

## **Experimental STA Request for Extension of -10db HD Operation**

July 2, 2020

Dear Secretary,

Educational Media Foundation (EMF) requested and was granted Experimental Special Temporary Authority for operation of the KLVB digital carrier levels. EMF requested and was granted permission to operate KLVB (FID 70676) in the asymmetrical mode with the upper digital sideband carrier at a power level of -10dbc and the lower digital sideband carrier at a power level of -14dbc.

### **Methodology and Results**

EMF found areas inside the KLVB 60dbu analog contour where the digital signal level was below reception levels due to the terrain within the 60dbu contour. Operating the upper sideband carrier at the -10dbc level while leaving the lower sideband carrier level at -14dbc helped alleviate this problem. Signal levels and a drive test were performed upon commencing operation of the increased power on the upper sideband and a noticeable difference was observed.

### **Technical Showing for Asymmetrical Operation**

According to MM Docket No. 99-325 Paragraph 20, increased digital sideband operation above -14dbc is allowed if certain criteria is met:

20. A licensee desiring FM Digital ERP in excess of -14 dBc is required to calculate the station's analog F(50,10) field strength at all points on the protected 60 dBu F(50,50) contour of a potentially affected first-adjacent channel analog FM station. This calculation must be done using the station's licensed analog facilities<sup>43</sup> and the standard FCC contour prediction methodology.<sup>44</sup> Once the most restrictive analog F(50,10) field strength of the proponent station has been determined, the licensee will use the following table to determine the proponent station's maximum permissible FM Digital ERP:

Proponent Analog F(50,10) Field Strength at Protected Analog 60 dBu F(50,50) Contour	Maximum Permissible FM Digital ERP
51.2 dB $\mu$ and above	-14 dBc
50.7 dB $\mu$ - 51.1 dB $\mu$	-13 dBc
50.3 dB $\mu$ - 50.6 dB $\mu$	-12 dBc
49.6 dB $\mu$ - 50.2 dB $\mu$	-11 dBc
49.5 dB $\mu$ or less	-10 dBc

**Educational Media Foundation**

5700 West Oaks Blvd.  
Rocklin, CA 95765

*Exhibit 1*  
*Citrus Heights, CA*

In the case of KLVB operating on channel 258 and first adjacent station KMQV-FM (FID 1084) operating on channel 259, the KLVB 49.5dbu(F50-10) contour does not overlap the KMQV-FM 60dbu(F50-50) contour as seen in Exhibit 1-A. Therefore, according to the chart seen above, -10dbc is permissible on the KLVB upper sideband.

**Lack of Objectionable Interference**

This experimental authority is specifically conditioned on the lack of objectionable interference.

EMF has received no complaints of interference since commencing operation with the -10dbc power level on the KLVB upper sideband. In the event of interference complaints, EMF agrees to discontinue operation of the KLVB experimental power level of -10dbc on the upper sideband carrier and revert to the -14dbc power level.

**Term of Operation**

EMF understands this experimental operation, when granted, was valid for a 5 year period and is required to request renewal of the grant on an annual basis. This is the first request of a renewal of this experimental operation of -10dbc on the upper sideband carrier. Since no interference complaints have been received during the first 12 months of operation and with a noticeable improvement of reception of the digital carrier, EMF respectfully requests an extension of the experimental operation.

**Anti-Drug Abuse Act Certification**

Applicant certifies that neither licensee/permittee nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.

Sincerely,

James L Travis  
FCC Compliance Engineer  
Educational Media Foundation  
5700 W Oak Blvd  
Rocklin, CA 95765