

***Before the
Federal Communications Commission
Washington, DC 20554***

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

Reply Comments of du Treil, Lundin & Rackley, Inc.

The firm of du Treil, Lundin & Rackley, Inc. (dLR) respectfully submits these Reply Comments in the above captioned proceeding relating to the *Third Periodic Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television* (herein “Periodic Review”). dLR, and its predecessors, have provided consulting engineering services to the broadcasting industry for over 60 years including assisting broadcasters in preparing hundreds of applications for television and digital television operation.

Below is a summary of the comments that dLR supports in MB Docket Number 07-91:

- dLR supports permitting noise-limited contour extension for those stations occupying new channels after the transition and for those stations staying on their present channel but have not had the opportunity to increase their service area
- dLR supports additional allocation flexibility beyond what the Commission is proposing
- dLR supports eliminating the power penalty for stations using electrical beam tilting
- dLR requests clarification if new DTV allotment proposals, besides having to satisfy the minimum distance separation distances to co- and adjacent channel stations, would be required to satisfy the maximum permitted interference requirements

Noise-Limited Contour Extension & Interference

dLR supports the comments of Allbritton Communications Company¹, CBS Corporation² and Byron W. St. Clair³ to allow stations returning to use their existing analog antenna to permit contour extension.

Furthermore, dLR believes contour extension should be permitted for a station moving to a new digital channel, post-transition, as suggested by Tribune Broadcasting Company⁴, and any additional stations not yet permitted to increase their service contours due to the current freeze on expanding coverage. These stations may include allotments won in a recent FCC auction and also singleton stations as suggested by Joseph M. Davis, P.E.⁵

dLR also observed that all of the commenting engineering consulting firms and their trade association are universally requesting additional allocation flexibility above the 0.5% “bright-line” interference threshold the Commission proposed.⁶ These are the entities with considerable aggregate experience in assisting television stations in preparing their respective applications for construction permit and are considered experts in TV/DTV station allocation issues. Therefore, dLR respectfully urges the Commission to carefully balance the need for stations to have flexibility in making service area modifications versus limiting interference.

¹ See Comments of Allbritton Communications Company, page 7, commission must accept and act on applications to modify/maximize post transition service areas as soon as possible.

² See Comments of CBS Corporation, page 8, applications for expanded facilities.

³ See Comments of Byron W. St. Clair, page 1, regarding the use of an analog antenna for post-transition use.

⁴ See Comments of Tribune Broadcasting Company, page 8, regarding the Commission must consider applications from stations moving to new DTV channels.

⁵ See Comments of Joseph M. Davis, P.E., page 3, regarding singleton analog stations authorized after April 3, 1997, not having the opportunity to expand their respective service areas.

⁶ See Comments of du Treil, Lundin & Rackley, Inc., Comments of Cohen, Dippell and Everist, P.C., Comments of Association of Federal Communications Consulting Engineers, Comments of Joseph M. Davis, P.E., Comments of Hammett & Edison, Inc., Comments of Byron W. St. Clair, Comments of Khanna & Guill, Inc.

As for what additional allocation flexibility would be appropriate, dLR believes permitting those stations moving to a new post-transition channel (or not yet having the opportunity to maximize) have one opportunity to create up to 2% new interference, as long as the cumulative 10% maximum interference limit is not exceeded. The Upper Cumberland Broadcast Council suggested this concept.⁷ For all other stations, dLR believes that 0.5% additional interference, as suggested by Gray Television, Inc.⁸ and KSLs, Inc.⁹ be permitted.

Elimination of Electrical Beam Tilt Power Penalty

dLR supports the comments of Tribune Broadcasting Company asking the Commission to eliminate the 1 dB penalty on stations proposing to use beam-tilting in excess of one degree of its transmitting antenna.¹⁰ We agree that there is no technical justification for such a continued power penalty.

New DTV Allotment Proposals

The comments of Khanna & Guill, Inc. support the Commission's proposal of allocating new DTV stations on satisfying the minimum distance separations to nearby co- and first-adjacent channel stations.¹¹ However, dLR requests clarification if these new allotments will be permitted maximum facilities for their channel and zone regardless of interference as has been the tradition, or will they need to be in compliance with the Commission's proposed maximum permitted 0.5% interference (or other value ultimately adopted by the Commission) that can be caused to other stations regardless of meeting the separation requirements.

⁷ See Comments on Behalf of Upper Cumberland Broadcast Council Licensee of WCTE-TV, Cookeville, Tennessee, page 4, believes that 2% is a reasonable proposal to limit interference for station who are adopting their analog channel.

⁸ See Comments of Gray Television, Inc., page 8, Commission should revise its proposed interference criteria.

⁹ See Comments of KSLs, Inc., page 3, KSLs suggests that the Commission permit an additional 0.5% interference.

¹⁰ See Comments of Tribune Broadcasting Company, page 8.

¹¹ Comments of Khanna & Guill, Inc., page 4.

Below is a table of the predicted interference that can be caused to another station that just satisfies the minimum distance separation requirements.¹² The percentage is the amount of area referenced to the desired station. As can be seen, all of these values will exceed 0.5%. Assuming uniform population distribution, the interference would exceed 0.5% of the population.

Assumed Station	Interference Area Caused to Other Stations Meeting Section 73.623(d) Minimum Distance Separation Criteria	
	Interference to Desired Co-Channel	Interference to Desired First-Adjacent Channel
High-Band VHF Zone I	2.6%	2.0%
High-Band VHF Zones II & III	5.5%	4.8%
UHF Zone I	16.7%	3.7%
UHF Zones II & III	11.9%	3.7%

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¹² This model is based upon the Commission's desired-to-undesired ratios defined in OET Bulletin #69, using maximum facilities, Commission's propagation curves assuming uniform terrain, and considering the receiving antenna front-to-back ratio.