

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

In the Matter of)
)
Amendment of Parts 73 and 74 of the Commission's) MB Docket 03-185
Rules to Establish Rules for Digital Low Power)
Television, Television Translator, and Television)
Booster Stations and to Amend Rules for Digital)
Class A Television Stations)
)

To: The Commission

**Hammett & Edison, Inc. Comments Regarding NPR Petition for Reconsideration
of the MB Docket 03-185 Second R&O**

The firm of Hammett & Edison, Inc., Consulting Engineers (H&E), respectfully submits its comments in response to the Commission's October 25, 2011, Public Notice regarding a Petition for Reconsideration of the July 15, 2011, MB Docket 03-185 Second Report and Order (Second R&O) filed by National Public Radio, Inc. (NPR). Comments on the Petitions for Reconsideration of the Second R&O are due by November 30, 2011, so this filing is timely filed.¹ 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. National Public Radio, Inc. Petition for Reconsideration

1. In its Petition for Reconsideration, NPR first argues that the Commission erred by restricting interference protection rights of a non-commercial educational FM (NCEFM) station from a TV Channel 6 Low Power Television (LPTV) or TV Translator station only to first-adjacent channel NCEFM stations. We agree. A secondary TV Channel 6 LPTV or TV translator station, especially one operating at the now allowed 3 kW effective radiated power (ERP), could cause interference to an NCEFM station operating on any of the reserved channels, not just FM Channel 201 (88.1 MHz). NCEFM stations on FM Channel 202 (88.3 MHz) or FM Channel 203 (88.5 MHz) would presumably be less susceptible to adjacent-channel interference from a digital TV Channel 6 station, but not immune to adjacent-channel interference. For FM

¹ H&E also filed a Petition for Reconsideration of the MB Docket 03-185 Second R&O.

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Channels 204 through 220 (88.7–91.9 MHz), brute force overload (BFO) interference could be created to NCEFM listeners close to a TV Channel 6 transmitter.

2. However, while a secondary station is obligated to protect primary stations from actual interference, there need to be technical rules defining when a digital TV Channel 6 signal would be expected to cause either adjacent-channel or BFO interference to a NCEFM station. Just as Section 73.525 of the Commission’s NCEFM rules provides no guidance to a NCEFM station about not causing interference to digital TV Channel 6 reception, because Section 73.525 only applied to now-discontinued full-service analog TV Channel 6 stations, Section 73.623(f) of the FCC rules provides no guidance as to what technical criteria a digital TV Channel 6 station must meet in order to ensure no interference to NCEFM stations. All Section 73.623(f) states is that Petitions for Rulemaking to create a new full-service DTV Channel 6 allotment must submit “an engineering study demonstrating that no interference would be caused to existing FM radio stations on FM channels 200–220.”

3. Thus, this rule applies only to Petitions for Rulemaking, not to existing full-service DTV stations or Class A digital TV stations operating on TV Channel 6; and the rule provides no technical criteria for performing the analysis. Therefore, existing full-service DTV Channel 6 TV stations, and DTV Channel 6 Class A TV stations, have no NCEFM protection obligations whatsoever, because they are primary stations, not secondary, stations. We submit, however, that there should be such a requirement.

4. We believe that the Commission needs to develop technical criteria defining both digital TV Channel 6-into-NCEFM interference, and NCEFM-into-digital TV Channel 6 interference. Both applicants and licensees need a “safe harbor” set of rules to provide reasonable assurance that if they build a DTV Channel 6 station or an NCEFM station meeting such rules, they will not become embroiled with interference issues when the station commences operation.

5. In the case of primary stations, that is, full-service DTV Channel 6 stations, Class A TV Channel 6 stations, and NCEFM stations, that safe harbor would be absolute. In the case of secondary DTV Channel 6 LPTV and TV Translator stations, and secondary LPFM and FM Translator stations, the safe harbor would not be absolute, since the final metric is that a secondary station cannot cause actual interference to a primary station. However, a secondary station meeting the interference criteria would have reasonable assurance that no actual interference would be caused when the station commences operation. Having technical rules defining DTV Channel 6-into-NCEFM interference, and NCEFM interference-into-DTV



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Channel 6, would also provide Commission staff with a benchmark to use in determining whether a particular application should be granted.

II. Summary

6. We agree that a secondary service station must not cause actual interference to a primary station. However, the Commission needs to update Section 73.525 to cover protection of *digital* TV Channel 6 operations, and needs to expand Section 73.623(f) to provide technical standards for predicting when a DTV Channel 6 signal is likely to cause interference to an NCEFM signal.



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Respectfully submitted,

By

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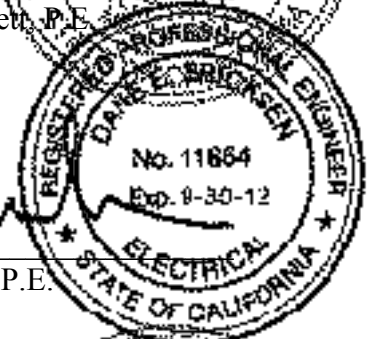
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