

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

MM Docket No. 89-46

In the Matter of

Policies to Encourage
Interference Reduction
Between AM Broadcast Stations

NOTICE OF PROPOSED RULE MAKING

Adopted: February 22, 1989; Released: March 17, 1989

By the Commission: Commissioners Quello and Dennis
issuing separate statements.

INTRODUCTION

1. The Commission is initiating this *Notice of Proposed Rule Making (NPRM)* to develop a formal procedure for AM licensees to reduce interstation interference and to consider certain changes in our AM processing rules that may facilitate such a procedure. Such reductions in interference between AM stations would improve the overall quality of AM broadcasting, thereby improving service to the public.

2. This *NPRM* is an outgrowth of the Mass Media Bureau's *Report on the Status of the AM Broadcast Rules*, RM-5532, (*AM Report*) released April 3, 1986. The *AM Report* addressed a number of technical, legal and policy issues, seeking to identify opportunities to make changes in existing rules to allow AM broadcasters to compete more effectively in today's broadcast marketplace and thereby enhance their service to the public.

3. Comments received in response to the *AM Report* helped identify the technical issues appropriate for further study, and on August 17, 1987, the Commission released a *Notice of Inquiry*¹ (*AM NOI*) to provide a comprehensive review of the technical principles pertaining to AM assignment criteria and related issues. One of the issues addressed in the *AM NOI* was the question of whether the public would benefit from allowing the resolution of interference issues through agreements between the various affected parties. The Commission believes that certain changes in our existing Rules may be warranted to facilitate the establishment of a formal procedure for AM licensees to reduce interstation interference. Before setting forth our rule making proposal in this regard, some background information will help place these issues in perspective.

BACKGROUND

AM Service

4. While the AM broadcast service is the oldest broadcasting service, it remains one of the most technically complex to administer. This is largely due to the

propagation characteristics that exist in the AM band. In contrast to other frequency bands in which broadcast services are authorized, the propagation characteristics of the AM band vary greatly with frequency and ground conductivity, and more importantly, between day and night.² The FCC has developed complex technical AM broadcast assignment principles that take into account these varying propagation characteristics.

5. The Commission's current technical broadcast assignment principles have evolved over many decades, coinciding with the considerable growth in the AM service.³ The Commission's Rules and practices reflect its historic concern with respect to interference protection for AM licensees. Initially, the Commission was concerned with establishing large numbers of AM stations across the country to serve the nation, and it developed assignment rules and interference criteria with this goal in mind. These rules effectively defined the station's coverage area as well as the degree of protection that the station could obtain within that service area by proscribing specific limits to interference that could be caused by other stations.

6. The AM broadcasting service has matured significantly since the 1930's, and the radio marketplace has undergone tremendous changes. Virtually all of the United States receives multiple full-time radio services, and there are approximately 4,900 AM stations currently authorized. In addition, the Commission has authorized more than 5,300 FM stations which have significantly added to the choices of aural broadcast service available to the public.

7. Broadcast and cable television have also become an important source of local information and entertainment for the public. Almost 1700 television stations have been licensed by the Commission, including commercial and educational UHF and VHF stations as well as UHF and VHF low power television stations. This growth has occurred in markets of all sizes. In addition, a substantial increase in the availability of alternative media delivery systems has added to the diversity of information sources for the public, as well as increased the level of economic competition in the marketplace. Significant new technologies include cable television, video cassette recorders (VCR's), satellite master antenna systems (SMATV's), home satellite dishes and multipoint distribution systems (MDS) as well as multichannel MDS systems.

8. Moreover, additional growth in traditional broadcast radio service can be expected due to several recent Commission actions. For example, in BC Docket 80-90 and related proceedings, the Commission established 689 new commercial FM allotments, most of which are located in medium and small radio markets, and created three new classes of FM channels to encourage the development of even more FM stations.⁴ Furthermore, a significant number of new AM stations are likely to be licensed in the future when the band from 1605 kHz to 1705 kHz becomes available for AM broadcasting as a result of international agreement recently reached in Rio de Janeiro.⁵

9. These developments have dramatically altered the listening habits of the broadcast audience, generally resulting in significant changes to the economic position of AM stations. During the last ten years, Commission studies have shown a substantial decline in the percentage of profitable AM stations, as well as drastic increases in the average annual lost revenue for AM stations or AM/FM

combinations.⁶ In addition, AM station sales prices have, on average, steadily declined while sales prices for the FM counterparts have consistently risen.

10. Furthermore, the AM service's share of the national listening audience has experienced a marked reduction, compared to a steady rise in FM audience share. The Commission's *AM Report* showed that by 1978, the majority of the radio listening audience had shifted from AM to FM. Even so, in 1980, forty of the top fifty stations in terms of metropolitan cumulative rating were AM stations. By the fall of 1984, however, only fifteen AM stations were found in the top fifty.

11. The quality of the AM service has decreased considerably when compared to newer services. Naturally occurring atmospheric noise found in the AM band is a pervasive source of degradation to the AM broadcast service that generally limits the minimum usable field strength of an AM station both day and night. In addition to atmospheric noise, the minimum usable field strength is further degraded by interference resulting from congestion in the AM band -- there has been a substantial increase in co-channel and adjacent channel interference from other AM stations. Finally, man-made noise has proliferated with increased use of electrical devices in the home and at the work place. All of these factors have combined to degrade the overall quality of the AM service. Because newer technologies are not affected to the same extent, the relative quality of the AM service has suffered a steady decline.

12. Commenters including NAB, ABES, EIA and numerous others have all emphasized the need to improve the overall quality of the AM service. Group W stated that "the single highest priority for FCC action to improve AM radio in this country would be to act now to reduce deleterious interference which is present throughout the AM band".⁷ Commenters have encouraged the Commission in its efforts to examine our Rules and past licensing policies to identify changes that could reduce congestion in the AM band and thus improve the quality of the AM service.

13. The considerable crowding in the AM band has forced many AM stations to develop elaborate directional antenna systems in an attempt to "fit in" to already congested service areas. As a consequence, AM licensees often have convoluted service areas that differ from day to night, disrupting service to their listeners. Our Rules have operated to allow as many authorizations as technically feasible, promoting an expansion in the number of stations. But this increase has come at the expense of quality. While the system currently supports expansion of service, it does not effectively allow for contraction of service where such reductions may improve the overall quality of AM service. Thus, the market does not have the ability to reach a true equilibrium of balanced, quality service.

14. We believe that the public would benefit from cleaner, more reliable service areas for AM licensees. Therefore we wish to consider the public interest utility of restructuring our policies and Rules to allow for contraction as well as expansion of service, when such contraction would allow improved service overall. While such contraction may result in a marginal loss in the number of stations receivable in some areas, the net gain in quality of the AM service could well better serve the public interest.

15. Thus, at this advanced stage of AM development, it may be appropriate for the Commission to consider establishing a mechanism by which licensees can coordinate to reduce interference. This proposal could permit some contraction of the AM broadcast market that would offer an opportunity for overall improvement of the AM service by reducing congestion in the AM band and allowing the remaining stations to improve service to their communities and strengthen their competitive position in the broadcast marketplace, thereby providing significant benefits to the listening public.

Technical Assignment Principles

16. Before outlining our proposal, it is necessary to discuss the evolution and application of the Commission's technical assignment principles applied to AM licensees.⁸ Under the Commission's Rules, proposals for groundwave AM service are examined in terms of a prohibition on the overlap of prescribed groundwave contours. This concept of "prohibited overlap" means that the prescribed contour of a proposed operation is not permitted to cause interference by overlapping the prescribed contour of any existing station.⁹ In effect, interference may neither be caused nor received within the prescribed service contour. An exception to the prohibition on *received* interference, permitting overlap to the 1 mV/m contour, is provided in cases where there appears to be a particular need for additional service.¹⁰

17. The concept of protected contours is also applied to skywave signals for Class I Stations. A Class I station provides skywave service to a prescribed contour. Other stations are not permitted to cause interference by overlapping that contour. A Class II or III station provides groundwave service to a contour which is the greater of (a) the value prescribed in the Rules for its particular class, or (b) the value determined by interference received from the other facilities existing at the time the station was first authorized. The resulting contour must be adequate to encompass the community of license. Other stations may not radiate skywave signals which would have the effect of "shrinking" this contour by raising the RSS limit. As a practical matter, full-time Class II and III stations have interference limited service at night which results in coverage areas much smaller than they have during the day.

18. Although both daytime and nighttime protection are expressed in terms of protected and interfering contours, there are important differences in how protection is calculated. Daytime interference calculations are concerned with the location of pertinent protected and interfering contours along the paths joining the stations' service areas. Because groundwave signals travel a direct path, diminishing with distance, it is a simple matter of plotting the pertinent groundwave contours and determining if they overlap. At night, it also is necessary to take into account the quite different nature of skywave signal propagation. Because skywave signals are reflected by the ionosphere, they have the potential for providing wide-area coverage, as is the case with clear channel stations, or for causing area-wide interference. Thus, on the one hand, this means protecting the skywave coverage of clear channel stations, and on the other it means taking into account the potential skywave signals have to cause widespread interference to the groundwave service of other classes of stations. Appropriate methodologies were

developed to perform both types of skywave calculations and, in the case of the regional channels, to take multiple interfering signals into account.¹¹

19. The Commission's Rules specify the signal strength contours¹² of areas protected from objectionable interference for each class of station. Some stations have nighttime limits that are equal or close to these contours, and therefore have moderately large nighttime service areas. Most stations, however, are limited by interference from other stations to contours of higher values than those nominally protected for their classes and are unable to provide wide area interference-free service.

20. The Commission's rules restrict the grant of applications whose effect would be to cause further interference.¹³ The Commission's Rules define objectionable nighttime interference from another broadcast station as "the degree of interference when, at a specified field strength contour with respect to the desired station, the field strengths of an undesired station (or the root-sum-square value of field strengths of two or more stations on the same frequency) exceeds, for ten per cent or more of the time, the values set forth in these standards."¹⁴ The rule excludes, however, many potentially interfering stations from the interference calculation because it further states that "the RSS value will not be considered to be increased when a new interfering signal is added which is less than 50% of the RSS value of the interference from existing stations."¹⁵ Thus, a station actually receives greater levels of interference than are represented in the RSS values as calculated under our Rules.

21. In addition, while the rules thus prevented proposed new stations from causing objectionable interference, they did not necessarily prevent new stations from accepting interference that had the effect of eliminating nighttime coverage. The rules permitted new stations to receive such levels of interference so long as the requisite city coverage was provided. Many licensees found it desirable to accept large amounts of interference in exchange for the opportunity to obtain the desired facilities.¹⁶ There have been many changes over the years which now call into question the interference situation faced by these stations. As discussed below, we are proposing to establish a procedure to help AM stations reduce interference, extend coverage and better compete in the marketplace.

22. Although occasional questions have been raised about the efficiency of proposals for new stations or for station modifications that would be subjected to extensive interference, most such applications were granted in recognition of the necessary trade-off of received interference for new service to be provided. Even though many stations originally elected to accept interference as a cost of obtaining the desired authorization, that is not to say that such licensees continue to find this situation desirable. Nonetheless, to date no alternative has been available to address this problem. The factors discussed above have contributed to considerable crowding in the AM band and an overall reduction in the quality of AM service. In light of current developments, it may be appropriate for the Commission to develop a mechanism that would promote the public interest by reducing crowding in the AM band in exchange for a marginal loss of service from some individual stations.

SUMMARY OF THE COMMENTS

23. The *AM NOI* suggested that it may be appropriate to consider whether it would be desirable to give AM station licensees the opportunity, through mutual agreement, to adjust the amount of interference to be permitted. The *AM NOI* suggested that the Commission might consider allowing AM licensees to negotiate levels of interference -- either by allowing a station to obtain greater interference protection than that resulting from current assignments, or to reduce its level of interference protection by relinquishing its right to specific protection afforded by the current rules.

24. Twenty-one formal comments and nine reply comments were filed during Phase I of the comment period for the *AM NOI* in response to the Commission's questions concerning additional assignment considerations.¹⁷ Only fourteen of these commenters addressed the question of negotiated interference rights. Nine of these commenters opposed the concept, including the National Association of Broadcasters (NAB), the Association for Broadcast Engineering Standards (ABES), the Electronic Industries Association (EIA), CBS and Capital Cities/ABC. They were concerned that such an approach could cause a further degradation in the quality of AM service as a whole and would thus be contrary to the stated purpose of the *AM NOI* to improve the quality and competitiveness of AM service.

25. Five commenters found merit in the proposal. For example, Group W supported interference negotiation that would make it possible for a licensee to reduce the interference being received. It pointed out that "grandfathered interference rights" have in some instances led to a level of interference beyond that contemplated by the Commission's Rules. According to Group W, the Commission created certain grandfathered interference rights on an *ad hoc* basis as a result of its reluctance to force divestiture.¹⁸ Group W suggests that allowing licensees to negotiate to eliminate grandfathered interference rights will serve the public interest by creating an incentive for stations to relinquish this protection, thus bringing more stations into compliance with the Commission's basic allocation principles. Group W pointed to other Commission incentives such as tax certificates that encourage voluntary divestiture of other types of non-conforming stations, and suggested that permitting negotiations to eliminate grandfathered interference rights could present similar opportunities to AM licensees by providing an economic incentive to eliminate interference that is at odds with Commission policy. Group W maintained that the resultant reduction in interference would benefit the public by improving AM service.

26. GSM Media Corporation suggested allowing negotiations that would allow interference to be increased if doing so would lead to additional service in communities and/or areas that need more service. Saga Communications urged the Commission to allow Class II daytime-only stations to provide nighttime service by negotiating with Class I stations to eliminate their extended protection, provided that the nighttime service to be gained from the Class II station would constitute a first, second, third or fourth nighttime service to the community. Crawford Broadcasting Company supported negotiation of interference rights so long as the resultant interference would be limited, thereby assuring the public of reception of a "quality signal".¹⁹ Finally, Karl D. Lahm supported negotiated acceptance of interference based upon the ap-

plication of a public interest test that would ensure that an adequate level of service would be maintained by all areas affected by the agreement.

DISCUSSION

Interference Reduction Efforts

27. As discussed above, the media marketplace has evolved considerably since the Commission first began licensing AM stations. In view of these significant changes, it may be counterproductive for the Commission to deal with the issue of interference solely through a rigid application of its existing regulations. Beyond a certain point, adherence to general rules may result in inefficiencies in spectrum use or, more significantly, a reduced quality of service to the public. On the other hand, it would overtax administrative resources to attempt to achieve greater efficiency, or better "tailoring" of service areas through *ad hoc* adjudications by the Commission. This was amply demonstrated during the period preceding the shift to the present "go-no-go" rules²⁰, when the Commission engaged in minute scrutiny, often in lengthy, expensive hearings, of claims that proposed new or changed facilities would render service that would more than offset service losses from resultant interference to existing stations. Such laborious case-by-case adjudications demonstrated that this method was not a desirable way to optimize the station assignment process.

28. The Commission has recently undertaken other rule making proceedings to evaluate other technical regulations governing AM stations.²¹ Changes such as those proposed in the proceedings addressing calculations in skywave and groundwave field strength and nighttime protection levels will eventually produce improvements in the AM service, but absent other changes, the benefits that can be derived from these proposals will accrue slowly.

29. We believe that it is appropriate at this time to give AM station licensees the opportunity to reduce the amount of interference currently received by implementing certain procedural changes in the processing of applications for facility modifications. Such changes would expand the opportunities to introduce improved technical criteria and allow stations to increase their level of interference protection, and thereby improve the quality and efficiency of AM spectrum use. At this "mature" stage of development of the AM service, a reduction in interference to existing service may be at least as beneficial as the introduction of new service.

30. Therefore, we propose certain changes in our Rules and procedures to encourage AM licensees to institute changes to reduce the amount of interference which has accrued under the current technical rules. While the *AM NOI* originally suggested that the Commission might consider allowing licensees to increase interference by mutual agreement, the commenters have persuaded us to refrain from proposing rules that would permit any increased interference within the protected contours of AM stations. Rather, we limit this proposal to permitting those activities between licensees that would *reduce* interference to one or more stations. Further, we propose to amend certain AM processing Rules to facilitate such efforts to achieve interference reduction between AM stations.

31. As discussed above, many AM stations have voluntarily accepted interference within the nominal contours specified in the Commission's Rules. The Commission granted applications involving such higher levels of interference so long as the applicant demonstrated that it would be able to provide the minimum requisite service to its community of license. Although the station had accepted this level of interference, this decision was based upon the circumstances then in effect. However, many communities may have grown or experienced population shifts. Suburbs may have expanded around the original licensed community. Moreover, FM service now competes for the AM audience and is not as susceptible to interference from the increased level of man-made noise resulting from the proliferation of use of electrical equipment. As a result, AM licensees may not be providing the service originally envisioned when the licensee determined what level of interference that it would accept. As FM and other media services have grown, the competitive position of AM stations has changed markedly. Thus, it may be beneficial to allow some flexibility in the application of our interference standards to allow licensees to adjust to changes in demographics as well as to changes in the broadcast market. This would permit AM licensees to improve service by reducing interference, and, where feasible, allowing stations to provide stronger signals to interstation areas that may need improved service.

32. Therefore, the Commission proposes to permit an AM licensee to reduce the area encompassed by its protected contour for the benefit of reducing interference to another station or otherwise permitting an overall improvement in interference-free service. Licensees reducing their coverage will still be required, however, to meet the city coverage requirements set forth in our rules.²² Thus, daytime operation must maintain daytime city coverage requirements, and nighttime operations from AM stations other than Class II-S or Class III-S stations must meet nighttime city coverage requirements.

33. Many changes in facilities are already permitted under our current rules. These include reducing power, altering antenna configuration, reducing tower height, or changing antenna sites. The licensee is required to notify the Commission of, and seek approval for, any such changes. Thus, under our current rules, nothing prevents licensees from working cooperatively to reduce interference, nor do the Rules prohibit payment of costs or additional consideration by any licensee in return for such "cooperative" changes. Furthermore, licensees are not required to inform the Commission of any such arrangements -- the licensee is required only to seek approval of the actual changes proposed. Requests for approval of the types of changes discussed above are treated as minor change applications.²³ Even significant reductions in power are currently treated as minor changes, provided that the licensee continues to provide the minimum level of service to its community of license as required by our Rules.²⁴

34. Furthermore, under our current Rules, a licensee may even surrender its license for the benefit of reducing interference to another licensee.²⁵ This could result in overall improved service to the public from the stations remaining on the air because interference from the former station would be eliminated completely. While this could result in a marginal reduction in the number of

AM stations received in a particular area, reducing interference in the congested AM band can lead to improved reception and better overall AM service to the public.

35. When a station surrenders its license, however, it is not deleted immediately from the Commission's records. The Commission has grandfathered the radiation and protection rights of stations that have gone off the air for various reasons by maintaining those rights for a period of one year while accepting applications for a "replacement" station.²⁶ Adherence to this practice of grandfathering radiation and protection rights of former AM stations, however, sometimes places the Commission in the position of perpetuating AM stations that do not meet our interference criteria. It is our intention to discontinue the practice of grandfathering radiation and protection rights in this manner in the future. The Commission's objective of improving the AM service by reducing interference between stations will be furthered by deleting stations that have surrendered their licenses from the Commission records. New proposals filed subsequent to a deletion will not be permitted to cause prohibited overlap of daytime contours of the remaining stations, and nighttime proposals will be examined based upon the recalculated interference reference (RSS) values for the AM stations remaining on the air.²⁷ We seek comment upon this proposal. Furthermore, to preserve our options in this regard, the Commission will not accept applications from parties seeking to replace or otherwise utilize the former radiation and protection rights of any station that surrenders its license during the pendency of this rule making proceeding.

Current Impediments to Interference Reduction Efforts

36. There are, however, two significant limitations within our existing Rules and practices that may impede efforts to reduce interference. The first is our present refusal to accept the filing of "contingent applications" -- that is, one or more applications seeking license modifications contingent upon Commission approval of another licensee's request for license modifications -- except under extraordinary circumstances. The Commission has traditionally refused to accept contingent applications because such applications are speculative and unduly impede the introduction of new and modified service by other parties. It may serve the public interest, however, to amend our Rules to allow the Commission to accept routinely a particular category of contingent applications where the proposed changes will result in interference reduction or otherwise permit an improvement in interference-free service. In this manner, licensees can endeavor to improve overall service by coordinating station modifications and having their coordinated efforts reviewed by the Commission simultaneously when determining whether to grant the proposed modifications.

37. We note that we would not expect a widespread occurrence of the use of contingent applications. Given the nature of the AM service, while there may be numerous situations presenting opportunities to reduce interference, we foresee comparatively few instances in which a licensee participating in an interference reduction arrangement could increase its power as a result of another licensee's efforts to reduce interference. We emphasize that this *Notice* does not propose to allow any increased interference to any AM station's protected contour. Thus, while limited opportunities for power increases by an AM licensee may arise if another station

reduces power or directionalizes, we expect that the largest number of opportunities for power increases -- and thus the incentive to file a contingent application -- will arise in cases where a licensee surrenders its license altogether.

38. Because of the point-to-point methodology used to calculate RSS values pertaining to nighttime interference, we would anticipate very few opportunities for power increases at night even in the event a station were to go off the air. Upon deletion of the station, we would recalculate the nighttime RSS limits for the AM stations remaining on the air. Subsequently, all stations, including those participating in any contingent arrangements, will be required to comply with the new RSS values.²⁸ Thus, while practicalities may limit the use of contingent applications to situations involving daytime service, we nonetheless find that they are important. Absent the assurance that the Commission will evaluate contingent applications simultaneously, licensees may not have sufficient incentives to take advantage of interference reduction opportunities. Given the potential for improvement to the overall quality of AM service, we believe that this proposal can provide significant public interest benefits.

39. The second significant limitation in our current Rules is the treatment of applications proposing increases in power as major changes,²⁹ subject both to the public notice and comment procedures of Section 73.3580 of our Rules, and to competing mutually exclusive applications and petitions to deny. We believe that the public interest is served by requiring that major change proposals comply with the public notice and comment requirements and allow interested parties to file petitions to deny, in accordance with Section 309 of the Communications Act of 1934, as amended. However, the possibility of competing applications may well prevent licensees from participating in the arrangements necessary to create opportunities for improved service. While the public could realize significant benefits from arrangements whereby one station reduces power, thereby reducing interference to a number of AM stations and, in limited circumstances, allowing another station to increase its power to better serve its audience, there is no incentive for such arrangements under our current procedures because the latter station will face potential competing applications when it seeks a power increase. Thus, under our current procedures, there appear to be few instances where two or more licensees could reach an interference reduction arrangement because a third party not participating in such efforts might prevail as a competing applicant.

40. We hereby propose to accept contingent applications from AM licensees seeking to implement interference reduction arrangements. We further propose that if two or more licensees submit contingent applications, the applicant(s) seeking power increases or other modifications that depend upon the contingency as part of the interference reduction arrangement will not be subject to competing applications from third parties with respect to the opportunities created by the contingent arrangements. In this regard, we propose to amend Section 73.3517, which restricts the Commission's acceptance of contingent applications, and Section 73.3571, which governs the processing of AM applications, as specified in Appendix A. In addition, we propose to amend Section 73.1750 to require a licensee that is surrendering its li-

cense pursuant to an interference reduction arrangement contingent upon another licensee's application for modification of facilities, to file a notice of intent to surrender, specifying the contingency, as set forth in Appendix A. We seek comment upon the proposed amendments.

41. Under the changes proposed above, the Commission would not examine third party proposals filed after the contingent applications by other parties that would not protect the currently authorized facilities of the contingent applicants, because to do so would interfere with the operation of the AM marketplace without compensating benefits to the public. Rather, the Commission proposes to review the terms and conditions of specific contingent applications for construction permits for facility modifications to determine whether grant of the contingent applications is in the public interest. To the extent that any of the contingent applications proposes a major change as defined in our Rules, the public will have the full opportunity to comment. While the Commission will consider objections to the proposed modifications raised by any comments, whether or not some alternative license modification proffered by a third party would confer greater public benefits will not be considered in the contingent application process. The Commission's determination of whether to grant the contingent applications will be based solely upon the issue of whether the public interest benefits to be gained by the proposals justify the requested modifications.

42. We believe that ample legal authority exists that supports the proposed amendments. The Commission is authorized to limit eligibility for applications seeking to utilize broadcast frequencies.³⁰ Because the channels involved in contingent application proposals are entitled to protection, they are not otherwise available for application by others. Thus, opportunities on these channels only arise if an existing licensee is persuaded to relinquish its protection, but this would only occur if the parties involved can be assured that they will benefit from the proposed modifications and that both applications will be granted. If one contingent applicant would withdraw in the face of any competing applications, both applications would be withdrawn. Any frequency utilization opportunities would disappear and other interested parties would have no comparative application rights pursuant to Section 309 of the Act, and therefore, the rule of *Ashbacker Radio Corp. v. FCC*, 326 U.S. 327 (1945), does not apply.

43. This analysis is analogous to that set forth by the Commission when it amended its Rules to provide a procedure that allowed the Commission to modify the licenses or permits of FM stations through Rule Making proceedings amending the FM Table of Allotments. Section 73.202(b) of the Rules, where the modifications would occur on mutually exclusive, higher class adjacent or co-channels.³¹ Such modifications are permitted regardless of the availability of additional equivalent higher class channels. In cases involving such proposed modifications, the Commission ruled that it would not entertain the filing of expressions of interest by other parties, reasoning that allowing the filing of potential competing applications would inhibit FM licensees from proposing upgrades that would be beneficial to the public.

44. There, as in the instant situation, the Commission found that licensees seeking to enhance service on co- or adjacent channels would generally withdraw their requests rather than risk the loss of existing authorizations, as well as the expense and delay of a comparative hearing. The

Commission found that *Ashbacker* was not controlling in such cases because the channels proposed for upgrades were precluded by existing operations and were thus unavailable for application by others, making the *Ashbacker* rule inapplicable.

45. Similarly, the analysis set forth above is somewhat analogous to that utilized by the Commission to support commercial-noncommercial channel exchanges without subjecting either existing licensee to competing applications.³² We believe that the use of contingent applications filed by AM licensees presents a similar situation in which the Commission is authorized to limit eligibility for applications for a specified frequency use. We seek comment upon these analogies.

Local Service Floor

46. The changes to Commission Rules and practices outlined above could provide important opportunities for licensees to obtain reductions in current interference levels, provide for more uniform coverage, and generally improve the quality of AM service. We recognize, however, that such changes carry with them certain implications with respect to the provision of local service. Thus, we believe that it may be desirable to develop a mechanism for ensuring that modifications do not result in a loss of local service that would be detrimental to the public interest. Therefore, we propose to establish a "service floor" -- a level of service that must be maintained subsequent to any changes in facilities.

47. We seek comment upon the appropriate parameters of such a service floor. For example, we seek comment upon whether the service floor should be defined solely in terms of reception of services (*i.e.*, the number of stations a listener can still receive), or whether the Commission should also consider transmission service (*i.e.*, the number of other stations licensed to a community losing a local station). We note that the Commission has traditionally been most concerned with first and second full-time aural services. An appropriate floor may be established in the form of a requirement that licensees not create any new "white" or "grey"³³ service areas.³⁴ Or, some other limitation may be more appropriate, such as prohibiting licensees from eliminating any third or fourth service, similar to the suggestions provided in the comments filed by Saga Communications and those of Karl D. Lahm. We also seek comment upon whether other services such as commercial FM services should be taken into account when determining whether the services available to a community meet the service floor.

48. A licensee seeking to reduce its service area would file an application with the Commission for a construction permit to modify its facilities. This application may be filed alone, or in conjunction with one or more other contingent applications. In any case, such an application could include a certification by the applicant(s) that the level of service provided to the area(s) that may experience reduced service would not fall below the service floor described above. Alternatively, the applicant could be required to include an exhibit consisting of contour maps documenting that the requisite number of signals would continue to be available to the areas affected by the interference reduction. Applications meeting this test and that are otherwise acceptable would be granted.

49. In all other respects, applications for modifications to facilities, whether single or contingent, will be processed in the usual manner at the Commission. Once an

application for modification of facilities for one or more licensees has been granted, the information used to calculate the interference protection ratios for the affected stations is automatically modified in the Commission's records to reflect the changes in facilities. Any future applicants for new or modified services will be required to protect the remaining stations to the recalculated interference protection level.³⁵ Thus, the increased protection derived from any interference reduction will automatically be enforced by application of the Commission's current procedures.

ADMINISTRATIVE MATTERS

50. Authority for the rule changes upon which comments are invited is contained in Sections 4(i), 303, and 307 of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 303, and 307.

51. Pursuant to the applicable procedures set forth in 1.415 and 1.419 of the Commission's Rules, interested parties may file comments on or before **May 8, 1989**, and reply comments on or before **May 23, 1989**. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. To file formally in this proceeding, participants must file an original and five copies of all comments, reply comments, and supporting comments. If participants want each Commissioner to receive personal copies of their comments, an original plus nine copies must be filed. Comments and reply comments should be sent to Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the Dockets Reference Room (Room 239) of the Federal Communications Commission, 1919 M Street, N.W., Washington, D.C. 20554.

52. For the purposes of this non-restricted notice and comment rule making proceeding, members of the public are advised that *ex parte* contacts are permitted except during the Sunshine Agenda period. *See generally* Section 1.1206(a). The Sunshine Agenda period is the period of time which commences with the release of a public notice stating that a matter has been placed on the Sunshine Agenda and terminates when the Commission (1) releases the text of a decision or order in the matter; (2) issues a public notice stating that the matter has been deleted from the Sunshine Agenda; or (3) issues a public notice stating that the matter has been returned to the staff for further consideration, whichever comes first. Section 1.1202(f). During the Sunshine Agenda period, no presentations, *ex parte* or otherwise, are permitted unless specifically requested by the Commission or staff for the clarification or adduction of evidence for the resolution of issues in the proceeding. Section 1.1203.

53. In general, an *ex parte* presentation is any presentation directed to the merits or outcome of the proceeding made to decision-making personnel which (1) if written, is not served on the parties to the proceeding, or (2), if oral, is made without advance notice to the parties to the proceeding and without opportunity for them to be present. Section 1.1201(b). Any person who submits a written *ex parte* presentation must provide on the same day it is submitted a copy of same to the Commission's Secretary for inclusion in the public record. Any person who makes an oral *ex parte* presentation that presents data or arguments not already reflected in that person's pre-

viously-filed written comments, memoranda, or filings in the proceeding must provide on the day of the oral presentation a written memorandum to the Secretary (with a copy to the Commissioner or staff member involved) which summarizes the data and arguments. Each *ex parte* presentation described above must state on its face that the Secretary has been served, and must also state by docket number the proceeding to which it relates. Section 1.1206.

54. As required by Section 603 of the Regulatory Flexibility Act, the Commission has prepared an initial regulatory flexibility analysis (IRFA) of the expected impact of these proposed policies and rules on small entities. The IRFA is attached as Appendix B. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments on the rest of the *Notice*, but they must have a separate and distinct heading designating them as responses to the Regulatory Flexibility Analysis. The Secretary shall cause a copy of this *Notice of Proposed Rule making*, including the Regulatory Flexibility Analysis, to be sent to the Chief Counsel for Advocacy of the Small Business Administration in accordance with section 603(a) of the Regulatory Flexibility Act, Pub.L. 96-354, 94 Stat. 1164, 5 U.S.C. 601 *et seq.*, (1981).

55. The proposal herein has been analyzed with respect to the Paperwork Reduction Act of 1980 and found to contain new or modified form, information collection and/or recordkeeping, labeling, disclosure, or record retention requirements. Implementation of any new or modified requirement will be subject to approval by the Office of Management and Budget as prescribed by the Act.

56. For further information on this proceeding, contact Diane L. Hofbauer, (202) 254-3394.

FEDERAL COMMUNICATIONS COMMISSION

Donna R. Searcy
Secretary

APPENDIX A

Part 73 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

57. The authority citation for Part 73 continues to read as follows:

Authority: 47 U.S.C. 154 and 303.

58. It is proposed to amend §73.1750 to add the following language at the end:

§ 73.1750 Discontinuance of operation.

* * * If a licensee surrenders its license pursuant to an interference reduction arrangement, and its surrender is contingent upon the grant of another application, the licensee surrendering its license must identify in its notification the contingencies involved.

59. It is proposed to amend §73.3517 by adding new paragraph (c) to read as follows:

§ 73.3517 Contingent applications.

* * * * *

(c) Upon payment of the filing fees prescribed in §1.1111 of this chapter, the Commission will accept two or more applications filed by existing AM licensees for modification of facilities that are contingent upon each other, if granting such contingent applications will reduce interference to one or more AM stations or will otherwise improve interference-free service. The applications must state that they are filed pursuant to an interference reduction arrangement and must cross-reference the other contingent applications.

60. It is proposed to amend §73.3571 by adding new paragraph (c)(1) to read as follows:

§ 73.3571 Processing of AM broadcast station applications.

* * * * *

(c) * * *

(1) In order to grant major change applications made contingent upon the grant of another licensee's request for a facility modification, the Commission will not consider mutually exclusive applications by other parties that would not protect the currently authorized facilities of the contingent applicants. Such major change applications remain, however, subject to the provisions of §§73.3580 and 1.1111. The Commission shall grant contingent requests for construction permits for station modifications only upon finding that such action will promote the public interest, convenience and necessity.

* * * * *

APPENDIX B

**REGULATORY FLEXIBILITY ACT
INITIAL ANALYSIS**

I. Reason for Action:

In this proceeding, we seek public comment upon a proposal to develop a formal procedure for AM licensees to reduce interstation interference and to consider certain changes in our AM processing rules that would facilitate such a procedure.

II. Objective:

This proposal is intended to reduce congestion in the AM band and thus improve the overall quality of the AM service.

III. Legal Basis:

Sections 4(i), 303 and 307 of the Communications Act, as amended, 47 U.S.C. §§154(i), 303 and 307.

IV. Description, Potential Impact, and Number of Small Entities Affected:

There are approximately 5000 AM broadcast stations in the United States, many of which may be able to take advantage of the procedures proposed herein. In addition, all could benefit from the anticipated reduction in the overall level of interference.

V. Reporting, Record Keeping, and other Compliance Requirements:

In order to effectuate any interference reduction efforts, the licensees involved would be required to obtain approval of proposed service changes from the Commission by filing an application for modification of facilities.

VI. Federal Rules that Overlap, Duplicate or Conflict with Proposal:

There is no overlap, duplication or conflict.

VII. Any Significant Alternatives Minimizing Impact on Small Entities and Consistent with Stated Objectives:

There are no significant alternatives available.

FOOTNOTES

¹ *Review of Technical Assignment Criteria for the AM Broadcast Service*, MM Docket No.87-267, 2 FCC Rcd. 5014 (1987).

² Throughout all periods of the day, AM stations transmit signals that travel in two directions -- signals that travel parallel to the surface of the earth, or "groundwaves", and signals that travel upward, away from the transmitter, or "skywaves". During the day, skywave signals are absorbed in the lower portion of the ionosphere in what is called the "D" layer. Groundwave signals thus predominate during daytime hours and their propagation is affected by frequency and the soil conductivity along the propagation path. Co-channel stations can be located reasonably close together without experiencing daytime interference because skywaves are not contributing to interference. At night the "D" layer disappears, and skywave signals are reflected from a second layer in the ionosphere and can thus be propagated hundreds of miles from the transmitter. Such enhanced nighttime propagation allows a station to provide skywave service over hundreds of miles, but also increases the possibility of interference over even greater distances.

³ The 107 AM channels were divided into three groups of channels: clear channels, regional channels and local channels. Four basic classes of stations evolved to operate on these three channel groups. Class I and Class II stations operate on clear channels. Class I stations provide extensive primary (groundwave) service during the day and night, with skywave service during nighttime hours generally extending out to 750 miles or more from the transmitter. Class II stations protect the Class I station on the channel and provide primary service only, the area of which depends upon station location, power and frequency. Class III stations represent an intermediate category

and operate on regional channels, providing primary service to larger cities and the surrounding rural areas. Class IV stations operate on local channels and provide primary service to a community and the immediately contiguous suburban or rural areas surrounding it. See 47 C.F.R. §§73.21-37, 73.182.

⁴ See *Report and Order* in BC Docket No. 80-90, 94 FCC 2d 152 (1983), *recon. denied*, 49 Fed. Reg. 10260 (March 20, 1984); see also *Implementation of BC Docket No. 80-90*, 100 FCC 2d 1332, 1340-1378 (1985).

⁵ See *First Report* in Gen. Docket No. 84-467, 50 Fed. Reg. 33844 (August 21, 1985); and *Second Report* in Gen. Docket No. 84-467, 51 Fed. Reg. 8706 (March 13, 1986); *Fourth Notice of Inquiry* in Gen. Docket No. 84-467, FCC No. 88-72 (released June 3, 1988).

⁶ *AM Report* at 82.

⁷ Group W Comments at 2.

⁸ There are differences in the contours to be protected. During the day, Class I stations receive co-channel groundwave protection to their 0.1 mV/m contour, while other stations are protected to their 0.5 mV/m contour. At night, Class I stations (other than Class I-N) receive co-channel protection to their 0.5 mV/m 50% skywave contours, while Class I-N stations are protected to their 0.1 mV/m 50% skywave contours. For Class II and Class III stations, nighttime protection is provided to a specified groundwave contour, (which can vary from 0.5 mV/m in the case of Class II-A to 10 mV/m in the case of Class II-C) or to a contour of a higher value if the station's service is already limited by interference from other stations. The rules also set forth adjacent channel protected contours for the various classes of stations. Finally, as discussed below, there are important differences in how daytime and nighttime interference calculations are made.

⁹ See 47 C.F.R. §73.37(a).

¹⁰ See 47 C.F.R. §73.37(b).

¹¹ See, *Notice of Proposed Rule Making: Review of the Methods for Calculating Nighttime Protection for Stations in the AM Broadcast Service*, FCC 88-327, 53 Fed. Reg. 47235 (November 22, 1988).

¹² See 47 C.F.R. §73.182.

¹³ See 47 C.F.R. §73.182.

¹⁴ 47 C.F.R. §73.182(1).

¹⁵ 47 C.F.R. §73.182(1)(1). This is commonly referred to as the "fifty per cent exclusion rule".

¹⁶ Thereafter, of course, other stations were required to provide protection to this station in accordance with the Commission's Rules.

¹⁷ The Commission bifurcated the inquiry proceeding and established separate filing periods for different sections of the AM NOI. *Order*, DA 87-1823, released December 15, 1987. Phase I of the comment period involved Sections II (Additional Assignment Considerations) and III (Related Technical Issues). Phase II involved Sections I (Technical Assignment Principles) and IV (Antenna Systems).

¹⁸ Comments of Group W (Phase I) at 8.

¹⁹ Comments of Crawford Broadcasting Company (Phase I) at 8.

²⁰ 47 C.F.R. §§73.37(a) and (b). The "go-no-go" rules rigidly proscribe the overlap of prescribed field strengths. Section 73.37(a) establishes the permitted overlap of contours between protected and interfering stations. Section 73.37(b) permits a proposed new or modified daytime facility to receive overlap up

to the 1.0 mV/m contour under specified circumstances to allow flexibility for provision of service to communities and areas lacking aural services.

²¹ *Improved Methods for Calculating Groundwave Field Strength in the AM Broadcast Band*, FCC 88-326, 3 FCC Rcd. 6577 (1988); *Improved Methods for Calculating Skywave Field Strength in the AM Broadcast Band*, FCC 88-324, 53 Fed. Reg. 45948 (November 15, 1988); *Review of the Methods for Calculating Nighttime Protection for Stations in the AM Broadcast Service*, FCC 88-327, 53 Fed. Reg. 47235 (November 22, 1988).

²² See 47 C.F.R. §73.24.

²³ See 47 C.F.R. §73.3571. A significant distinction between minor change applications and major change applications is that the latter are subject to the public notice provisions of §73.3580, as well as the petition to deny procedures afforded by §309 of the Communications Act of 1934, 47 U.S.C. §309.

²⁴ However, we note that existing Class II-S and Class III-S stations are exempt from the city coverage and minimum operating schedule requirements. We further note that in *Enhanced Nighttime Operation for Class II-S and Class III-S AM Radio Broadcast Stations*, FCC 88-325, released November 4, 1988, the Commission sought comment upon permitting full-time stations to employ voluntary nighttime power reductions, even to levels below the current established minimum power of 0.25 kW. We proposed that stations reducing their nighttime power below 0.25 kW would be reclassified as Class II-S or Class III-S and would lose their interference protection rights.

²⁵ Currently, any station may surrender its license without obtaining Commission approval to do so -- it merely notifies the Commission that it is relinquishing its frequency. 47 C.F.R. §73.1750. However, as detailed below, a change in the current Commission procedure is required if this approach is to offer a feasible method of reducing interference. See Appendix A.

²⁶ See, e.g., *Lorraine Broadcasting*, 88 R.R. 2d 985,987 (1966).

²⁷ See 47 C.F.R. §73.182.

²⁸ See also *Review of the Methods for Calculating Nighttime Protection for Stations in the AM Broadcast Service*, FCC 88-327, 53 Fed. Reg. 47235 (November 22, 1988).

²⁹ See 47 CFR §73.3571(a)(1).

³⁰ See, *Storer Broadcasting v. FCC*, 351 U.S. 192 (1956); *Malrite of New York, Inc.*, FCC 84-338, released July 31, 1984.

³¹ *Modification of FM Broadcast Licenses to Higher Class Co-channels or Adjacent Channels*, MM Docket No. 85-313, 51 Fed. Reg. 20290 (June 4, 1986).

³² See *Amendments to the Television Table of Assignments to Change Noncommercial Educational Reservations*, FCC 87-117, 51 Fed. Reg. 15628 (April 25, 1986).

³³ A "white area" is an area that receives no full-time aural service. A "grey area" receives one full-time aural service.

³⁴ Case law suggests that the Commission is precluded as a legal matter from allowing creation of any white or grey areas. See, e.g., *Hall v. FCC*, 237 F.2d 567 (D.C. Cir. 1956); *TV Corp of Michigan v. FCC*, 294 F.2d 730 (D.C. Cir. 1961); *West Michigan Television v. FCC*, 460 F.2d 883 (D.C. Cir. 1971).

³⁵ See 47 C.F.R. §73.182 for calculation of RSS values.

**CONCURRING STATEMENT
OF
COMMISSIONER JAMES H. QUELLO**

Re: Policies to Encourage Interference Reduction Between AM Broadcast Stations

Generally, I support issuing the *Notice of Proposed Rule Making* because it has the potential for reducing interference in the AM Band. My support, however, is tempered by several issues that are raised in this proceeding.

As the item correctly notes, the proposal has significant implications for our localism policies as established by Section 307(b) of the Act. We must make sure that service to local communities is not reduced to the point where a community is underserved. Second, the procedural mechanisms contained in the proposal could lay the foundation for a system of negotiated interference rights. I would like commenters to address these specific issues.

On balance, the benefits of potential reduced interference justify issuing a *Notice of Proposed Rule Making*. I intend to examine this issue closely.

**SEPARATE STATEMENT
OF
COMMISSIONER PATRICIA DIAZ DENNIS**

In Re: Policies Regarding Interference Between AM Broadcast Stations.

By now, the facts about AM's decline are familiar. AM's share of the radio audience has fallen from 73 percent in 1973 to 37 percent in 1983 to 25 percent today. Because the Commission has authorized so many AM stations, interference is a serious problem, especially at night. Class IV and other low-powered AM stations have an especially difficult time reaching their whole markets.

The FCC cannot "save" AM in a single proceeding, nor should we attempt to help AM by handicapping its competitors. We can, however, try to create conditions in which AM stations have an opportunity to compete effectively.

This notice addresses some AM problems by making it easier to reduce interference on the AM band. By accepting contingent applications, we would give stations more flexibility in adjusting their service areas. By deleting radiation and protection rights for stations that go dark, we would finally end our counterproductive practice of licensing replacement stations not meeting our current interference criteria.

These two proposals could gradually lead to a less cluttered AM dial. Listeners could benefit from the emergence of more high-power AM stations that have the facilities to cover an entire market and the resources to compete effectively.

Despite these potential benefits, our proposals carry some risk. We may be giving some stations an incentive to cut back service or, in extreme cases, to shut down altogether. Therefore, my support for this rulemaking is based on three safeguards. First, this item does not contemplate "negotiated interference." No station will be allowed to modify its facilities unless the change complies with the Commission's interference rules. Second, we will

continue requiring every station to provide a city-grade signal to its community of license. Finally, we are considering limiting stations' flexibility by adopting a local service floor. The idea is to deny contingent applications if the effect would be to reduce service to a community that has little service. I look forward to reviewing comments on whether we should adopt this last safeguard and, if so, how stringent it should be.