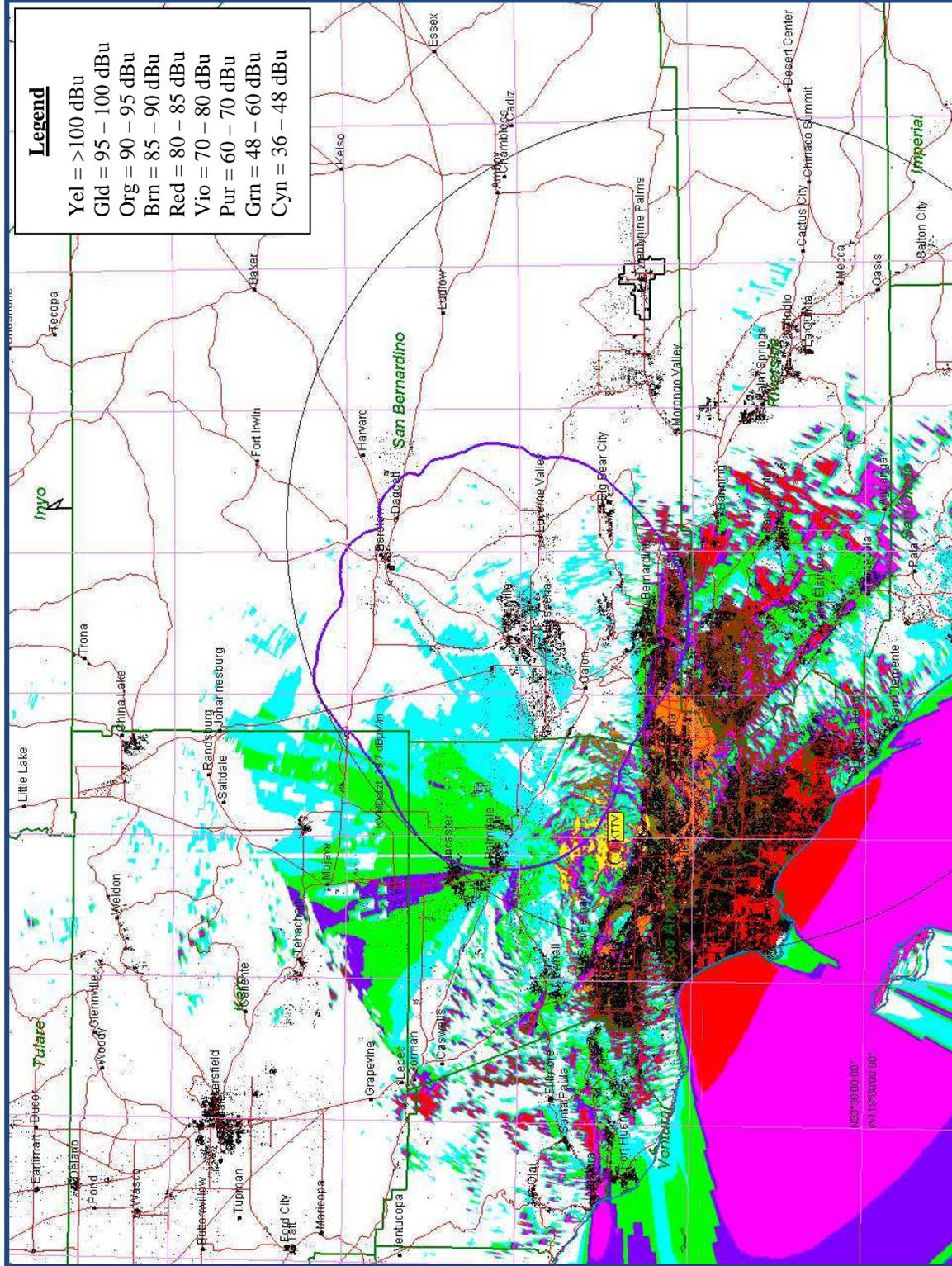


Figure 1 — KTTV, Channel 11, Longley-Rice Field Strength in High Desert Region

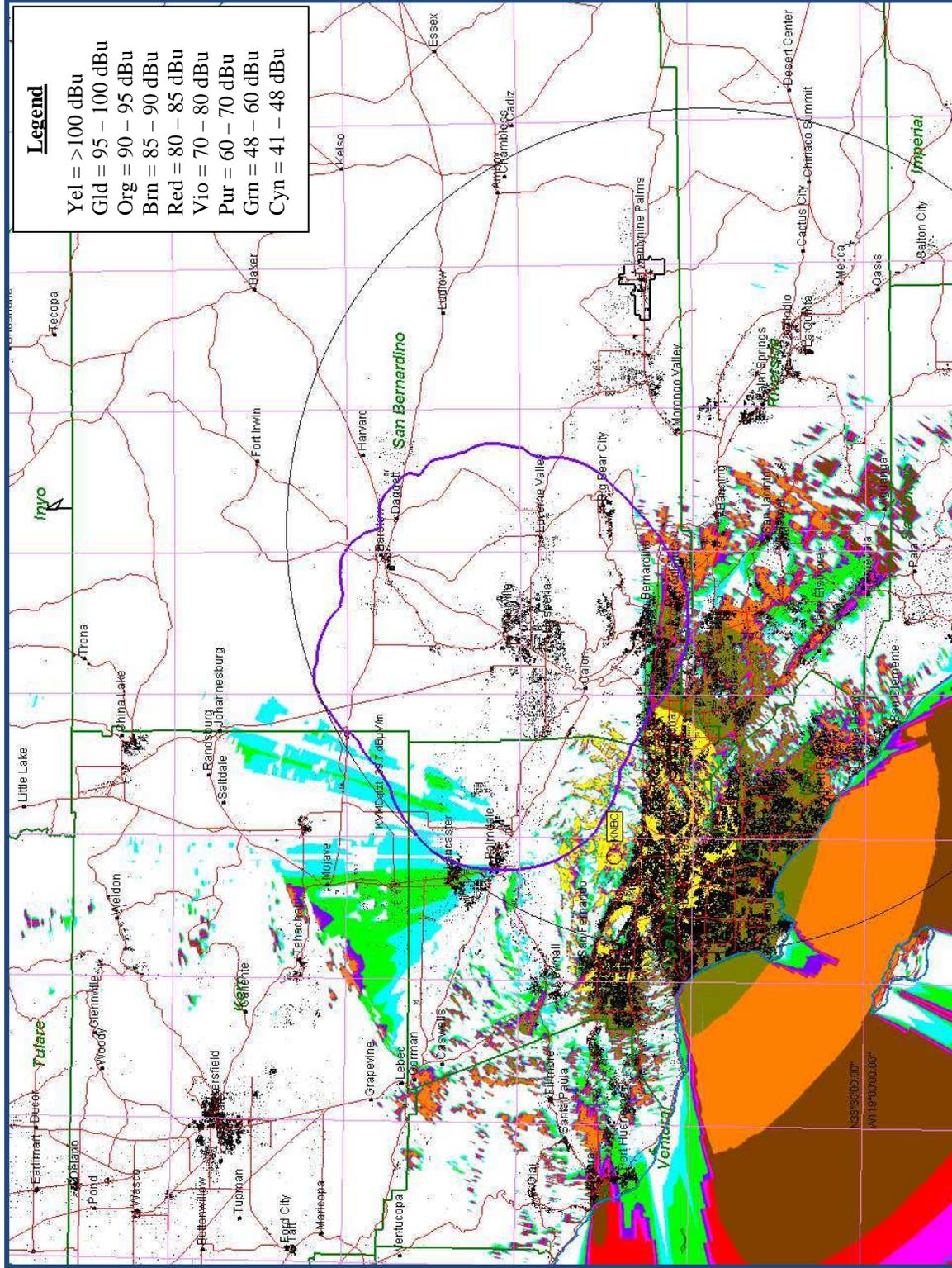


Figure 2 — KNBC, Channel 36, Longley-Rice Field Strength in High Desert Region

