

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C. 20554

In the Matter of)	
)	
An Inquiry Into the Commission’s Policies)	MM Docket No. 93-177
and Rules Regarding AM Radio Service)	
Directional Antenna Performance Verification)	

COMMENTS OF
Waterford Consultants, LLC

Waterford Consultants, LLC (“Waterford”) hereby submits these Comments in response to the Second Further Notice of Proposed Rule Making (“Second Further Notice”) in the above-captioned proceeding. In the Second Further Notice, the Commission seeks comment on new rules under Part 1 of the FCC’s Rules (“the Rules”) for the protection of AM stations from the effects of nearby tower construction or significant modification.

The rules as proposed in the Second Further Notice are welcomed by those who have been diligently working on behalf of wireless carriers (primarily Section 22 and Section 24 licensees) to assure compliance with both specific Commission rules, public notices, policies and generally accepted good engineering practices. This Second Further Notice makes substantial progress in eliminating the confusion that has existed since the beginning of the rapid deployment of additional vertical assets to support new wireless services. The issue of antenna support structures (usually towers) reradiating AM station’s signals, thus disturbing the radiation pattern, first became a significant problem with the development of facilities in the 1980s for cellular systems and has now become more pronounced with additional wireless technologies and the proliferation of almost

ubiquitous wireless networks.

Waterford's principals have a long history in the broadcast engineering consulting industry, however we now represent primarily cellular, PCS and public safety organizations in regulatory compliance efforts necessary for deployment. The principals have been providing detuning analysis and in-the-field detuning services since about 1985. We have studied, measured and/or detuned over 5,000 wireless sites. From that experience, we support this proposed rule (although it greatly diminishes a principal business area) as it will clarify the responsibilities of both parties (tower proponent and AM licensee), establish a clear time line to allow timely construction, eliminate the often ambiguous and costly field measurements and greatly reduce or eliminate unneeded animosity that often resulted from interpretation of field data. We believe a few additional clarifications could only help all parties concerned, and thus we request the Commission to address the following concerns.

I. The Commission Should Clarify the Rules' Use of "Licensee"

Proposed section 1.30002(a) and 1.30002(b) both say "...the licensee shall be responsible for the installation and maintenance of the detuning apparatus necessary to restore...." Second Further Notice at Appendix E. We believe that to mean the "licensee" referred to is actually the tower proponent as defined in 1.30001(c). ("Proponents of construction or significant modification of a tower within the distances defined in (a) and (b) herein of an AM station....") If this is the Commission's intended meaning, we suggest the word "licensee" be replaced by "proponent" in order to eliminate any potential ambiguity of obligation in the rule.

II. The Commission Should Simplify its Notice and Information Exchange Process

As the proponent's tower is to be modeled as a number of straight wire segments, the notification to the AM station of the tower proponent's construction need not contain anything more than latitude, longitude, height, and if not a new construction, the height change resulting from the modifications. We believe that the circumstances requiring an exchange of more information should be clearly specified and minimized.

Regarding the notification timelines proposed in Rules 1.30002 (a) and (b), we believe 30 days of notification prior to construction is too long and will cause unnecessary wireless deployment delays. The potential impact to the AM station can be modeled before or after construction and therefore we propose that if a tower proponent has preformed the method of moments ("MOM") analysis, that the modeling be included with a notification. If such modeling shows the need for detuning the tower construction should proceed if, and only if, detuning hardware is installed and tuned at the time of tower construction (or immediately after construction is complete). As there is no longer a snapshot in time of the performance of the AM station that must be recorded before construction, we believe there is little need to delay construction. We would suggest that notification be made to the AM station before any tower erection, or construction of a height increase is commenced, even if it is the with essentially little or no pre-notice.

We would also like to see a clear definition of *whom* to notify. Traditionally, the proponent contacts the station engineer, however there is no consistent contact information available at the station level. We have traditionally contacted the station's management directly through information available through BIA's Media Access Pro, a

web search or the station's web site. However, we would request that a proper definition of the appropriate party and a notification method be specified. It has been suggest by many corporate owners that notification at the corporate level is appropriate. We propose that the Commission specify that the FCC's CDBS database be used to identify the licensee and the listed address should serve as the official notification location.

III. Ambiguities Exist in the Determination of Distance and Location of Proponent's Construction from AM Station

Under proposed Section 1.30002 the proponent of a new or modified tower that is within the "immediate vicinity" of an AM station must examine the potential effects of its proposed construction to any nearby AM station. A clear definition of what reference location should be used to determine distance from the AM station is needed. We believe that the reference coordinates of the AM station as readily available in the commission's own CDBS AM database is sufficient for determination of compliance with respect to the distance criteria of 1.3002(a) and 1.3002(b).

Though the academics may argue that the distance from the reference tower, center of the array, closest tower or furthest tower would be more representative, we suggest that as this is only a cut off for further study, anything inside of the relatively conservative wavelength distance threshold is sufficient for determining the need for MOM analysis. However, once it is determined that MOM analysis is needed to determine pattern impact, exact geographic relationship needs to be determined for accurate MOM analysis to be completed. As there are a variety of accuracy standards, and not all AM towers must be registered, there are circumstances under which it is

necessary to acquire information which is not available through the Commission's databases. We suggest that 1.3002(c) should be revised to include a discussion that if the coordinates of each tower are not known from the CDBS (if there is no ASR filing information), that the actual coordinates of the reference tower (from which the coordinates of each additional tower can be computed) be independently determined to allow accurate MOM modeling. We would like to further suggest that perhaps AM stations reference coordinates could be updated over time to be those of the reference tower, or perhaps that all towers in the array be put into the ASR system.

IV. The Proposed Rules Leave the Tower Proponents' Responsibilities Open-Ended

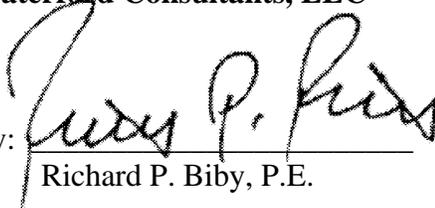
Section 1.3002(g) appears to be to address the situation when a proponent's tower is outside of the 3 kilometer distance threshold but still has an impact on the AM station's pattern. At low frequencies, the distance threshold in 1.30002(b) of 10 wavelengths would extend well beyond 3 kilometers. As previous rules limited the action threshold distance to 3 kilometers, there is precedent to also limit this action threshold to 3 kilometers. However, proposed section 1.3002(g) essentially opens the door to extend responsibility well past 3 kilometers. We believe that the distance should be increased to incorporate concerns of pattern disturbance by construction beyond 3.0 kilometers, or that the financial responsibility to detune a structure beyond 3 kilometers should be that of the AM station. A tower proponent needs clear documentation at or very near the time of construction about the need to detune, and not to have a potentially open-ended financial obligation. Such a clarification would provide tower proponents with more certainty.

V. Conclusion

For the reasons set forth herein we encourage the timely adoption of the proposed rules with the proposed changes incorporated. Adoption of these modified rules will streamline the process of communications site deployments, while affording much greater and more complete protection for AM stations.

Respectfully submitted,

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