

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

In the matter of:

Revitalization of the AM Radio Service)
) **MB Docket No. 13-249**
)

**COMMENTS OF THE ASSOCIATION OF FEDERAL COMMUNICATIONS
CONSULTING ENGINEERS (AFCCE)**

The Association of Federal Communications Consulting Engineers hereby submits these comments in response to the Commission’s October 31, 2013 Notice of Proposed Rulemaking in the above-captioned proceeding. In that Notice, the Commission solicited comments on its various specific proposals.

Members of this organization strongly support the Commission’s goal of revitalizing the AM radio service. In its comments to follow, AFCCE seeks to be consistent in the following trends, which it believes will contribute to an enhanced, sustainable and useful audio service, while remaining compatible with every manufactured AM radio receiver:

1. Any proposal should have the net result of enhancing station reception quality;
2. Any proposal should have the net result of enhancing the value of the investment already made by the incumbent AM licensee;
3. Given its requirement for interference protection, dynamic diurnal propagation swings, and large antenna size requiring large amounts of real estate, AM is not an efficient service for neighborhood “narrowcasting,” and rulemaking should not be undertaken solely to encourage this application; and
4. AM viability would be enhanced with fewer stations on the band, and to the extent that some AM broadcasters are barely “hanging on,” rulemaking proposals should seek to do the most good for those broadcasters that can reasonably survive, not for the least common denominator.

To those ends, then, AFCCE respectfully offers its comments on the FCC's proposals. It should be noted that the AFCCE membership base includes not a few engineers and firms with an extensive history of innovation and development in AM broadcasting, and these comments are not necessarily inclusive of their opinions on this matter. Some of those members and/or their firms have submitted their own comments on this Notice, and in those cases where they disagree with those below, those separately filed comments, and not these, represent those commenters' intentions.

A. Open FM Translator Filing Window Exclusively for AM Licensees and Permittees

We support, with modification, the Commission's proposal of an open FM translator filing window for AM licensees. AFCCE agrees with the Commission's assessment that allowing such translators has been an unqualified success, in terms of audience retention and growth for those AM broadcasters who have such translators.

However, the impact of all rules directed at revitalization of the AM service should serve to increase the AM licensee's station investment to the extent possible. The proposed limitation to one single translator per licensee, and the requirement that the translator be tied to rebroadcasting solely that licensee's AM station, diminish the value of the translator to the AM ownership and create a special class of translators, which is better off avoided.

For instance, it would be a benefit to smaller broadcasters in the market if larger co-market AM stations could carry out the licensing of a translator, and then allow that translator to be used by those smaller AM broadcasters in the market. Furthermore, the limitation to a single translator serves no particular purpose, as multiple translators might be helpful in providing additional fill, or again be made available to other AM licensees. Finally, allowing the AM licensee to sell or trade translators could provide a current or future revenue source that could strengthen the AM business position. Thus, there should

be no restrictions on usage or future sale for translators AM stations obtain through the special window.

While acknowledging the success of FM translators' role in AM revitalization, care must be taken to insure the total spectrum utilization remains consistent with the public interest and fair commercial competition. We are familiar with behavior of a destitute AM broadcaster who, upon hopping a translator into his market, rebranded the station under an FM identity and allowed the AM signal to degrade and go off the air for weeks at a time. The FCC must strictly enforce the prohibition against program origination on an AM station's FM translator and only under unusual circumstances allow the translator to continue to broadcast when the AM signal is off the air. Otherwise, an unfair advantage is afforded that station as compared to those stations in the market that do maintain their AM signal quality and reliability, in terms of dramatically lower overhead and maintenance costs while still providing programming to a portion of their audience.

Finally, consideration should be given to a Commission-established allocation table for translator channels available in certain communities, for the exclusive application of Class C and D broadcasters, in order to facilitate their acquisition of the translator channels without the expense of participation in a window process requiring allocation studies.

B. Modify Daytime Community Coverage Standards for Existing AM Stations

After careful consideration, we partly support the Commission's proposal to modify the daytime community coverage requirement, for existing licensees, to 50 per cent of the community of license population or 50 per cent of the community of license area, with a daytime 5mV/m principal community signal. This coverage allowance should be implemented via waiver only, upon an acceptable showing by the licensee that a hardship exists requiring the coverage requirement relaxation. Otherwise, the Commission's current daytime community coverage standards, while potentially

problematic, serve a purpose for a vital AM service and should be substantially maintained.

An overriding concern in any proposal to invigorate the AM band is that the signal and audio quality must be as high as practical, given the dynamic propagation characteristics of the AM band and its requirement for large, complex antenna systems. It is totally commendable and appropriate for licensed radio services to address ethnic and/or minority audiences. The AM band, however, is not ideally suited for “narrowcasting” to those niche audiences, which might reside in distinct districts of larger metropolitan areas or far-flung communities, due to expense in engineering and maintaining AM antenna systems. Noise concerns make it paramount that adequate signal be radiated to cover local communities. In general, the overall AM service would benefit by having fewer stations on the air.

Therefore, any proposal that advocates a reduction in signal level for listeners in a particular community of license is potentially undesirable. Partial community coverage will perpetuate AM’s image as a noisy, low-fidelity antiquated service that can’t be received well in many locations. It is debatable that there exist vastly greater numbers of available site locations for AM antenna systems of shorter height. Whereas anecdotally this may be the case, most communities are hypersensitive to tower location proposals due to the proliferation of cellular towers, and location of any tower of significant height may be difficult to accomplish due to local ordinances.

Nevertheless, changing conditions sometime cause exiting stations to have to move their facilities. Likewise, there are occurrences where the relocation of a facility might accomplish the goal of rendering better quality service to a targeted community, at the expense of the loss of 100% community coverage.

Therefore, the Commission’s current practice, to require (by waiver) 80% daytime community coverage, could be modified to 50% coverage, to better serve the goal of providing a quality audio service to the listening public.

C. Modify Nighttime Community Coverage Standards for Existing AM Stations

We support, with modification, the Commission's proposal to reduce the nighttime coverage requirement for existing licensees. We do not recommend its total elimination however.

A daytime-only service is not sustainable in many cases. The idea of a daytimer is antiquated, confusing to the public, and obsolete, as even the Commission has admitted by virtue of no longer licensing new Class D stations.

Diminished nighttime coverage, either due to signal strength or interference, is detrimental to success of an audio service. Since most high school and many college football games are nighttime games, for instance, a station's brand is diminished if it cannot approach the same community coverage at night that it has in the daytime. Securing the rights for a particular college team might make the difference to insure survival for a struggling AM, but those rights might be unavailable to a station with very limited nighttime coverage.

The overall thrust of these proposals should result in a sustainable service, and nighttime coverage is in general important for AM. However, there may be situations outside of a licensee's control that require moving the transmission facility, and a relaxed nighttime coverage requirement might reduce the burden involved in such a move. Therefore, as the Commission has suggested, the rules for existing licensees should be relaxed to require that nighttime coverage be required to be 50% of the community's area or population encompassed by the nighttime 5mV/m contour or the nighttime interference-free contour, whichever value is higher.

A related productive route would be to return nighttime protection to the protected station RSS calculations using 50% exclusion. The present reliance on 25% exclusion complicates nighttime protection requirements and ultimately reduces flexibility to provide signal improvement and find workable relocation real estate.

We have observed that nighttime coverage issues are aggravated by outlaw behavior on the part of neighboring stations which allow their patterns to be out and/or

run power in excess of the nighttime limit. Strengthened enforcement concentration in this area could reduce these occurrences.

D. Eliminate the AM “Ratchet Rule”

AFCCE observes that the record is practically unanimous that the ratchet rule did not achieve its desired purpose, and in fact works against an improved AM service, especially for nighttime coverage, and should be eliminated.

E. Permit Wider Implementation of Modulation Dependent Carrier Level Control Technologies

We support the Commission’s proposal to permit wide implementation of MDCL technology. It is surprising that only “30 permanent waiver requests and 16 experimental requests” have been received thus far for use of MDCL technology. The potential power savings are dramatic and there is a quick payout. The record shows no potential technical issues (other than the potential for out-of-band emissions with hybrid IBOC, still under study), so, for the purpose of streamlining permission processes, AFCCE supports the Commission’s proposal to allow MDCL implementation without prior notification. We further believe the choice of MDCL technology, and the source of the equipment, should be the licensee’s and not subject to Commission pre-approval.

F. Modify AM Antenna Efficiency Standards

We advocate that the Commission eliminate antenna efficiency requirements altogether, and depend on other rules to insure community coverage.

Any invigoration proposal for the AM band must above all else result in a higher quality environment for delivering an audio service to the listening public. Lessening or eliminating AM antenna efficiency standards is consistent with this goal if it results in being able to locate a lower-profile antenna system, or one with a less expansive ground

system, closer to the listening public. AFCCE believes that allowing smaller antenna systems might achieve that goal.

However, it is not a “given” that such antenna systems will have substantially easier experiences with urban location than traditional systems. Available land for antenna structures of any appreciable height is frequently limited by local ordinances designed to comply with Commission directives to allow cellular companies to do business. These have the effect of limiting antenna height and may confine deployment to special community pre-designated zones. The fact that the AM tower(s) are not primarily cellular towers may or may not exempt them from these ordinances.

Nevertheless, the Commission’s rules for antenna efficiency are unnecessary given the Commission’s continuing day- and nighttime coverage requirements, and thus serve little purpose.

Therefore, the Commission should substantially eliminate antenna efficiency standards, retaining only what is necessary to insure stability and predict interference, in recognition that existing community coverage requirements will still insure adequate signal coverage.

G. Submission of Further Proposals

In some markets the overwhelming success of an FM translator addition in terms of audience numbers and station finances can lead to almost total abandonment of the AM delivery system for that station’s programming. In especially small communities totally covered by the translator, or in cases where the translator has an especially good location, few listeners use the AM service.

In such cases, requiring the licensee to maintain the AM simply to deliver on FM serves to perpetuate noise and interference on the AM band, and the AM ought to go dark. Perhaps some combination of compensation for the station to cease operation on AM, program origination on the translator, or a special class of FM in just this sort of case (small community, total community coverage possible on FM, surrender of legacy

AM license) would be possible and be for the overall good of the AM band by virtue of interference elimination. Such a situation merits further exploration.

Conclusion

Would anyone care if the AM service were scrapped entirely? AFCCE believes that answer is “yes,” and the public interest is still served by many AM broadcasters. But in many markets the AMs are on life support and it’s time to pull the plug. We are aware of a small-town AM station whose automation system was still playing a mystery program, with its bartered spots, which had ceased syndication two years previously. Another station in a nearby market had lost automation synchronization and regularly played audio test tones and network alert messages preceding the top of the hour—along with a hefty helping of dead carrier. Why these stations bothered to remain on the air is puzzling. No amount of rulemaking is going to rescue these. To the extent that such carelessness accompanies rules violations, we would encourage enforcement diligence.

We hope that rules changes make the licenses of such underperformers more valuable and encourage more serious broadcasters to take them over.

The proposals above are meant for those stations that remain serious about providing a public service and, given a regulatory and technical chance to improve, could actually thrive. We anticipate more debate on this matter, perhaps in the context of industry committees, and this organization stands ready to participate.

Respectfully Submitted,

January 21, 2014

The Association of Federal
Communications Consulting
Engineers
P.O. Box 19333
Washington, DC 20036
(954) 644-2953

David Snavelly, PE

David Snavelly, PE
President