

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

In the Matter of )  
 )  
Advanced Television Systems and ) MB Docket No. 87-268  
Their Impact Upon the Existing )  
Television Broadcast Service )  
 )

To: The Commission

**Petition for Reconsideration**

The firm of Hammett & Edison, Inc., Consulting Engineers, respectfully submits this Petition for Reconsideration of the March 6, 2008, *Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order and Eighth Report and Order* (Eighth MO&O). Hammett & Edison, Inc. is a professional service organization that provides consultation to commercial and governmental clients on communications, radio, television, and related engineering matters.

**I. The Eighth MO&O Is Inconsistent with the Policy Established in the Fifth MO&O Regarding the Lack of Applicability of NTSC-Only Analog Technical Standards to DTV Stations**

1. At Paragraph 14 of the February 23, 1998, Media Bureau (MB) Docket 87-268 *Memorandum Opinion and Order on Reconsideration of the Fifth Report and Order* (Fifth MO&O), the Commission established the policy that

In addition, such a new permittee of licensee's DTV facility must generally comply with the analog operation rules, such as minimum operating hours, except where the analog rule is inconsistent with the digital rules or inapplicable to digital technology.

That is, the existing FCC rules were to apply to DTV stations and operations, unless it was clear that those rules were inapplicable or technically inconsistent with digital operation. This approach avoided the creation of DTV-specific operational rules throughout Parts 1, 2, 73 and 74 of the FCC rules; for example, it was thus not necessary to modify Section 73.1560 ("Operating Power and Mode Tolerances") of the FCC Rules to add a DTV-specific power tolerance.

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Instead, the existing analog power tolerance of 80% to 110% of the authorized power would apply. Likewise, Section 73.653 of the FCC rules ("Operation of TV Aural and Visual Transmitters") would clearly be inapplicable to DTV stations, even though that section still exists in the FCC Rules, and was not modified to explicitly state that it did not apply to DTV stations.

2. Unfortunately, the Commission has now turned this principle on its head in the Eighth MO&O, by ruling, at Paragraph 26, that the NTSC TV Channel 6 protection rules apply to DTV Channel 6 stations. Such a reading of Section 73.525 ("TV Channel 6 Protection") of the FCC Rules is flawed and contrary to the entirely reasonable policy established in the Fifth MO&O. The rules requiring noncommercial educational FM (NCEFM) stations to minimize the interference to TV Channel 6 reception were derived for *analog National Television Systems Committee (NTSC) operations*, with its discrete visual carrier, discrete aural carrier, and for the characteristics of *analog NTSC* receivers. To apply those technical standards to a noise-like DTV Channel 6 signal, and to the performance characteristics of a digital receiver, makes no technical sense whatsoever. It is also patently inconsistent with DTV Channel 6 operations to use the analog VHF low band F(50,50) 47 dBu Grade B contour as the protected contour; instead, the F(50,90) 28 dBu VHF low band DTV Threshold contour should be the contour used to define a DTV Channel 6 station's protected contour. The undesired-to-desired (U/D) signal ratios given in Figures 1 and 2 of Section 73.599 of the FCC rules, which were derived for NCEFM-into-analog TV interference, would similarly need to be revised for NCEFM-into-digital TV interference, to give just two examples of FCC rules clearly "inapplicable to digital technology."

3. Indeed, at Paragraph 74 of the August 14, 1996, Docket 87-268 *Sixth Further Notice of Proposed Rulemaking* (Sixth FNPRM), the Commission stated

We also propose to maintain our plan to apply an appropriate standard similar to that currently specified in the rules to protect against interference between NTSC Channel 6 and FM radio.

However, no such "appropriate" or "similar" NCEFM-into-DTV Channel 6 rules were ever adopted. Thus this made the Fifth R&O policy that NTSC-specific rules that were inapplicable to DTV operations controlling.

4. While in Paragraph 46 (not Paragraph 45, as incorrectly cited in Footnote 71 of the Eighth MO&O) of the *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order* (Sixth MO&O), also dated February 23, 1998, the Commission did refer to Section

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73.525 of the FCC Rules, via a footnote (Footnote 30), there was no explicit ruling that NCEFM stations would have to protect DTV Channel 6 stations. Instead, Paragraph 46 of the Sixth MO&O focused on the threat of DTV Channel 6 operations *to* existing NCEFM stations.

5. In light of the broad policy established at Paragraph 14 of the Fifth MO&O, namely that analog-specific FCC rules would not apply to DTV operations, we had assumed that this analog rule simply would not apply to DTV Channel 6 stations or allotments. That is, while a newcomer NCEFM station was obligated to show that it would protect soon-to-sunset TV Channel 6 analog stations, there was no provision in the FCC Rules for NCEFM stations having to show that they protected DTV Channel 6 stations or allotments, because such a rule did not exist.

6. Accordingly, the Commission needs to reverse the Paragraph 26 decision in the Eighth MO&O, and confirm that Section 73.525 does not apply to DTV Channel 6 stations. Or, if the Commission really is determined to apply a technical standard so clearly created for NTSC analog operations and not DTV operations, then to issue a Notice of Proposed Rulemaking (NPRM) to this effect, so as to give the public notice required by the Administrative Procedures Act (APA). In that event, interested parties would have the opportunity to comment and also to potentially recommend a more appropriate protection standard. Such a rulemaking could then also address the protection requirements (if any) that a DTV Channel 6 station would have to provide to existing NCEFM stations.

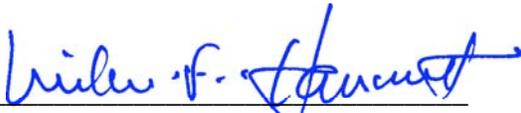
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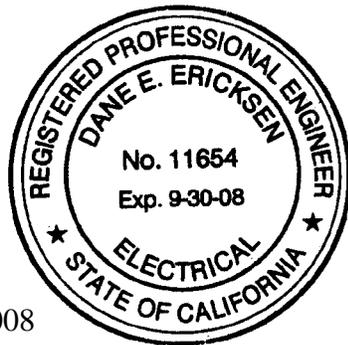
## II. Summary

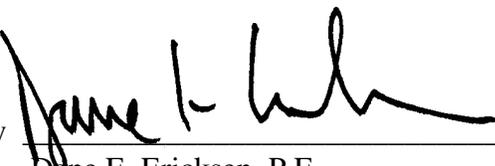
7. The interpretation in the Eighth MO&O that Section 73.525 of the FCC Rules applies to DTV Channel 6 stations is fundamentally flawed and inconsistent with the policy established in the Fifth MO&O that existing FCC rules that are "inapplicable to digital technology" do not apply to DTV stations. If the Commission wishes to have NCEFM licensees be subject to Section 73.525 in regard to DTV Channel 6 stations or allotments, the APA requires that the Commission first complete a rulemaking to update that rule section to reflect DTV technical parameters.



Respectfully submitted,

By   
William F. Hammett, P.E.  
President



By   
Dane E. Ericksen, P.E.  
Senior Engineer

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Hammett & Edison, Inc.  
Consulting Engineers  
Box 280068  
San Francisco, California 94128-0068  
707/996-5200