

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Third Periodic Review of the) MB Docket No. 07-91
Commission's Rules and Policies)
Affecting the Conversion)
To Digital Television)

COMMENTS OF
COHEN, DIPPELL AND EVERIST, P.C.

The following comments are in response to the Federal Communications Commission (“Commission”) Public Notice dated July 9, 2007¹ regarding MB Docket No. 07-91 by the firm of Cohen, Dippell and Everist, P.C. (“CDE”). CDE and its predecessors have practiced before the FCC for over 60 years in broadcast and telecommunications matters. These comments are submitted in response to the FCC’s adoption of the Notice of Proposed Rulemaking, *“In the Matter of Third Periodic Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television, MB Docket No. 07-91 (‘Third Periodic Review’)*).

The Commission is to be commended on identifying the extensive number of issues surrounding the final steps in terminating public off-the-air analog service and the commencement of public off-the-air digital operation. The following comments are respectfully offered for the Commission’s consideration.

¹FCC Public Notice, DA 07-3073, Released July 9, 2007, Media Bureau Announces Comment and Reply Comment Dates for the Third DTV Periodic Review NPRM, MB Docket No. 07-91.

Propagation Analysis Methodology

The analysis offered by Longley-Rice should have the option of two cell sizes--2.3 to 3.1 km and 0.6 to 0.8 km as described later in this filing. Furthermore the Longley-Rice analysis should be modified to the fixed grid system. Based on the performance results revealed in the report entitled, "Interference Rejection Thresholds of Consumer Digital Television Receivers"², the Commission should modify its Longley-Rice program so that if off-the-air reception issues arise after the DTV transition, there will be an analysis tool available to the FCC staff and industry to resolve the possible off-the-air reception problems as they arise.

Application Processing

The process to convert existing off-the-air NTSC stations to DTV to this point in an approximate ten year time frame is remarkable particularly when no new spectrum was available and at the end of the transition 108 MHz will be returned to the Federal government for other uses. However, the DTV transition forced a conversion process which did not result in equal treatment because of the unavailability of new spectrum. For example, in the early stages of the transition process there was 2%-10% interference tolerance applied when later a 0.1% interference processing tolerance was adopted and a "freeze" was applied. Depending upon what stage in the transition an individual station was submitting its application, a different application processing procedure would result from the FCC. Furthermore, an allotment pattern was developed which was generally independent of a physically realizable antenna pattern from

²*Interference Rejection Thresholds of Consumer Digital Television Receivers Available in 2005 and 2006*, dated March 30, 2007, Technical Research Branch Laboratory Division, Office of Engineering and Technology, Federal Communications Commission, OET Report, FCC/OET 07-TR-1003, prepared by Stephen R. Martin.

any domestic antenna manufacturer. While it may be a necessary procedure, in order to establish an allotment with an associated ERP from a specific site and channel, this nevertheless results in a burden which cannot be easily resolved under the current application processing procedures. Therefore, a two-step is required in order to achieve a balance between the need of expediting the final step and achieving the final operating parameters once the channels are finalized. The first necessary step will begin to occur once the Table of Allotments³ are finalized by the publication in the Federal Register. This will permit stations to submit applications for those facilities envisioned in the Table of Allotments under the so called “footprint” procedure. However, the Commission should consider permitting as soon as practical an interim step which would permit the stations returning to their NTSC channel to attain a final ERP as a result of a temporary 2% interference criteria. Thereafter, the Commission could establish final processing and interference rules for the long term.

Temporary Use of In-Core Pre-Transition DTV Channels

In applying the post-transition interference standard outlined in Third Periodic Review, a station desiring to operate under Special Temporary Authority (“STA”) on its pre-transition channel should only be required to protect operating DTV stations (licensed or under program test) using the established or modified OET 69 methodology. This is fully consistent with the statutory transition deadline. Moreover, continued operation on pre-transition channels should be permitted, as long as interference criteria continue to be met, until the channel is auctioned

³Seventh Report and Order and Eighth Further Notice of Proposed Rule Making, Adopted: August 1, 2007 and Released: August 6, 2007

and a new full power station begins operation. This continued service should be permitted even when the permanent digital channel begins operation.

Continued STA operation of these facilities would make effective use of a substantial investment and spectrum that would otherwise be vacant in the interim. Because these pre-transition channels would by definition satisfy interference criteria, they are prime candidates to eventually be auctioned as full-power allotments. Therefore, temporary availability to interim low-power stations would not be a better use of this spectrum. Furthermore, the STA operation should have the flexibility to offer different programming than the permanent DTV channel. This would expand viewer choice with minimal opportunity cost in terms of de minimis interference. However, must-carry privileges and protection from received interference should only be granted to the permanent DTV channel once it is in operation.

Applications to Construct or Modify DTV Facilities

The current freeze on DTV applications is probably the single most significant regulatory impediment to the DTV transition. The laudable intent to enable all DTV stations to first “find a home” and to protect their ability to maximize their allotments can be enforced through the proposed interference criteria. If the concern is the Commission’s ability to process applications, then “checklist” applications can be expedited and “non-checklist” applications processed when possible.

An application window should be established immediately after the effective date of the

interference criteria. While the Commission processes the “non-checklist” applications at its convenience, applicants could evaluate mutually exclusive situations for themselves and proceed to resolve them through negotiation or technical modification.

Proposed Interference Criteria

The 0.5% absolute interference limit is overly restrictive, inflexible, and ignores potential public interest benefits.

Certain stations absent appropriate regulatory relief may face a situation where the predicted actual DTV service may be less than the actual NTSC service when the ERP adjustment for the irregularly shaped DTV allotment pattern is considered.

It should be noted that any number of low-power stations are permitted to each cause 0.5% interference. It is possible for a low-power station to cause more interference than the service it actually provides.

The 2.0% limit should be implemented to permit those stations returning to their NTSC channel⁴. It is reasonable under the circumstances to maintain 2% as an absolute interference cap from a single station during this interim step.

Interference from low-power stations is just as real as that caused by full-power facilities. Also, with the proposed interference criteria, low-power interference will be of the same scale as that of full-power stations. A DTV receiver does not distinguish, nor can the consumer,

⁴Alternatively, up to 2% interference should be permitted for other stations if the maximizing station is adding service to sparsely underserved areas.

between the signal/interference from a secondary low-power station and that from a primary full-power station at any given field strength. Therefore, the evaluation methodology must include the masking effect of authorized low-power stations as well as Class A and full-power stations.

In resolving the question of cell sizes, the Commission should modify the Longley-Rice evaluation software to use a cell grid defined by cardinal values of latitude and longitude (NAD83). Cells defined by one minute of latitude and longitude would range in size from approximately 2.3 sq km to 3.1 sq km in the continental U.S. Cells defined by 30 seconds of latitude and longitude would range from approximately 0.6 sq km to 0.8 sq km. Limiting analysis to these 2 cell grids would provide simplicity without any loss of accuracy. The fact that the transmitter site would not be in the exact center of a cell would not significantly affect the results of any study.

Using a grid standard of cardinal latitude and longitude values would provide a host of other benefits including:

- a grid that does not change as the desired station changes.
- the ability to store cell results of stations that do not vary for use across multiple studies.
- a simplified analysis for digital transmission systems and single frequency networks systems with multiple transmitters.
- the means to easily compare, sum and difference the service areas of stations in the same geography.
- streamlined code for the evaluation software.

The Commission needs to reexamine its current rules regarding NTSC and replace these rules for equivalent DTV. The Commission Rules for NTSC have served the Commission, the public, and the industry well. It is imperative that the Commission establish similar rules for DTV.

Those that need to be modified, replaced, or eliminated are as follows:

<u>Section</u>	<u>Recommendation</u>
73.601	modified
73.603	eliminate
73.610	eliminate
73.611	modified
73.612	modified
73.613	modified
73.614	modified
73.635	eliminate or modify
73.641	modify
73.642	eliminate or modify
73.643	modify
73.644	modify
73.646	modify
73.653	eliminate or modify
73.664	modify
73.665	modify
73.667	modify

<u>Section</u>	<u>Recommendation</u>
73.669	modify
73.681	modify
73.682	modify
73.683	modify
73.684	modify
73.685	modify
73.686	modify
73.687	modify
73.688	modify
73.691	modify
73.699 Figure 5-8	modify
73.699 Figure 11, 12, 16 and 17	modify

The Commission should revisit its transmitter monitoring requirement at a remote site of the transmitter and remote control functions for DTV. The Commission should revise Section 73.686 of the FCC Rules to provide clear insight when DTV issues arise. Further, the Commission should provide its technical expertise in measurement procedures and compliance for the DTV emission mask.

International Coordination

Some stations may be advised that the facilities and channel specified in the Seventh Report and Order will need to be modified due to further negotiation of incompatibilities with neighboring administrations. The Third Periodic Review requests that individual stations advise

the Commission if they foresee difficulties in performing the required tasks to implement their DTV facilities for the post-transition. Inquiries to the Commission staff find that it is difficult for stations to ascertain if indeed their Seventh Report and Order facility is subject to further or on-going negotiations with these administrations. Therefore absent this indication, some stations may make plans, expend time and resources on facilities that may be subject to modification and adjustment. This could be a serious complication for small market and educational stations and frustration for other affected stations.

FCC Form 301 and 340 Revision

It is recognized that the entire Paragraph 13 on FCC Form 301 and 340 be revised so that the information required as a result of the adoption of the *Report and Order* in WT Docket No. 03-128⁵ be properly located under the General or Legal section. The reason is that this is a specialized requirement with non-technical criteria.

Respectfully Submitted By



Donald G. Everist
President

Date: August 15, 2007

⁵Report and Order entitled, "*In the Matter of Nationwide Programmatic Agreement Regarding The Section 106 National Historic Preservation Act Review Process*," WT Docket No. 03-128, Adopted: September 9, 2004 and Released: October 5, 2004.