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

MM Docket No. 88-140

In the Matter of

Amendment of Part 74 of the FM Commission's Rules Concerning Translator Stations	RM-5416 RM-5472

REPORT AND ORDER
Proceeding Terminated

Adopted: November 8, 1990; Released: December 4, 1990

By the Commission: Commissioners Marshall and Duggan issuing separate statements.

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INTRODUCTION

1. By this *Report and Order*, the Commission is amending the rules governing the FM translator service. The Commission is restructuring the FM translator rules consistent with the intended purpose of this service, which is to provide supplementary service to areas in which direct reception of radio broadcast stations is unsatisfactory due to distance or intervening terrain barriers. In particular, we revise and clarify the FM translator rules, including new rules for: ownership and financial support of translators; methods for selecting among translator applications; the definition of "major change" in translator coverage areas; use of commercial and auxiliary band frequencies; interference criteria; and technical requirements for translators.

BACKGROUND

2. FM translators are stations that receive the signals of FM radio broadcast stations and simultaneously retransmit those signals on another frequency.[1] In general, the signal of the FM radio broadcast station being rebroadcast[2] must be received directly over-the-air at the translator site. [3] FM translators were first authorized in 1970[4] as a means of providing FM service to areas and populations that were unable to receive satisfactory FM signals due to distance or intervening terrain obstructions.[5] While the Commission recognized the benefits of authorizing FM translator service, it also expressed concern regarding the possible competitive impact such translators could have on FM radio broadcast stations and the effect their authorization could have on the licensing of those stations.[6] Thus, the Commission elected to authorize FM translators on a secondary basis only and imposed rules that restrict their service, ownership, financial support and program origination.[7] The FM translator rules currently in effect are essentially the same as those adopted in 1970.

3. The Commission commenced this proceeding with a *Notice of Inquiry (NOI)* [8] to study the role of FM translators in the radio broadcast service. This *NOI* responded to seven parties who petitioned the Commission for rule making seeking various, sometimes conflicting changes to our FM translator rules. Rule making petitions were filed by the National Association of Broadcasters (NAB), AGK Communications, Inc. (AGK), John Davidson Craver (Craver), John S. La Tour (La Tour), Communications General Corp., Bruce Quinn (Quinn), and Robert Jacoby (Jacoby).[9] In its petition, the NAB re-

quested the Commission to impose financial support and profit-making restrictions on FM translators to prevent their use by primary stations to expand their service areas. The NAB also asked the Commission to tighten the technical rules to prevent interference from translators to FM radio broadcast stations. The other petitioners generally sought expansion of the current translator service, including program origination authority.

4. The Commission next adopted a *Notice of Proposed Rule Making (Notice)* [10] in this proceeding, proposing to amend the rules governing the FM translator service based on the comments submitted in response to the *NOI* and our own analysis of the translator service. We stated, in the *Notice*, that the proper role for FM translators should be as a secondary service intended to supplement the service of FM radio broadcast stations. The rule changes proposed in the *Notice* sought to ensure that translator service does not adversely affect the operation of FM radio broadcast stations. Sixty-nine parties filed initial comments in response to the *Notice* and twenty parties replied.[11]

DISCUSSION

5. We continue to believe that the proper role for FM translators is that of a secondary service intended to supplement the service of FM radio broadcast stations.[12] Further, the rule changes we now make reflect our conclusion that the sole purpose of FM translators is to provide service in areas where direct reception of radio service is unsatisfactory due to distance or intervening terrain obstructions. After review of the comments submitted in response to the *Notice* and our own analysis of these issues, we conclude that our existing regulatory structure does not adequately ensure that the FM translator service achieves its intended purpose. We are aware of the need to clarify and amend several rules in order to ensure that FM radio broadcast stations are not adversely affected by translator operations. We also have determined that several rules should be modified to assure that translators better serve the public.

6. This *Report and Order* takes the following actions to revise the FM translator rules. First, the coverage contour of a translator providing fill-in service will be defined congruent with the coverage contour of the primary station for respective station classes. An FM translator's protected contour will be defined at 1 mV/m. With respect to service issues, an FM translator may not be licensed to a commercial FM broadcast station if the translator's coverage contour goes beyond the primary station's coverage contour. However, in "white area" situations beyond the protected contour of any full-time aural service, we will be favorably disposed toward requests for waivers of our rules to permit commercial primary station ownership. Commercial primary stations may financially support fill-in translators both before and after the translator commences operation. However, commercial primary stations may provide no financial support beyond technical assistance to FM translators serving other areas, although we will favorably view waiver requests to allow financial support for translators in "white areas." Noncommercial FM stations are not subject to any ownership or financial support restrictions. For all translators, one or more announcements not to exceed a total of 30-seconds per hour are permitted in order to acknowledge and solicit funds for operating expenses. Emergency warnings of imminent danger remain permissible with no local service obligations. Commercial translators providing fill-in service may use any terrestrial means to obtain the primary station signals, with a favorable disposition toward waiver requests for similar permission entertained for "white area" translators. Commercial fill-in translators will also be authorized to use intercity relay frequencies on a secondary basis. We will retain the existing rule which prohibits use of a translator solely to relay signals of a primary station to more distant translator facilities, although incidental relays will be permitted. We clarify that licensees may operate multiple FM translators upon showing "need" as determined on technical grounds by the quality of signal received from the intended primary station or any operating translator. We adopt procedures to resolve mutually exclusive applications: "fill-in" translators of the commonly owned primary station will have highest priority; alternative frequencies will be assigned when possible; when alternative frequencies are unavailable, priority classifications for FM allotments will be used; and, where the mutual exclusivity remains, we will select applications using a first-come-first-served method. A "major change" for FM translators will be defined as any change in output frequency (output channel), or any change or increase (but not decrease) in geographic area that increases the 1 mV/m coverage area by more than 10 percent of the previously authorized coverage contour. FM translators will remain exempt from multiple ownership rules and no AM-FM cross-service translating will be permitted.

7. Regarding technical issues, we will allow all FM translators to operate on any of the 80 non-reserved commercial channels with the 20 reserved noncommercial educational (NCE) channels remaining available for NCE-FM translator use. The proposed maximum ERP standard has been reduced to 250 watts at low antenna heights (HAAT), with the provision that additional antenna height must be traded for reduced power yielding new criteria for permissible coverage distance. We will be favorably disposed toward waiving this rule to permit higher power up to 250 watts ERP at any HAAT if the applicant demonstrates that the service to a greater distance reaches only a "white area." For purposes of applying the waiver standard to NCE-FM translators, the Commission will construe any area that is not served by a full-service public radio station as a "white area." We have clarified the standards for antennas and adopted our proposed prohibited overlap criteria for interference to FM and TV Channel 6 stations. Existing stations must comply with the new service rules within three years of the effective date of these new rules, and we will entertain waiver requests where service to the public would be lost as a result. Since most translators already comply with the new technical rules, we will "grandfather" existing translators until interference problems occur, at which time compliance will be required. Prospective licensees applying for translators under the new rules should be aware that the Commission intends to enforce the standards, and those found in violation of the rules will be subject to the appropriate sanctions.

8. In an effort to simplify the treatment of numerous issues in this proceeding, this *Report and Order* examines each of the existing FM translator rules and policies separately. Below we describe the current rule or policy,

summarize the comments received in response to the *Notice* and set forth our decision to retain, to modify or to eliminate that rule.[13]

SERVICE ISSUES

Coverage area

9. The present rules do not contain a definition of an FM translator station's "coverage area." The rules, however, refer to the 1 mV/m field strength contour of the FM radio broadcast station being rebroadcast regardless of its class as an area within which a translator may provide service.[14]

10. We proposed in the *Notice*, that, for purposes of the FM translator rules, a primary station's protected contour will be defined as the predicted 0.5 mV/m contour for commercial Class B FM stations, the predicted 0.7 mV/m contour for commercial Class B1 FM stations, and the predicted 1 mV/m contour for all other classes of commercial as well as all NCE-FM stations. In this way, the FM translator rules will be consistent with the Commission's other rules with respect to the protection of all classes of FM stations. We also proposed to define the coverage contour for an FM translator station as its predicted 1 mV/m contour.

11. *Comments*. While several commenters support the Commission's proposal, the NAB states that translator coverage contour definitions should be congruent with the protected contour of the primary station for the respective station classes. Thus, the fill-in FM translator contours should be established as the predicted 0.5 mV/m, 0.7 mV/m, and 1 mV/m for commercial Class B, B1, and other FM stations, respectively, and should fall entirely within the primary station's protected contour in order to prevent a primary station's reception area from extending beyond its protected contour. National Public Radio (NPR), as well as several other public broadcasting entities, argue that wider coverage areas (0.5 mV/m, 54 dBu) are necessary for both NCE-FM translators and NCE-FM primary stations because the proposed 1 mV/m protected coverage area for NCE-FM primary stations and NCE-FM translators will degrade actual coverage areas of many noncommercial FM stations, threatening the economic viability of these stations through lost listenership. Tucson Broadcasters Association (TBA) recommends that the protected contour for all FM stations be defined as the predicted 0.5 mV/m contour. du Treil, Lundin & Rackley, Inc. (du Treil) suggests that the FM translator service should parallel the TV service, where TV translator and low power TV stations are required to protect the Grade B coverage contour even though full service stations are not protected from interference from each other to the Grade B. du Treil proposes that FM translators be required to protect the 34 dBu contour of all FM stations. KSOR-FM suggests protecting the .05 mV/m (34 dBu) contour for existing 10-watt TPO NCE-FM translators as a result of their specialized circumstances.

12. *Rules*. For purposes of the FM translator rules, a primary station's coverage contour will be the same as its protected contour and will be defined to be consistent with the Commission's other FM station protection rules. Thus, the coverage contours will be the predicted 0.5 mV/m contour for commercial Class B FM stations, the predicted 0.7 mV/m contour for commercial Class B1 FM stations, and the predicted 1 mV/m contour for all other classes of commercial and all NCE-FM stations (including all Class D secondary NCE-FM stations). We believe that it would be inappropriate to single out particular classes of primary stations and provide them with greater protection from predicted interference than they otherwise receive under the applicable rules in their service. Thus, for example, NCE-FM radio stations will continue to be protected to their predicted 1 mV/m contours rather than to their predicted 0.5 mV/m contours. Furthermore, it does not appear necessary to adopt much more conservative protected contour values since there are rules to resolve the few interference situations involving translators that may arise. *See* paras. 128-131, 137 *infra*.

13. While we proposed, in the *Notice*, to define the coverage contour for an FM translator as its predicted 1 mV/m contour, we are persuaded that it is more appropriate to define the coverage contour for an FM translator providing fill-in service to be congruent with its primary station. Thus, the coverage contour for an FM translator providing fill-in service for a commercial Class B FM station will be defined as the former's predicted 0.5 mV/m contour; the coverage contour for an FM translator providing fill-in service for a commercial Class B1 FM station will be defined as the former's predicted 0.7 mV/m contour; and the coverage contour for all other FM translators, including those providing fill-in service for all classes of stations except B and B1, will be defined as their predicted 1 mV/m contour. For a fill-in FM translator, this contour must be contained within the primary station's coverage contour.

14. Although we are making a translator's coverage contour congruent with the coverage contour of the primary station as discussed in the preceding paragraph, we decline to take similar action with respect to FM translator protected contours. Our existing rules concerning the protected service provided by FM translators and our proposal to use a uniform 1 mV/m contour for the FM translator service, provide a consistent standard for determining predicted interference. We intend to use this value to define both protection for authorized FM translator stations and those applications that are considered mutually exclusive.

Ownership restrictions

15. The Commission adopted rules restricting the ownership of FM translators by the commercial FM primary radio station in response to its concern about the potentially adverse effect if primary stations expand their service areas into other stations' service areas.[15] A licensee of a commercial FM radio broadcast station is, therefore, prohibited from owning and operating FM translators intended to provide service beyond the primary station's predicted 1 mV/m contour, if such service is within the predicted 1 mV/m contour of another commercial FM station licensed to a different community.[16] This means that a commercial FM station licensee may own and operate FM translators serving areas within its own predicted 1 mV/m contour for the purpose of filling in signal reception where its signal is impeded by geographic obstruction. In addition, commercial FM radio broadcast stations may become licensees of translators to serve areas beyond their 1 mV/m contour where there is no other predicted FM service.[17]

16. The licensee of an NCE-FM radio broadcast station is not subject to any restrictions regarding the service area of any translators it owns and operates, if the signal is transmitted over-the-air from the primary station to its

translators. A recent Commission action amended the signal delivery rules for NCE-FM translators owned and operated by their primary stations that are assigned to the reserved frequency band (channels 200-220) to permit the use of alternative signal distribution technologies. In such cases, an applicant for a translator proposing to serve a particular area is required to meet certain conditions before its application can be accepted.[18]

17. Independent parties are also eligible to become FM translator licensees for stations that are intended to rebroadcast either commercial or NCE-FM stations.[19] Under existing rules, there are no restrictions on the ownership of FM translators by independent parties since their interest in establishing such translators is indicative of a need for supplemental FM service.[20] Thus, independent parties may be licensed to operate FM translators providing service to areas within or outside the 1 mV/m contour of the FM primary station.

18. In the *Notice*, we proposed to divide FM translators into two categories. The first category includes FM translators providing "fill-in" service -- *i.e.*, the FM translator's predicted 1 mV/m contour is within the coverage contour of the primary station. The second category includes FM translators providing service to "other areas" -- *i.e.*, the FM translator's predicted 1 mV/m coverage contour extends beyond the coverage contour of the primary station. We proposed to modify the existing ownership rule so that the licensee of a commercial FM radio broadcast station cannot own an FM translator if the coverage contour of the FM translator goes beyond the coverage contour of the primary station. We also requested comment on the extent to which our proposed ownership rules are sufficient to prevent unintended uses of FM translators when considered in conjunction with our other proposals discussed below.

19. *Comments*. Most of the broadcast interests commenting on this issue support the Commission's proposal to modify the ownership rule.[21] NAB further suggests that the Commission continue to permit primary stations to own and/or fund translators operating beyond their protected contour, provided that the translator does not operate within the protected service contour of another commercial FM broadcast station nor within an AM station's primary daytime service area.[22] NAB also urges that once full-service radio station operation begins to serve the community of a translator meeting the above exception, the primary station should be required to cease ownership or funding of the FM translator within 60 days.[23] La Tour responds that this "white area" exception is meaningless, since these locations are essentially nonexistent. Capital Cities/ABC, Inc. (Capital Cities/ABC) and the Association for Broadcast Engineering Standards (ABES) urge the Commission to permit commercial FM stations to own FM translators in "other" areas as a way to ensure that residents of remote and sparsely populated areas will be able to obtain a reasonable minimum of FM reception services. They suggest that FM translators should be allowed to operate where necessary in order for a community to have at least four primary FM (reception) services.

20. NPR urges that independent owners of NCE-FM translators should have some relationship or "nexus" to the translator service area and be responsive to the concerns of the local community, in order to prevent "flipping" of licensed frequencies to another owner from the original applicant. NPR is concerned that such practices cause sudden disappearance of valued services when the translator facility transfers to another primary station. La Tour disagrees with this concept, stating that an unregulated market and the pressure for translator operators to raise financial support will be most likely to create community responsive programming, thus establishing a "real connection" for a broad variety of locally appealing FM radio services. KPBX Spokane Public Radio (KPBX) states that NCE-FM translator stations should be permitted to operate only within the primary station's protected contour or in areas where there is no other NCE-FM radio service.

21. Alpine, licensee of WAVV-FM, Marco, Florida, and Kneller, licensee of WKII-AM, Port Charlotte, Florida, provide an example of an alleged abuse of the FM translator rules. They state that FM translators of a Class A FM station from North Naples, Florida, broadcasts big band programming into the Punta Gorda and Port Charlotte communities. All four of this station's translators are licensed to the station owner's father-in-law, who resides in the midwest. Alpine complains that Punta Gorda is already well-served as it receives radio service from Ft. Myers, Naples, Sarasota, and Tampa-St. Petersburg with local service from two AM and two FM stations. Kneller shows that of the four translator locations, three are served by six, three, and two local full service FM facilities, respectively. Furthermore, the Punta Gorda translator duplicates the local format of WKII-AM of Port Charlotte (owned by Kneller) and has nearly driven Alpine's WAVV-FM off the air. Kneller states that the North Naples station denies any connection to the translators. The commenters contend that this situation violates the intended use of translators -- to fill in dead spots in a station's service area -- and that the translators are being used to benefit the primary station rather than the public.

22. *Rule*. Most of the commenters on this issue agree with our proposal to change the ownership rule. We now adopt that proposal, including the provision distinguishing between "fill-in" and "other area" translators,[24] which will permit commercial FM stations to own FM translators only where the FM translator's coverage area is entirely contained within the coverage contour of the primary station.[25] We impose no ownership limitation on NCE-FM translators or on FM translators that are independently owned.[26] While the establishment of independent party translators in these other locations indicates a public desire for the programming, translators owned by FM radio broadcast stations would more likely indicate a station's interest in reaching audiences in areas that lie outside its service area. More generally, we believe that to relax restrictions on FM radio broadcast station ownership of translators would conflict with our belief that the public interest is best served by maximizing service through the use of FM radio broadcast stations. We continue to believe that the most appropriate and efficient means of providing additional FM service nationwide is by creating opportunities for the establishment and development of full service broadcast stations. We believe that a modification of our rules to permit the expansion of FM service through the use of translators would be inconsistent with our basic FM allotment scheme. Such a change also would be particularly undesirable while we are implementing Docket No. 80-90 through the authorization of a large number of new and upgraded stations because the

potential for interference between these new facilities and new translators is substantially greater until most or all of the new and upgraded primary stations are operating.

23. The Commission believes that the record lacks the evidence to suggest that a "white area" exception to our ownership rule would noticeably improve coverage and public service and leads us to conclude that a specific "white area" exception is unnecessary. However, in situations where a licensee establishes that service is indeed unavailable, we will be favorably disposed toward requests for waivers of this rule to address these unique circumstances. Within the context of this proceeding, we will define a "white area" as any area outside the coverage contour of any full-time aural service. We emphasize that in order for commercial primary stations to own translators in such areas, the Commission will require a showing of a lack of service in accordance with the "white area" definition given above.[27] Independent party ownership of translators in "white areas" will be permitted under the general provisions of this rule. With respect to provision of service to remote areas experiencing limited radio service, we note that our ownership restriction does not prohibit FM translator service in these "other" areas, it simply rules out commercial primary FM station ownership of such translator stations. Independent parties may establish FM translators to serve any area.

Financial support

24. The current rules provide certain restrictions on financial support of FM translators by commercial FM radio broadcast stations. In particular, we do not grant construction authority to an independent party applicant who proposes to construct a new FM translator station beyond a commercial primary station's predicted 1 mV/m contour, and within the predicted 1 mV/m contour of another commercial FM broadcast station assigned to a different community, if such independent party applicant will receive, directly or indirectly, any financial support or contribution from the primary station for application and construction costs, or any other costs incurred up to the time the translator commences operation.[28] However, a primary station licensee may support the operation and maintenance of such a translator after operations commence.[29] No similar restrictions apply to NCE-FM licensees.

25. In the *Notice*, we proposed to allow a commercial primary station to support translators providing fill-in service, both before and after the translator station commences operation, but to prohibit a commercial primary station from supporting, directly or indirectly, any FM translators providing service to other areas, both before and after they commence operation.[30] We stated that the proposed revisions to our financial support rule should remove the ambiguities that have led to the alleged abuses reported in the comments submitted in response to the *NOI* by NAB and others. We also asked whether parties might still circumvent the proposed rule, through "under the table" reimbursements or any other consideration not addressed by the proposed rule, and sought comment on specific clarifications that might discourage such activities.

26. *Comments*. Several commenters support the Commission's proposal to prohibit commercial primary station support of FM translators in "other" areas.[31] CBS states that the restrictions on financial support are the only realistic means of moving toward the goal of non-expansionist FM translators since it is virtually impossible to monitor the extent of financial support to translators by primary stations. NAB and Capital Broadcasting *et al.* support the Commission's proposal but would also permit primary station funding for FM translators in "white areas." Capital Cities/ABC proposes that an exception should be made for translators serving "underserved areas", defined as areas receiving fewer than four radio signals.

27. ABA claims that the incidence of competitive abuse through FM translators has been high in Arizona, where distant signals exceed the number of local signals in some communities, while few translators have been licensed to other communities where service is truly lacking. NAB cites the example of KCLS-AM of Flagstaff, Arizona, regarding the adverse effect of FM translators upon the radio environment in general, and vulnerable AM stations in particular. NAB notes that Tucson stations, imported by FM translators in Flagstaff, dominate the top rated radio stations in Flagstaff and, thus, allegedly drove KCLS-AM from the air. La Tour offers a letter from Michael N. Ferguson, President of Northern Arizona Broadcasting, Inc., the licensee of the KDKB-FM translator in question, who states that KCLS-AM was owned by Arizona land developer Jim Kurtz, who sought to use the land for a mobile home development. Mr. Ferguson also states that the programming rebroadcast by the translator is considerably different from the KCLS-AM format such that it could not compete with the AM station as alleged. Accordingly, Columbia Bible College Broadcasting Company (Columbia) states that any instance in which an FM translator knocks a broadcast station off the air simply indicates that the primary station was not adequately serving the special needs of the local community.

28. La Tour strongly opposes restrictions upon financial support on the grounds that many translator services would be eliminated, thus causing economic damage to the primary station as well as the translator operator.[32] La Tour's perspective is based upon the premise that FM stations in smaller markets must be able to use translators in order to penetrate larger markets, where greater advertising revenues may be earned, in order to compete on a "level playing field" with larger market stations. In addition, La Tour contends that translator use should not threaten the FM environment because primary stations will only be willing to support stations that meet a legitimate need through unique programming formats and potential for listenership. He questions the feasibility of policies in which translator operations are funded solely by charitable donations from listeners and supporting businesses, especially in smaller market areas where the need for translator services is particularly strong. Further, La Tour states that translator listeners who prefer more "narrowcast" program formats are harmed because they would be forced to pay twice for such programming: once through the product price paid by all consumers; and, again, through translator contributions. Moreover, La Tour questions whether the Commission has authority for such economic regulation of a broadcasting station. As an alternative to the Commission's proposal, La Tour suggests a limit, either in the form of a maximum number or ratio, imposed upon the number of translators for each market area similar to the limit for high power radio

stations. La Tour argues that this alternative would preserve program variety and service to various regions while providing some bridle for competition.

29. The National Translator Association (NTA) comments that the Commission's rule proposal reflects a concern with suburban stations or rural stations located near urban markets having their signals retransmitted into the urban market. NTA contends that the rule changes proposed in the *Notice* are overly broad and will result in the extinction of the FM translator service in rural areas.[33] NTA argues that the mere allegation of rule violations cannot justify revision of the rules, since the proper remedy for such problems is to enforce existing rules rather than to make new rules. NTA states that in order to enforce the existing financial support rules, the Commission should require that each FM broadcast station include with its annual ownership report a statement of whether it provides financial, technical, or in kind support to any translator, stating the total value of support provided for each translator. FM translators should also be required to file statements of support with their renewal applications, providing similar information about the amounts and sources of their funding. These reports, which would be open to public inspection, would enable interested parties to monitor potential abuses, while permitting primary stations to provide reasonable amounts of financial support to translators with minimum reporting requirements. As a final matter, translator operators in Utah request that the Commission permit primary stations to provide technical assistance to FM translator licensees.[34]

30. *Rule*. As proposed in the *Notice*, the Commission will allow a commercial primary station to support translators providing fill-in service, both before and after the translator station commences operation. Also, we will prohibit a commercial primary station from supporting, directly or indirectly,[35] any FM translators providing service to other areas, both before and after they commence operation.[36] In order to encourage the introduction of service to "white areas", however, the Commission will be favorably disposed toward requests for waivers of this rule to permit a commercial primary station to support its own translator, or an independently owned translator, providing service to these unserved areas. Under the current rules, it is virtually impossible to monitor the extent to which primary stations offer financial support to translators. We believe that this revision of the financial support rule is necessary to assure that translators are used only for their intended purpose. Also, underserved communities will have the opportunity to fund FM translator service according to the new rule through their independent charitable support. Although the Flagstaff situation cited by NAB does not offer conclusive evidence of abuse, we are convinced that the recent expansion of FM translators was facilitated by the financial support arrangements permitted under the original rule. To the extent that this expansion threatened to undermine the vitality of FM and AM services, we believe that the public will be best served by the revised financial support rule we now adopt.

31. We observe that La Tour's general argument for expanded FM translator service is based upon his perspective that translator facilities offer the "level playing field" by which broadcasters in small markets may gain access to the attractive advertising revenues of larger markets. We continue to believe that Mr. La Tour's vision of a "level playing field" could potentially undermine the development of broadcast station service due to the lower cost structures and lack of local service obligations of these reception facilities. Second, Mr. La Tour wishes to compete with broadcasters by offering narrowly tailored formats to local communities, yet his comments seem to obscure the categorical distinction between FM translators and broadcast stations. Indeed, given that FM translators and broadcasters are not similar entities, the disparity in treatment in order to promote incentives for new broadcast stations offering diverse programming formats is reasonable. Consequently, we find that Mr. La Tour's arguments for loose constraints upon financial support for FM translators would detrimentally affect the competitive balance between broadcast stations and translator facilities by redistributing revenue away from broadcast stations, and thus, potentially limiting primary radio service to the public.

32. We reject as unworkable the La Tour proposal that we limit, either in the form of a maximum number or ratio, the number of translators in each market rather than prohibit financial support by the primary station. Each local market has a unique capacity to support FM translators, based upon available frequencies and other factors related to interference, population and income. Thus, any number or ratio we might pick could unduly constrain service to the public in some instances, and permit excessive growth of FM translators in other areas. We also reject NTA's proposal that we retain the existing financial support rule and adopt financial reporting requirements for both broadcast station and FM translator licensees. NTA's proposal burdens both licensees and the Commission. Furthermore, NTA's alternative does not solve the existing rule's fundamental enforcement problem, namely the practical difficulty and resource requirements of determining the appropriate level of compensation from the primary station to the translator.[37]

Fundraising by translators

33. The current rules provide that translators may originate one announcement per hour of up to 30 seconds, to solicit or acknowledge financial contributions made to defray the costs of installing, operating and maintaining the translator station.[38] Such announcements are to be made principally for the purpose of acknowledging financial contributions and may include identification of the contributors, the size or nature of the contributions and advertising messages of contributors.[39] The licensee of the translator may not make these announcements "for the purpose of making a profit."[40] The same restrictions which apply to solicitations by and contributions to noncommercial FM stations are also applicable to noncommercial FM translators.[41]

34. We proposed, in the *Notice*, to retain the existing rule allowing a total of 30 seconds per hour to solicit contributions or to acknowledge contributions. We also proposed to clarify the rule to permit announcements for solicitation or acknowledgement of contributions to be split during the hour. Finally, we asked commenters whether our proposed rules concerning fundraising by fill-in and other area translators should be clarified by the inclusion of a definition of what constitutes acceptable solicitations and acknowledgements.

35. *Comments*. NAB, as well as many broadcast interests, support our proposal to retain the 30 second limitation for on-air fundraising.[42] NAB also suggests that the

Commission permit only community-owned translators to originate acknowledgements or solicit contributions. In addition, NAB argues that all FM translators should be subject to enhanced underwriting restrictions similar to those of NCE-FM broadcast stations when acknowledging contributors.[43] Several of the noted commenters also support the Commission's proposal to permit the 30 seconds to be split during the hour, while NAB, as well as Northland, disagree, stating that the rule is necessary to limit profit-making opportunities and to avoid unnecessary clutter of primary station programming.

36. KBUR-AM/KGRS-FM alleges an example of an "abuse" of the 30-second limitation on FM translator fundraising in Burlington, Iowa. KBUR/KGRS produces a copy of a proposed translator contract and cover letter signed by Dan Hendrix, an employee of La Tour's Power Du Pree Broadcasting Co., the terms of which call for the primary station to broadcast one 60-second advertisement provided by the translator operator per hour during each hour in which the primary station is broadcasting. Also, in the event of special programming, sports events, political speeches, etc., the contract states that the primary station may run the advertisements at an alternate time with prior written permission of the translator licensee.

37. KBUR/KGRS also presents copies of business cards, letterhead, newspaper advertisements, and a newspaper article citing on-air practices, which refers to La Tour's existing Burlington translator KZ285DJ station as "Burlington's Lite 104.9." KBUR/KGRS argues that this reference misrepresents the nature of Mr. La Tour's facility, which should be identified as "WCAZ, Carthage, Illinois, on translator KD285DJ." KBUR/KGRS states that not only does this practice mislead local merchants into believing that they are advertising on a locally oriented FM station, but listeners may be misinformed during weather or news emergencies.

38. Several commenters suggest that FM translators should be able to cover costs of necessary maintenance and to generate revenues in excess of operating costs. These commenters suggest, therefore, that the Commission expand the fundraising opportunities for FM translators. La Tour argues that the 30 second limitation, when combined with the cessation of financial support from the primary station, will effectively eliminate independently owned FM translators providing narrow-format programming. Mr. La Tour argues that FM translators must be offered some reliable alternative and expanded means of raising support beyond existing charitable sources. WTI proposes, and La Tour concurs, that FM translators should be permitted to make use of multiplex subcarriers as provided in Section 73.293 of the rules. WTI and La Tour also support expanding the existing 30-second per hour limit on local announcements to 60 seconds per hour, while also asking that FM translators be permitted to divide or combine announcement time in any manner convenient to the licensee.[44] Finally, Christian Media Associates, Inc. (Christian Media) requests a one minute block per half hour to air acknowledgements and solicitations.

39. La Tour contends that requiring FM translators to solicit funds solely through local on-air announcements will inconvenience listeners through frequent interruptions by annoying solicitations inserted into primary station programs. Furthermore, La Tour, as well as WTI, believe that the FCC should not restrict wording or content of announcements beyond those restrictions applied to commercial radio stations.[45] La Tour subsequently notes that it has not been demonstrated how content restrictions may benefit the public.

40. *Rule*. The Commission will retain the existing rule which limits on-air fundraising activities of FM translators to 30 seconds per hour. We believe that the present 30-second limitation provides a reasonable opportunity for FM translators to acknowledge contributions as well as to solicit funds from their listeners as necessary for the facility's operation. Furthermore, we are concerned that an increase in the 30-second limit would be inconsistent with the secondary nature of FM translators.[46] We believe that any additional time provision for on-air fundraising would unnecessarily detract from service to the public by interrupting primary station programming. Moreover, we believe that additional time allotted to on-air solicitation and acknowledgments will fractionalize audiences as well as revenues. The existing rule remains consistent with the new, more restrictive limits adopted above for translator ownership and financial support, all of which are designed to assure that FM translator operations are constrained to their intended role as an auxiliary service.

41. As with the alleged abuses regarding ownership and financial support, we are also concerned by the purported abuses alleged by KBUR/KGRS. Therefore, we wish to emphasize that any Commission licensee which engages in a practice designed primarily to evade the 30-second limitation potentially subjects itself to the full panoply of Commission enforcement mechanisms. Indeed, because intentional evasion of Commission rules represents behavior which jeopardizes the Commission's ability to discharge its regulatory mandate, we view such behavior with particular disfavor.

42. We will also permit solicitations or announcements to be split during the hour. We believe that while the 30-second limit is the appropriate standard for fundraising efforts, it is unnecessarily restrictive to stipulate how that time should be allocated. Considering that the announcement and solicitation time is brief, a station's choice to split the 30 seconds should not noticeably burden listeners through interrupted programming. Likewise, we believe that the present format for acceptable acknowledgements by commercial FM translators -- which includes identification of contributors, the size and nature of contributions, and advertising messages of these contributors -- gives sufficient guidance as to what should be communicated during the permitted time. Admittedly, the advertising portion of the acceptable announcement causes some concern to broadcasters. However, translators must be able to raise operating funds. We believe that some information about contributors must be allowed in order to enable translators to encourage donations and, thus, provide the public with radio service. In addition, we do not wish to unnecessarily intrude upon the initiative of FM translator licensees who attempt to raise funds within the given parameters. Therefore, we will maintain the existing language.

43. The rule will continue to permit all translators, whether owned by their primary station or by an independent party, to originate 30 seconds per hour for fundraising purposes. Although NAB has suggested that we restrict fundraising opportunities to community-owned translators, we find no reason to change the current rule. The Commission's rules for FM translators have never distinguished between various categories of independent ownership. Given that both community groups and "third

parties" must each raise funds for their translator operations, we will permit all independent owners to do so within the parameters of the 30-second limit without further restrictions.[47]

Local program origination authority

44. The current rules limit FM translators to rebroadcasting the signal of an FM radio broadcast station.[48] Program origination by all translators, commercial and NCE-FM, is prohibited with the exception of origination authority to acknowledge or solicit financial support and to provide emergency warnings of imminent danger.[49] Moreover, emergency transmissions are limited in time and frequency to that necessary to protect life and property. Furthermore, where the translator is owned by an independent part[illegible] written consent is required for the rebroadcast of [illegible] radio broadcast station's signal.[50] In the *Notice*, w[illegible] sed that the existing prohibition against progra[illegible] nation authority for translators be retained.

45. *Comments*. Most commenters agree with the Commission's proposal to make no change in the program origination rule.[51] NAB states that there is no public interest need for expansion of translator station program origination. CBS contends that translator program origination would be inconsistent with the secondary nature of translator service and would generate direct, low power competition for FM stations. London Bridge states that if radio service is needed, then traditional FM station applications should be filed.

46. Conversely, La Tour contends that the public will be better served by translators with local program origination authority. La Tour suggests that FM translators are uniquely able to provide narrow appeal formats such as Christian, classical, and children's programming due to the low cost of operating the facility. Houston L. Pearce of Radio South, Inc., observes that translators may also be used to compete with other stations, arguing that one of Mr. La Tour's translators in Tuscaloosa, Alabama is not contributing a unique format to the area. Pearce alleges that La Tour provides an urban contemporary format from a translator in Tuscaloosa which rebroadcasts station WSLY-FM, York, Alabama, which in turn rebroadcasts the programming of WALT-AM in Meridian, MS. Pearce indicates that the translator's programming is already provided by WTUG-FM, which has served the community for over 12 years, and WENN-FM which is a Class C station from Birmingham, AL. Furthermore, an FM translator in Meridian, MS, retransmits the programming of WSLY-FM. Alpine and Kneller provide another example of duplicated formats in the situation cited above from Punta Gorda, Florida. Alpine alleges that the Punta Gorda translator exactly duplicated the big band format of Kneller's WKII-AM of Port Charlotte, which was ultimately forced to alter its programming.

47. Several commenters propose intermediate options for program origination authority for FM translators. Gerard A. Turro (Turro) proposes, based upon the Bergen County, New Jersey, circumstance and his petition for waiver, that translators should have authority to originate local programming when serving counties with no present, locally-situated commercial FM stations, nor any possibility of future FM station allotments. In this way, Turro argues, a translator can provide the local community with reports on local events and news such as school closings, traffic emergencies, or water main breaks. Turro suggests that such origination authority should remain secondary in status to full-service FM broadcasters. FM Technology states that FM translators should be authorized to originate programming in areas void of any other service that addresses their needs. KSOR suggests that NCE-FM translators be permitted to provide news service, such as election coverage, to the local community.

48. *Rule*. We continue to believe that we should not authorize program origination for FM translators, even on the limited basis proposed by Mr. Turro and other commenters. The proper role of FM translators among aural services to the public is to provide secondary service to areas in which direct reception of signals from FM broadcast stations is unsatisfactory due to distance or intervening terrain obstructions. In view of our commitment to provide FM radio broadcast service in a manner that promotes program diversity while enhancing the incentives for efficient broadcast station development, we believe it is desirable to hold constant the existing relationships between FM broadcast stations and translator service. Furthermore, we believe that our efforts to improve local service must be balanced against the technical degradation to the overall broadcasting system that could result from a proliferation of translator stations. Thus, we will maintain FM radio broadcast stations and translators in their current role as providers of primary and secondary service, respectively.

49. Where there is sufficient community interest, the rules that permit translators to rebroadcast the programming of FM stations provide an opportunity to import programming formats otherwise unavailable. Furthermore, our existing rule, which permits unlimited programming in the event of an emergency, gives the translator licensee an adequate vehicle for informing local residents of any such situations. Yet, in these areas, we believe that allowing low cost translators to operate essentially as FM radio broadcast stations, without subjecting the translators to the requirements imposed on the radio broadcast stations, would undermine our preference to provide service through more efficient primary service stations.[52]

50. In our *Notice* we subsumed Turro's request for waiver of Section 74.1231 of the Commission's rules to permit his FM translator station (W276AQ) to originate local programming.[53] We reasoned that since the issues raised in Turro's specific request were similar to the broad policy questions raised in the *Notice*, they should be considered in this single item. We have reaffirmed that the FM translator service should facilitate the reception of radio signals to areas deprived of such service due to distance and intervening terrain obstructions. We continue to believe that this is the proper role of FM translators and that our scheme of classifying FM and standard broadcast stations should not be subverted by the creation of a new transmission service.[54]

51. Apart from the broad policy questions that have led us to reject Turro's proposal, there are a number of other reasons to deny his waiver request. Foremost, Turro has not made a sufficiently compelling showing that Bergen County is without aural broadcast service. We note that the county is already served locally by WDJ(AM), Hackensack, New Jersey which has obligations to its community of license and surrounding areas. Additionally, three NCE-FM stations are licensed to Bergen County communities: WFDU(FM) in Teaneck, WRRH(FM) in Franklin Lake, and WRPR(FM) in Mahwah. A 10,000 watt com-

mercial AM station (WVNJ) is presently under construction in Oakland, New Jersey. Thus, not only is the county the recipient of over 60 radio broadcast stations, it is the locus of 5 authorized radio stations, all bearing a responsibility and opportunity to serve the county in time of emergencies. Other nearby radio stations, such as WPAT-AM/FM, licensed to Paterson, New Jersey, broadcasts the results of Bergen County elections. WCBS-AM/FM, licensed to New York City, filed comments showing that it provides the county with daily traffic reports, public service announcements, programming of local interest and school and weather reports. Thus, while a number of local services are apparently available to meet the demands of Bergen County, albeit not as envisioned by Turro, he has not shown why the county cannot arrange with these stations to provide any desired programming or why Turro himself cannot contract with these or other stations to attain his desired objectives. Turro's facility is already empowered, as are all FM translator stations, to serve the county in times of emergency by broadcasting information in order to protect life and property.[55] Where the ability to provide local public information is constrained by available funds, we emphasize that our rules permit unlimited independent financial support for this form of FM translator service.

52. Next, Turro has not shown that his situation is so unique that other applicants would not seek similar treatment. By his own admission through a detailed study included in his comments, numerous counties similarly have no dedicated allocation. If we were to grant Turro's request, we would be compelled to grant these presumptively similar requests as well, resulting in the creation of a new transmission service using the very facilities that we have affirmed as being restricted to reception purposes. Turro's comments also overlook the fact that the Commission allocates frequencies on the basis of communities, not counties, such that a new system of allocation would be necessarily based on the needs of counties without consideration of its consequences on the Commission's long-standing distribution objectives. Consequently, for the reasons set forth above, the Commission will deny Mr. Turro's request for waiver of Section 74.1231 of the rules.

Local service obligations

53. Under the current rules, FM translators have no local service obligations. We proposed in the *Notice* to continue to exempt FM translators from local service obligations in all areas. We stated that imposing local service obligations on translators would exact a cost on their operations that could jeopardize their existence, contrary to our goal of extending service to areas that would otherwise remain unserved.

54. *Comments*. La Tour states that local translator operators would be pleased to accept public service responsibilities in exchange for program origination authority. Furthermore, he contends that listeners who prefer the more narrow formats should not be deprived of local weather, news, and other public service information. Alternatively, La Tour contends that the Commission could give primary stations local service responsibilities for their translator markets as well as their primary markets. No other commenters specifically addressed this issue.

55. *Rule*. We find no compelling reason for imposing local service obligations on translator licensees. Because FM translators are a secondary service with limited means of support, it would be burdensome to impose additional program responsibilities upon translators. La Tour contends that translators would reasonably accept local service obligations in order to offer narrow programming formats. We reiterate that translator program origination is inconsistent with the Commission's competitiveness and efficiency interests as expressed above, such that any local service obligations would be unwarranted.

Signal delivery

56. The current rule generally provides that translators may only rebroadcast the signal of an FM radio broadcast station or another translator that is received directly over-the-air.[56] The only exception is that an NCE-FM translator station operating on a reserved channel, and owned and operated by the licensee of the primary station, may use alternative signal delivery means, including, but not limited to, satellite and microwave facilities under certain conditions.[57] In the *Notice*, we proposed to change the signal delivery rule to permit commercial FM translators providing fill-in service to use terrestrial microwave transmission facilities. We stated that this change will facilitate the rebroadcast of FM station signals to remote or geographically inaccessible areas where over-the-air terrestrial retransmission has not been particularly effective.

57. *Comments*. Many broadcast interests support the Commission's proposal to authorize commercial FM translators providing fill-in service to use terrestrial microwave transmission facilities.[58] NAB favors off-the-air delivery of signals as an adequate method for most FM translator operations. NAB remains opposed to FM translators receiving space satellite program feeds, and suggests that the Commission revisit its decision to permit satellite feeds to certain NCE-FM translators. However, NAB supports the FCC's proposal to allow "fill-in" translators to use microwave links, despite previously opposing any translator use of microwave facilities. NAB now contends that fill-in use of microwave links would improve signal quality and, thus, serve the public interest. Furthermore, NAB argues that FM translators owned and funded by primary stations should be permitted to use microwave program feeds in serving "white areas" until radio service becomes available to the region.

58. ABA and London Bridge oppose any alternative signal delivery authority for FM translators. NPR states that the Commission's philosophy towards FM translators as evidenced in the *Notice* indicates that satellite delivery of signals is inconsistent with the secondary status of FM translators. NPR suggests therefore that the Commission overturn the exception which permits NCE-FM translators owned and operated by their primary station to use alternative signal delivery means. NPR urges that the FCC continue to recognize the "Alaska exception" if distinctions in signal delivery authority between commercial and NCE-FM translators are eliminated.

59. La Tour notes that if noncommercial translators are permitted to use alternative signal delivery in order to provide a higher quality signal, then commercial translators should also have access to the same signal delivery authority since both forms of translators operate on the same principles of reception and transmission. La Tour suggests that listeners who prefer narrow formats should not have to tolerate inconsistent service nor sacrifice the quality of broadcasts when better technology is available. du Treil suggests that any alternative means

should be employed, including telephone company circuits. Vernier states that any available methods, including twisted pair, fiber optic or satellite should be used for fill-in signal delivery. WTI supports the use of any superior technology on all channels for all licensees. Christian Media recommends that independently owned FM translators should be allowed use of satellite or microwave feeds.

60. Temple University of the Commonwealth System of Higher Education (Temple), as well as a few other public broadcasters, propose that the option of alternative signal delivery should be extended to NCE-FM translators on non-reserved channels (Channels 221-300) owned and operated by a primary station in order to avoid interference with TV Channel 6. Temple suggests, further, that the signal delivery option should be limited to translators located within 75 to 100 miles (120 to 160 km) of the primary station, corresponding to the distance over which a translator can receive an over-the-air signal without interference.

61. *Rule*. We will change the signal delivery rule to permit commercial translators providing fill-in service to use any terrestrial transmission facilities in order to obtain the primary station's signal including, but not limited to, microwave, phone company circuits, and dedicated fiber optic cable.[59] In addition, for "white areas" where service is indeed unavailable, we will be favorably disposed toward requests for waivers of this rule so that commercial FM translators, owned independently or by primary stations, may receive signals by any terrestrial means. We believe that this change will facilitate the rebroadcast of broadcast signals to remote or geographically inaccessible areas where over-the-air retransmission has not been effective.

62. In response to those commenters seeking to extend signal delivery authority to include various alternative methods, we state that the off-the-air signal feed should be adequate for most FM translator operations. In such fill-in instances where the quality of the off-the-air signal would be unacceptable, our decision to authorize the use of any terrestrial transmission facilities should enable translators to receive a signal suitable for rebroadcast. We believe that any further extension of authority would be inconsistent with the role of FM translators as a secondary service not intended to supplant the services provided by radio broadcasters.

Use of auxiliary frequencies

63. Under existing rules and policies, only NCE-FM translators owned and operated by their primary station may use auxiliary broadcast frequencies for program reception.[60] In the *Notice* we proposed to authorize commercial FM translators in fill-in areas to use aural broadcast auxiliary frequencies (intercity relay stations) on a secondary basis.[61] We also proposed to condition the use of these frequencies on advance coordination with local frequency coordinating committees, or local broadcast users in the absence of a coordinating committee. Specifically, we proposed to modify our rules to: 1) make aural broadcast intercity relay stations available for the transmission of program materials between an FM radio broadcast station and its translators; 2) authorize the transmission of program material between FM radio broadcast stations and the FM translator facilities; and 3) amend the licensing procedures to accommodate such usage.

64. *Comments*. NPR and FM Technology support the Commission's proposal. Other commenters support the Commission's proposal with further suggestions. WTI suggests that the Commission authorize the use of auxiliary frequencies for all FM translators, not just for translators providing fill-in service. Corinthians XIII supports the use of auxiliary frequencies and suggests that the Commission grant use of the frequency despite local broadcaster objections, given a showing that its use will not cause interference.

65. NAB opposes the secondary use of broadcast auxiliary facilities by fill-in translators on the grounds that auxiliary frequencies are approaching spectrum saturation. NAB argues that additional spectrum use, even under secondary conditions, may impede primary station use of the frequencies. NAB states that broadcast auxiliary facilities should be limited to the Private Operational-Fixed Microwave Service facilities licensed under Part 94 of the Commission's rules. CBS states that although program delivery may be possible on 950 MHz, other auxiliary frequencies should not be used due to the possibility of creating interference with existing broadcasters. In larger metropolitan areas, aural intercity relay frequencies are already congested and both TV and radio stations use the frequencies for electronic news gathering purposes to cover area events. CBS contends that coordination between the latter media and FM translators would be difficult to arrange.

66. *Rule*. We will authorize commercial FM translators providing fill-in service to use aural intercity relay frequencies on a secondary basis. The use of these frequencies will be conditioned upon advance coordination with local frequency coordinating committees, or local broadcast users in the absence of a coordinating committee. For "white areas," we will also be favorably disposed toward requests for waivers of this rule to permit FM translators owned independently or by commercial primary stations to use aural intercity relay frequencies on a secondary basis. We believe that this use of auxiliary frequencies, with the specified limitations, is consistent with FM translator's role as a supplemental service to that of FM radio broadcast stations. Notwithstanding some parties' arguments that these frequencies are congested in many areas, we find it likely that broadcast intercity relay channel space is available in those more remote areas where translators are needed most. Therefore, our authorizing intercity relay frequencies in these areas would be in the public interest because it would facilitate signal delivery. However, the secondary nature of this proposed authorization should minimize its effect on the availability of broadcast intercity relay frequencies in those areas where congestion already exists.

Conditional relaying

67. The current rules permit FM translators to engage in "conditional relaying," *i.e.*, retransmission by one translator of the signal of another FM translator, if the translator is not used solely to relay the signal of the primary station to a more distant facility.[62] The rules state that each FM translator is intended to provide direct reception to the public; any other use is incidental. We proposed in the *Notice* to retain the current rule on conditional relaying for translators.

68. *Comments*. The various broadcast interests commenting on this issue support the Commission's proposal to retain the rule concerning conditional relaying.[63]

While these commenters generally oppose the development of translator relay networks, NAB mentions the limited circumstance in which an FM translator serves a legitimate "white area," suggesting that relay operation should be permissible within the "white area." NPR and La Tour agree that conditional relay networks of signals under the incidental service provisions of the rules pose little threat to existing broadcasters, even when operated through virtually unpopulated areas. They claim that incidental relays provide a more reliable signal to distant communities in need of service, while La Tour highlights the additional programming offered to the mobile community along highway systems.

69. *Rule*. We will retain the existing rule which prohibits use of a translator solely to relay signals of a primary station to more distant facilities, but permits incidental relays. We believe that our existing rules are adequate to prevent potential abuses through translator relay networks. Furthermore, our revised financial support and ownership rules resolve objections raised by commenters concerning translator relay networks established by primary stations seeking to expand their broadcasts into distant markets. Under our new rules, an FM radio broadcast station would be unable to own, operate or support FM translators in areas outside its coverage contour except as provided by waivers for "white areas." Translators serving those areas must be operated by independent parties without any financial contribution from the primary station. Therefore, these revised rules will effectively prevent the establishment of translator relays when their principal purpose would be to extend the geographic coverage of primary stations into other areas already served by AM or FM radio broadcast stations.

Need requirements for translators

70. Section 74.1232(b) states that an applicant may be licensed to operate more than one FM translator, even if such translators serve substantially the same area, upon an appropriate showing of need for the additional stations.[64] The rule does not contain specific guidelines defining the showing necessary to justify grant of a translator application, or the showing sufficient to demonstrate lack of need. Under our current standard, the need for a translator is presumed upon the filing of the application. Only if a *prima facie* showing of lack of need is made, or if an applicant is seeking more than one FM translator to rebroadcast the same primary station, do we require the applicant to document a need for the proposed new FM translator station.

71. In the *Notice* we proposed to revise Section 74.1232(b) of the rules to clarify that "need" refers solely to the quality of the primary station's signal present at a receiver site (*i.e.*, technical necessity) and that programming content, format, or transmission needs of an area will not be considered in our determinations. We proposed to apply similar standards to translators providing fill-in service, as well as to translators providing service to other areas. We also proposed to clarify that in order for a primary station to demonstrate the need to own a second translator within its coverage contour, it must only show that a technical necessity exists for the additional translator. We stated that removing any issues of programming from translator applications will eliminate unnecessarily subjective deliberative criteria from the application process. Conditioning "need" solely on technical criteria will clarify the information required for translator applications, expedite the processing of those applications and facilitate the delivery of higher quality broadcast signals to the public.

72. *Comments*. Several commenters support the Commission's proposal.[65] NAB contends, however, that "need" considerations should go well beyond the quality of signal reception. In particular, the burden of proof regarding need for a translator in a given area should be shifted to the proponent, as the present onus unfairly disadvantages opponents by requiring a demonstration of a lack of need. NAB believes that "fill-in" translator applicants should be required to file a shadowing study indicating that terrain obstacles prevent adequate primary station coverage within the relevant contour.[66] Similarly, in evaluating translators applying to serve other areas, the FCC should consider whether the relevant area is already adequately served through existing broadcast signals while also establishing stronger standards to discourage independent party ownership of other area translators.[67]

73. NPR suggests that the burden of proof regarding "need" should vary according to circumstance. The "lack of need" burden for "fill-in" service should be placed upon opponents while shifting the onus for need to the applicant in "other area" instances in order to ensure opportunities for NCE-FM stations and other service to unserved or underserved areas.

74. La Tour states that programming variety is an appropriate criteria to prove "need" for FM translator service. He says that supply and demand forces of the marketplace are best suited to make "need" determinations as demonstrated intrinsically through an application for translator service. La Tour recommends that the Commission refer to the study prepared by the staff of the Federal Trade Commission regarding public benefit from and need for additional radio services.[68] Finally, La Tour indicates that applicants should not be overburdened by excessive evidentiary requirements nor through delays in the application process.

75. *Rule*. We believe that it is appropriate to clarify, as proposed in the *Notice*, our definition of "need" as a criterion in the licensing process when applicants seek to operate more than one translator. Thus, showings of "need" should focus upon the technical necessity for the additional facilities as determined by the quality of signal received from the intended primary station or any operating translators for both "fill-in" as well as "other area" FM translators. We believe that the technical interpretation of "need" is appropriate given the role of translators as a reception service. To support their applications for multiple translators in the same area, applicants will be required to describe any relevant terrain obstruction as a means of showing "technical need", and if useful, may include a shadowing study. Contrary to the suggestion by Mr. La Tour, we are convinced that programming considerations are not warranted as a component of "need" because of the secondary nature of FM translator service and because such highly subjective deliberative criteria would both delay and complicate the application process. FM translators are intended to resolve reception problems, the "need" for which should be determined on technical grounds alone. We also reject NPR's proposal to shift the burden of proof to applicants for "other area" translators. Independent ownership of translators is indicative of a legitimate need for service and, where techni-

cally feasible within our parameters, we believe that such service should be authorized without creating an additional requirement for demonstrating that "need."

Method for selecting among applicants

76. Our existing procedure for selecting among mutually exclusive competing applicants for translator authority relies upon voluntary mutual agreement among the applicants. We stated in the *Notice* that in light of our proposal to eliminate the rules restricting FM translators to certain limited frequencies and to permit them to use all 80 channels (Channels 221-300) of the commercial FM frequency band, we believed that mutually exclusive applications will not arise with any frequency. In the rare event that we are faced with mutually exclusive applications, we proposed to assign alternative frequencies as necessary for the applicants. Applications for FM translator stations proposing to provide fill-in service of the commonly owned primary station will be given priority over all other applications. In those instances where there are no available frequencies to substitute for a mutually exclusive application, we proposed to apply the priority classification specified in BC Docket No. 80-130, as appropriate, in selecting a winning applicant for the FM translator station.[69]

77. *Comments*. NAB and other broadcast interests support the Commission's proposal. Other commenters, while supporting a priority system in concept, propose alternative rankings. For example, NPR argues that the need for public radio should be a first-tier rather than a third-tier consideration due to the high federal priority placed upon extending public radio in recent legislation. WTI argues for, and La Tour supports, a priority system which assigns a high priority for a displaced translator service and an existing translator seeking changes, and a low priority for fill-in service. CBS proposes that the priority granted to fill-in service should be conditioned upon the actual provision of fill-in service in order to prevent licensees from switching to another primary station at a later date. Further, CBS proposes that if fill-in service is necessary and spectrum is unavailable due to distant signal importation by a translator, the importing translator should be required to provide the fill-in service or return its license. Finally, CBS, with the support of other commenters, argues that all other applications should be granted on a "first-come-first-served" basis.[70]

78. *Rule*. As proposed in the *Notice*, we will resolve mutually exclusive applications by substituting frequencies and giving highest priority to translator applicants proposing fill-in service of the commonly owned primary station. In those instances where frequencies are unavailable, we continue to believe that use of the priority system for choosing among mutually exclusive applications for FM station allotments (with the exception of criterion number three) is best suited for resolving conflicts among translator applicants promptly. In addition, the priority system accurately orders public interest concerns to be considered in choosing among mutually exclusive applications for translator licensees. We believe our priority system should assign a high priority to translator applicants proposing fill-in service. One of an FM translator's primary functions is to fill in "dead spots," and thus such services should be given priority over other applications. Finally, in those rare instances where the above criteria do not resolve the mutual exclusivity, we will select applications using a first-come-first-served method.

Definition of major change

79. The rules define a major change for FM translator stations as any change in output frequency (output channel), or authorized principal community, or area of service.[71] In the *Notice* we proposed to define "major change" as a proposed change of coverage area of more than ten percent of the previously authorized 1 mV/m contour,[72] or a change in frequency. All other changes would be considered minor changes including a change in the authorized principal community. We noted that this proposal would apply to both fill-in and other area translators. We also asked whether the ten percent change in coverage area is too restrictive, and whether a reduction in coverage of more than ten percent should be considered a major change. We also asked whether standards are needed to clarify the manner in which the relevant coverage change should be measured.

80. *Comments*. Cowan supports the existing rule while McKenzie supports the Commission's proposal. Other commenters indicate that the 10% level is too restrictive for defining a major change, and suggest appropriate modifications. NPR states that the definition for major changes in translator operations should be the same as those for the FM primary stations, requiring at least 50 percent change in the predicted 1 mV/m coverage area. NPR agrees that the intent of the proposed rule -- to discourage modifications to adjacent markets -- is necessary, but expresses concern that the specific actions may ultimately become cumbersome for routine service adjustments following unanticipated changes in growth patterns in local communities. Such changes could easily exceed 10 percent of predicted coverages and may unnecessarily burden FCC resources. Other commenters also indicate that higher change levels are necessary, with specific proposals ranging from 20 percent to 75 percent, including the ECS proposal that a 20 percent decrease should also be considered a minor change. Finally, some of these proposals measure the major change according to percent of population change rather than change in geographic coverage area.

81. TBA urges the Commission to consider any extension of translator coverage area into the protected contour of an existing full service station as a major change. CBS states that all applications should be considered relative to the FM translator's original authorization in order to avoid consecutive minor changes which ultimately amount to a major change. NAB states that the definition of "major change" should include a change of principal community and primary station being rebroadcast.[73] According to NAB, our proposed modification would create internal inconsistency with respect to the present "need" standard, as translator applicants who successfully applied by showing need for service to one community could subsequently change community of service without demonstrating similar need. NAB also states that this problem in conjunction with the lack of public complaint following changes in coverage area could degenerate into inadequate interference protection for FM stations. Finally, since the change of output channel (frequency) is considered a major change, NAB suggests that a change of input channel (primary station) should be afforded parallel status.[74]

82. *Rule*. We believe that a "major" change for FM translator stations should be defined as any change in output frequency (output channel), or any change[75] or increase (but not decrease) in 1 mV/m coverage area of

more than 10 percent of the previously authorized coverage contour.[76] We believe it is appropriate to give licensees some flexibility to make certain facility changes without triggering the "major change" process. We reject the suggestions of several commenters that we adopt a cut-off that is higher. We believe that a higher cut-off could cause abuse as it would enable FM translator licensees to increase their coverage area significantly without being subject to competing applications or public comment.

83. We decline to adopt "change in population" criteria as espoused by some commenters. Population studies are more complex, expensive, and therefore burdensome for applicants than analyses based on geographic areas. NAB's proposal to include a change in principal community as a major change would not be a useful revision because FM translators are not always licensed to serve specific communities and have no coverage or service requirements. As for NAB's reference to a change in input channel or primary station as a criterion, our new ownership and financial support rules will remove both the incentive and opportunity for changes in a primary station that would require special attention. Furthermore, since FM translators are a reception service, we find that it is unnecessary to review the programming the translator rebroadcasts. Finally, we believe that our new rule resolves TBA's concerns that an extension of coverage area into the protected contour of an existing broadcast station should be treated as a major change. Because the new rule limits "minor" change coverage area movements to 10 percent, TBA's concern is unwarranted since no significant encroachment upon another station's contour could likely occur without application of the procedural safeguards provided by the rules for "major" change.

Multiple ownership limits

84. Under existing rules, FM translators do not count against multiple ownership limits.[77] We stated in the *Notice* that it is reasonable to continue to exclude the ownership of FM translators for purposes of the multiple ownership rules in all cases. We also proposed to continue to exempt FM translators from the radio "contour overlap" rule, which prohibits the common ownership of two or more commercial radio stations in the same broadcast service in the same geographic area.[78]

85. *Comments*. Several broadcast interests support the Commission's proposal to continue to exclude FM translators from the multiple ownership rules.[79] NAB suggests, however, that the FCC impose local, if not national, multiple ownership rules for FM translators. NAB expresses concern that multiple ownership could prompt overwhelming development of secondary services in some communities, particularly given the FCC proposal to allow FM translator use of the 80 commercial channels. NAB also states that the FCC might also consider placing a limit on the number of co-owned translators with service contour overlap.[80]

86. *Rule*. We find no compelling reason to apply multiple ownership limits on the number and location of translators a single party can own and/or operate. Translators are established where there is a need to supplement the service provided by FM radio broadcast stations, and restrictions on multiple ownership could impede the delivery of necessary service to the public. We emphasize that translators are authorized on a secondary basis and are subject to displacement by FM radio broadcast stations. Consequently, it does not appear reasonable to impose multiple ownership restrictions on translators given that significant concentrations of the facilities are less likely to occur in any particular area under the constraints of the rules.

Cross-service translating

87. The current rules preclude an FM translator from rebroadcasting the signal of any station other than that of an FM radio broadcast station or FM translator.[81] We proposed in the *Notice* to retain the current rule precluding an FM translator from rebroadcasting AM signals.

88. *Comments*. Among the few commenters who address this issue, most agree with NAB that AM signals should not be rebroadcast, especially in light of the FCC's attempts to improve AM broadcasting conditions.[82] AFCCE concurs with the FCC's position but would support nighttime fill-in service by FM translators of AM daytime stations on a limited or temporary basis. Alternatively, McKenzie opposes the FCC proposal on the grounds that AM stations may not be able to serve entire counties in mountainous regions. Therefore, FM translators may accomplish service that AM radio is technically unable to provide.[83] Furthermore, MPR states that many NCE-FM licensees broadcast on the AM band because of the scarcity of spectrum space in many urban areas, and should be permitted to extend their service through the use of FM translators.

89. *Rule*. We continue to have serious reservations that actual improvements in AM service could be gained by allowing FM translators to rebroadcast AM stations in fill-in and other areas. We are conducting proceedings to improve the quality of AM radio service and to enhance the opportunities and incentives for such stations to compete in the marketplace via the existing band and new spectrum.[84] We believe that the fundamental problems of AM radio -- channel congestion, interference, and low fidelity receivers -- will be resolved by this concerted effort with the broadcasting community and radio manufacturers, apart from further consideration of cross-service translating. In addition, the groundwave propagation characteristics of AM signals are such that they normally do no leave service voids or "shadowing" (i.e., holes in coverage) similar to the "shadowing" found in the FM band, although licensees may desire to supplement coverage in directional antenna nulls. Thus, there is generally no reason for AM licensees to establish fill-in service facilities on the FM band. Indeed, policies authorizing FM translators to rebroadcast AM signals may exacerbate the fundamental problems of the service, rather than ameliorate them. Therefore, we believe that to approve the general use of FM translators by AM stations would contravene the goals of our AM improvement action.

TECHNICAL ISSUES

Frequencies available to FM translators

90. The existing rules authorize commercial FM translators to use the 20 channels of the FM broadcast band formerly authorized for Class A stations. NCE-FM translators may use these 20 channels and the 20 channels reserved for noncommercial use (Channels 201-220).[85] In the *Notice*, we proposed to allow commercial FM translators to operate on all 80 non-reserved commercial channels (Channels 221-300). We also proposed to permit NCE-FM translators to use these 80 channels and the 20

channels reserved for noncommercial use. We sought comment on ways to alleviate the expected impact that expanded channel availability will have on the time needed to dispose of applications tendered for filing and whether FM radio broadcast stations should be allowed to use first adjacent channels for fill-in translator service.

91. *Comments*. Several commenters urge the Commission to retain the existing rules restricting commercial FM translators to operation only on the 20 channels formerly authorized for Class A operations.[86] NAB doubts that unserved areas suffer spectrum congestion that impairs the public's ability to receive FM broadcast services. NAB disagrees with our analysis that the proposed expansion of available frequencies would not create an interference problem because the contour protection provision "is based upon outdated, inaccurate and/or imprecise technical assumptions that need a current and comprehensive review." NAB, among other parties, has requested this review in their "Petitioners' Statement of Consensus and Joint Supplement to Petitions for Reconsideration," filed in MM Docket No. 87-121, on May 11, 1990, at 7. Until such a review is completed, and the technical assumptions underlying contour protection are updated, NAB urges that we proceed cautiously and maintain the current restriction. TBA is concerned that the greater availability of frequencies will enable commercial translator operators to serve large areas using multiple translators. Kneller argues that the FM band is already "reeling" from the "AM-ization" caused by the 640 plus BC Docket No. 80-90 drop-ins and by upgrades of Class A's to B's and C's, and it should not be "degraded" further by a secondary service which provides no community service, local news or information to the areas outside the primary station's protected contour. KPBX opposes our proposal because it believes it would have an economically damaging effect on many NCE-FM stations.

92. Many commenters support the FCC proposal.[87] AFCCE contends that the proposed expansion of available channels would offer opportunities for additional FM translators, hence minimizing the potential for interference. Also, several commenters with public broadcasting interests[88] request that NCE-FM translators have specific access to the 80 non-reserved channels. Moody further suggests that NCE-FM translators applying to use these expanded channels should not be required to demonstrate that reserved-band FM channels are unavailable. McKenzie and MSTV support NCE-FM translator use of the non-reserved band because it reduces the chance of interference to TV Channel 6 stations.

93. FM Technology, Jones, and WTI support the use of first adjacent channels for fill-in translator service. NAB does not object as long as operations are consistent with the interference limitations proposed in the proceeding. AFCCE indicates that use of first, second, or third adjacent channel operation should be allowed for fill-in translator service, provided that no substantial actual interference is caused to the primary FM station within the station's principal community. Christian Media believes that translators should be permitted to use second and third adjacent channels. Seven Ranges states that the use of the primary station's second and third adjacent channels for translators has many advantages for fill-in translators, but urges the Commission to exclude first adjacent translators.

94. *Rule*. Much has changed since 1970, when we limited commercial FM translators to the use of the 20 Class A channels. Growth in the demand for FM service led us to permit Class A FM broadcast stations to operate on all 80 channels of the commercial frequency band.[89] That growth is still evident in the flow of petitions to amend the FM Table of Allotments and FM station applications. Furthermore, we are adopting other rules today which we believe will effectively prevent interference from FM translators. Consequently, we will allow all FM translators to operate on any of the 80 non-reserved commercial channels (with the 20 reserved noncommercial educational channels remaining available for NCE-FM translators' use as well).[90] We expect this decision to reduce the number of actual interference problems we face, including interference to TV stations operating on Channel 6, since the wider range of channels from which to choose often will allow applicants to choose channels on which the margin of predicted interference protection is greater. Finally we have decided to follow the approach we use for FM booster stations with respect to fill-in translator operation on the first, second or third adjacent channel to the primary station. We will authorize such translators if they meet interference protection standards to all other stations and if their operation is not predicted to create interference to the primary station within its principal community.

Maximum power output

95. Currently, power limits for FM translator operation are based on a transmitter power output (TPO) standard. FM translator stations located east of the Mississippi River or south of a line at 40 degrees North Latitude in California, are limited to a TPO of 1 watt. The maximum permissible TPO for FM translators located in all other areas is 10 watts.[91]

96. In the *Notice* we proposed to change our standards regarding maximum power from TPO values to effective radiated power (ERP) values. As distinct from TPO, a known ERP from an antenna of a given height yields a unique contour which can be used to predict coverage and interference. We proposed a 1 kW ERP limit for all FM translators, with no additional restrictions needed for fill-in translators because our other proposals would restrict their coverage area.[92] For translators serving other areas, we also proposed that the distance from their transmitting antenna to their predicted 1 mV/m contour may not exceed 16 km (approximately 10 miles)[93] in any direction. We stated that applicants would be required to compute the antenna height above average terrain (HAAT) along each of 12 distinct evenly spaced radials, starting from true north. Along each radial the ERP would be such that the distance to the predicted 1 mV/m coverage contour would not exceed 16 kilometers. As a final matter, since higher powered stations are more likely to contribute to significant human exposure to radiofrequency (RF) radiation,[94] we proposed to amend Section 1.1307(b) of the Commission's rules to require FM translator stations operating with more than 10 watts ERP to consider the potential impact of RF radiation on the environment.

97. *Comments*. There is general support for the Commission proposal to limit ERP instead of TPO. However, ECS believes that changing from TPO values to ERP values would greatly limit coverage. ECS, Jones, and Tower suggest that the translator output power be limited

to 100 watts without regard to antennas, transmission lines or HAAT. The University of Utah (Utah) states that increasing power would only increase interference to their repeater sites, with a concomitant decrease in service to the rural areas. Utah supports the current transmitter output power limit of 10 watts. NTA proposes a 10 watt antenna input power limit.

98. Many commenters[95] support the Commission's 1 kW maximum ERP proposal, including NJPBA which argues that 1 kW allows more meaningful coverage, especially in situations where very high antenna sites are not available. Cedar Ridge opposes any limit less than the proposed 1 kW limit unless existing translators are permanently grandfathered. McKenzie suggests that 1 kW ERP be a guideline maximum, but that all other pertinent factors that affect any particular area of the country be taken into account. McKenzie contends that a lesser maximum ERP, such as 100 watts, may be overly restrictive and the selection of ERP should be made by the applicant based on the power sufficient to provide adequate coverage. AFCCE is concerned that the ERP limit may not prevent a potential abuse where a station proposes much more power than is needed to provide fill-in service, and essentially provides its service on another channel to an area which already receives the primary signal. AFCCE wants the Commission to be careful not to permit the "warehousing" of frequencies or "stacking" of a station across the dial.

99. Alternative suggestions range from Christian Media's proposal for 3 kW maximum ERP down to NAB's proposal of a 10 watt/75 watt ERP limit east and west of the Mississippi River, respectively. Most comments in opposition considered the Commission proposal excessive.[96] CBS, NAB, MSTV and NTA cite the potential for increased interference. NAB strongly argues that 1 kW provides the framework for further abuse, and one of the major purposes of the proceeding is to eliminate abuses, not to accommodate them. NAB urges that our guiding principle should be service intended to provide localized coverage generally to unserved areas, and translators should be permitted only those power levels minimally needed to accomplish this objective. NAB claims that its lower proposed maximum ERP levels are used by the vast majority of existing translators. Feaster suggests that the Commission could give operators an option with regard to the proposed maximum power output or at least include a grandfather clause to prevent loss of service. CBS and du Treil contend that a translator should not have power in excess of the minimum for the class of their primary station and the 1 kW proposal is in excess of the minimum power permitted a Class A station (0.1 kW).

100. CBS proposes 10 watts ERP in the east and 100 watts ERP in the west. If the Commission wants ERP, NTA prefers 200 watts and would provide for liberal waivers up to 1 kW (without correction for HAAT) upon a showing that ERP is designed to cover a particular service area and is limited to the minimum ERP reasonably necessary to accomplish that coverage. du Treil proposes using rules parallel to the FM booster power limit and permitting a translator one percent of the maximum power for its class. Using this standard, FM translators rebroadcasting Class C and C1 stations could employ an ERP up to 1 kW; Class B and C2 limited to 0.5 kW; Class B1 and C3 stations limited to 0.25 kW; and Class A limited to 0.06 kW. Croghan believes a maximum radiation equivalent to 10 watts at 300 feet HAAT would be reasonable.

101. Corinthians XIII, a primary station licensee of fill-in translators, urges the Commission not to treat translators as second class stations in the Mexican Border area. Instead, they suggest that FM translator stations in the border area should be treated as if they were full service stations because they can meet the spacing distances required of Class A stations, but not the translator requirements. Corinthians XIII says the Commission does this with Class A stations now authorized 6 kW. Seven Ranges opposes the treaty limitation of 50 watts ERP near the Canadian border and proposes a case by case arrangement to allow higher power translators if the radiation towards Canada is suppressed. AFCCE urges the modification of Section 74.1235(i) to clearly state the ERP restrictions with respect to both Canadian and Mexican agreements, rather than depending on Public Notices and statements of Policy separate from the actual rules.

102. AFCCE, Capital Broadcasting *et al.*, Elving, Jones and Cedar Ridge support the Commission proposal regarding an ERP/HAAT tradeoff, or limit of 16 km maximum predicted 1 mV/m coverage distance for translators providing service to other areas. Cedar Ridge opposes any limit more restrictive than the proposed 16 km unless existing translators are permanently grandfathered. NAB argues the 16 km limit is grossly excessive, constituting a potential coverage area equal to 44 percent of a 3 kW, 100 meter Class A facility. NAB further contends that a Class A station could install multiple fill-in translators for the sole purpose of appearing at multiple frequencies in the FM band. NAB, with support expressed by ABA and Northland, suggests a 30-meter antenna height above average terrain limit resulting in a coverage limit of 5.2 km based on an ERP of 75 watts. CBS also recommends reducing its proposed maximum ERP for any HAAT in excess of 30 meters. On the other hand, Christian Media, ECS, FM Technology, WTI and Moody suggest generally larger coverage limits because 16 km is too restrictive. Others contend that certain circumstances, such as the widely separated population centers of the western plains states or the rugged terrain of the mountainous western states and Alaska, need provision for continued translator coverage beyond 16 km.[97]

103. Jones and NAB agree with the proposed maximum facilities prediction methodology (12 radials, each 30 degrees apart). du Treil, AFCCE and Vernier propose using the standard eight radials for HAAT calculations. AFCCE and du Treil indicate coverage and protection calculations for directional antennas require additional radials in the main lobes of a translator's directional antenna pattern, if the main lobes do not fall on one of the eight standard directions. AFCCE indicates these additional radials should not be taken into account for calculating HAAT, with HAAT calculated according to the procedure specified in Section 73.313 based on the evenly spaced radials. AFCCE suggests that translator contours should be based on the maximum ERP irrespective of polarization of signal used or antenna beam tilt employed. Vernier recommends that the Commission allow the applicant to average the HAAT of the eight cardinal radials and set the TPO to a level which produces no more than the maximum 1 mV/m signal.

104. NAB suggests that FM translators operating with 75 watts ERP or less should remain categorically exempt from the FCC regulations concerning the potential environmental impact from RF radiation as it relates to human exposure. AFCCE supports amendment of Section 1.1307(b) requiring translator stations employing 10 watts ERP or more to consider the potential of RF exposure effects on the environment. Jones suggests requiring statements regarding the potential impact of RF radiation. St. Clair believes the calculation of exposure to RF radiation is another requirement which is completely beyond the knowledge of rural translator operators, and suggests the requirement be limited to proposals where the transmitter power exceeds 100 watts.

105. *Rule.* In making our decision, we have sought to reconcile the role of translators as delivering broadcast signals to small service areas with the minimum necessary power, and the fact that a significant number of existing translators have been constructed more than 16 km from the area they are serving. We have decided to reduce our proposed maximum ERP standard and to provide criteria for the extent to service which, when combined with grandfathering discussed later in this document, should promote the primary purpose of the service while accommodating most existing authorized facilities.

106. The Commission is not persuaded by the comments that power levels above the current standard must result in increased interference. We continue to believe that the protection criteria we are adopting today will effectively control interference. The new standards create an equal probability of interference from translator stations operating at different powers by requiring higher power stations to be farther away from potentially affected stations. Having concluded that interference is not a factor in selecting the new maximum power limit, we have allowed for sufficient facilities to cover the locations traditionally served by translators. At the same time, we have incorporated a measure of flexibility with respect to ERP and distance to service contour to permit translator stations to meet the particular needs of individual areas while conforming to our rules.

107. We are setting 250 watts as the maximum ERP at which any FM translator may operate. The overwhelming majority of translators authorized under the 1 watt/10 watt TPO limits have ERP's of less than 250 watts. Very high gain transmitting antennas are needed to achieve an ERP of 250 watts from a TPO of 10 watts at the FM band frequencies. Therefore, we expect that virtually all operations with greater ERP would use higher transmitter powers than currently permitted. In that way, a higher maximum ERP limit would clearly represent an expansion of the traditional translator role. With the interference criteria we are adopting, we also have decided that it is reasonable to apply a 250 watt maximum ERP limit in all parts of the country, except for the border areas subject to bilateral agreements with Mexico and Canada.[98] Upon review of the comments and our own decisions establishing Commission requirements for environmental consideration of RF radiation, we have decided that the proper course in this area is to categorically exclude from the requirements for environmental assessment all applications requesting 100 watts ERP or less.[99] The modified environmental rule on RF radiation will apply to FM boosters as well as FM translators. In the *Notice*, we proposed to modify §1.1307 of our rules so that it covers both FM boosters and FM translators and it expresses the environmental consideration standard in terms of ERP instead of TPO. The 100 watts ERP standard we are adopting imposes less of a burden on applicants than the proposed 10 watts ERP standard.[100]

108. With respect to the coverage distance or HAAT limits, we will reduce the proposed limits by a small amount for areas west of the Mississippi River and by a large amount for areas in the east and southern California previously allowed 1 watt TPO. In order to enhance the distinction between maximum ERP determinations and protection calculations, we also are adopting a simplified procedure using tables instead of distance calculations. The tables allow ERP and HAAT combinations that produce 1 mV/m contour distances of 12.7 to 13.3 kilometers (km) in the west and 6.7 to 7.3 km in the east and southern California. An FM translator is allowed at least 10 watts ERP at any HAAT. This permits some extended coverage for stations at very high HAAT's (for example, at an HAAT of 800 meters, 1 mV/m coverage would extend 15.6 km). To illustrate, part of the table we are adopting for areas west of the Mississippi River, excluding southern California, follows:

Radial HAAT (meters)	Maximum ERP (MERP in watts)
less than or equal to 107	250
108 to 118	205
119 to 130	170
131 to 144	140
145 to 157	115
. . .	. . .
426 to 480	13
481 to 540	11
greater than or equal to 541	10

We recognize that situations exist where service to a greater distance would clearly serve the public interest without harm to any party. To address the most critical of such situations, we will be favorably disposed toward waiving this rule to permit higher power, up to 250 watts ERP at any HAAT, if an applicant demonstrates that the 1 mV/m coverage in the pertinent direction reaches only a white area (*i.e.*, beyond the protected contours of any full time aural service). For purposes of applying this waiver standard to NCE-FM translator applications, the Commission will consider any area that is not served by a full-service public radio station to be a white area (even if there is a full-service commercial station serving the area).

109. Our intention in specifying use of 12 radials to determine maximum ERP is to have an administratively workable determination that still provides for consideration of terrain variations. By choosing 12 radials for this purpose, the HAAT's determined for the calculations can also be used in coverage contour and protection requirement determinations, and the maximum power authorized will be based on a fairly broad sample of the terrain surrounding the transmitter site. In the preceding paragraph, we have identified an alternate method of determining maximum ERP and our rules will require this method to be used at the proposed 12 evenly spaced radials starting from True North. For azimuths that are not on one of the radials, the maximum ERP limit will be the MERP of the closest radial. We will not require or accept showings of higher or lower MERP values based on the terrain along intermediate radials. The adopted method, with its 12 required calculations should provide

adequate accuracy for the maximum power determinations. We emphasize, however, that protection standards will be applied without this 12 radial limit, so appropriate consideration will be given to intermediate radial heights and powers in that context.

Antennas (including standards for directional antennas)

110. The existing rules for licensing of multiple and composite antennas and the various forms of polarization are imprecise.[101] Section 74.1235(a)(2) specifies that multiple antennas are permissible as long as their radiation fields do not combine. We stated in the *Notice* that our proposal to use an ERP standard to set maximum power limits should cure any ambiguity in our rules concerning the licensing of multiple and composite antennas. The total radiated power in any direction from all antennas must not exceed the proposed ERP limit. With respect to dual or circularly polarized antennas, we proposed that the ERP/distance limit would apply equally to both the horizontally and vertically polarized components.

111. The current rules do not otherwise address the use of directional antennas by FM translators, and therefore do not include standards.[102] In the *Notice*, we proposed to codify the use of directional antennas by FM translator stations and to impose standards for such use. We further proposed that applicants seeking to use directional antennas for translator service would need to include information specified in Section 73.316 of the rules as part of their applications demonstrating conformance with the rules. We also proposed to require the applicant to address the impact of its proposal on nearby existing or proposed AM, FM and TV broadcast antennas.

112. *Comments*. AFCCE, Corinthians XIII, du Treil, FM Technology and Jones support the Commission's proposals regarding multiple and composite antennas. CBS supports retention of our existing rules for licensing these antennas. WTI asserts that any antenna system should be allowed as long as the station is constructed so the area within its 1 mV/m contour does not exceed the area of a circle with a 16 km radius.

113. Although some express reservations or request clarifications, several commenters support the Commission's directional antenna proposals.[103] Given the pending reconsideration of the decision in MM Docket No. 87-121 where numerous parties urge the Commission to refine the provisions of Section 73.317, NAB and ABES suggest that the Commission incorporate whatever final action it adopts in MM Docket No. 87-121. AFCCE clarifies that it supports proposed Section 74.1235(e) which states that applications must comply only with Section 73.316(c)(1) through (3), which would not impose the antenna maximum-to-minimum ratio or radiation pattern azimuth rate of change requirements of Section 73.316(b)(1) and (2) on FM translators.[104]

114. WTI suggests that an applicant should supply the information specified in Section 73.316 only if it seeks authorization for a translator facility that would otherwise be short spaced. NPR proposes that Section 73.316 should apply to situations posing the greatest risk of interference, such as when power levels exceed some predetermined limit (such as 500 watts ERP), or where a proposed translator facility requests a coverage pattern to avoid a prohibited Section 73.509 overlap. St. Clair believes that requiring compliance with all the subsections of Section 73.316 would be unduly burdensome and, in particular, opposes including the requirements of Section 73.316(d) in the FM translators rules. Vernier states that the rules should allow for the use of inexpensive directional antennas in order for translator service to remain a reasonable investment for stations. He further suggests that maximum-to-minimum radiation should be allowed to approach 24 dB for measured patterns and that the Commission should work with antenna manufacturers to develop a number of approved, low cost, off the shelf, directional antennas that can be used reliably in translator installations. McKenzie, Alaska, Temple, Corinthians XIII and Jones state that Section 73.316 of the rules would excessively burden both applicants as well as the Commission, and imposition of the standards is unwarranted.

115. *Rule*. In conjunction with our new ERP limits and predicted interference contour overlap standards, it is important that we have specific information about each composite antenna, multiple antenna array and directional antenna system that is being employed. At the same time, we recognize the need to minimize the burden on FM translator licensees. We believe the appropriate course is to adopt the proposed rules, essentially as written. These rules do not require FM translator directional antennas to meet the FM maximum-to-minimum radiation or the rate of change restrictions specified in Section 73.316(b) of the rules. The remaining rules should not be unduly burdensome. Moreover, the full antenna pattern description requirement is necessary not only for determining protection of other currently authorized stations but also to determine protection of the requested facilities from subsequently authorized translators.[105]

Interference criteria

116. Under the current rules, FM translators must not cause either predicted or actual interference to the public's direct reception of any authorized FM radio broadcast station.[106] Predicted interference is an application processing standard, currently based on Section 73.509 of the Commission's rules. Actual interference that is the result of broadcast operation must be corrected, or the FM translator station must suspend operation until it can be corrected.

117. In the *Notice* we proposed to adopt Section 73.509 standards to predict interference from FM translators, except commercial Class B and B1 stations would be protected to their predicted 0.5 mV/m and 0.7 mV/m contours, respectively. We proposed an absolute prohibition on a translator's causing actual interference to a broadcast transmission. For actual interference to the reception of service, we proposed to adopt the "significant number of complaints" standard we have found effective in resolving cases of interference for FM boosters.[107] We also proposed protection of existing FM translators from both predicted and actual interference caused by subsequently authorized FM translators.

118. *Comments*. Many commenters support the proposal to predict interference with Section 74.1203 standards based on Section 73.509.[108] Most other commenters support the adoption of some predicted interference criteria but disagree with specifics. Jones asserts translator-to-translator interference can be remedied by acknowledging the right of the first translator as the "protected one". McKenzie agrees with the Commission's statement that existing translator interference protection standards are sufficient for resolving problems.

119. CBS and NAB strongly support the intent of proposed Section 74.1203(e) not to grant translator authorizations where the translator is likely to interfere with the reception of a regularly received off-the-air service, even in an area where predicted field strength contour overlap does not occur. On the other hand, AFCCE is concerned that proposed Section 74.1203(e) will preclude some non-interference, non-overlap situations and thus artificially restrict translator service based on fear of interference in a populous area. AFCCE suggests relying on the "actual" interference standard for this situation.

120. Vernier and WTI support the proposed Section 74.1203(a) note, which would allow showings regarding population and terrain factors that minimize the impact of the predicted interference. Temple suggests that lack of population be defined as the predicted interference area not containing over 500 persons or 0.1 percent of the affected station's total service population, whichever is the lesser value. However, NPR and Pleasant consider these two proposed "escape clauses" to be inappropriate for the secondary translator service. NPR suggests that the absence of population in a given interference zone today may not be accurate in the near future. NPR is also concerned that while the premise of intervening terrain affecting interference is sound, the complexity of evaluating the claims outweighs the potential benefits. NPR argues that the Commission should maintain its longstanding policy that applicants are not permitted to "poke holes," theoretical or actual, in the 1 mV/m coverage areas of existing FM facilities so that the public is assured uninterrupted service.

121. Capital Broadcasting *et al.* and Jones suggest that an FM translator applicant should be required to submit contour maps with its application evidencing compliance. La Tour suggests a simpler method, using separation standards based on the predicted contours, except for applications involving directional antennas or terrain differentials, which could be required to plot contours. La Tour is concerned that rules which increase the complexity, and thereby the cost, of an application will diminish the ability of a translator to survive economically. Columbia also requests that we allow simplifying assumptions, such as determining height above lowest terrain using nearby river elevations, as a conservative substitute for a detailed radial study, to enable participation by groups with limited technical means.

122. AFCCE is concerned because the rules do not describe the precision with which the interfering or protected contours must be predicted in order to assure lack of overlap. NAB supports calculating protection along 12 radials, but urges that we also permit supplemental showings of other radials that may encompass terrain features that depart from the 12 radial minimum. NAB suggests that pleadings challenging an applicant's showing of non-interference be permitted to demonstrate their claims using these supplemental showings.

123. On miscellaneous matters relating to predicted interference, AFCCE requests clarification of proposed Section 74.1203(c), which it claims is confusing if it is intended to deal with creation of new interference and misworded if it is intended to deal with existing interference. Capital Broadcasting *et al.* agree that the Commission should continue to prohibit absolutely interference to the transmission of the signal of an FM station, but also suggest the Commission clarify the procedures to be followed when a primary FM station relocates its antenna, resulting in a new field strength contour overlap with an FM translator station. La Tour states that a translator should be protected from interference from upgrades of stations licensed to communities more than 75 miles away. FM Technology requests that the Commission be explicit about grounds for waiving restrictions. KSOR provides information supporting its assertion that some interference results from poor equipment design or maintenance practices and not from spectrum assignments.

124. Generally, NAB and other commenters[109] contend that our proposed "significant number of complaints" standard for determining actual interference is a nebulous, unreliable way of assessing interference, which is ultimately too lenient because listeners do not complain.[110] NPR contends that the Commission's experience with this standard for boosters is very limited and does not provide adequate support. NPR requests actual interference be limited to complaints arising within the predicted 34 dBu contour of the listener's desired station. Vernier also contends that the Commission's proposal would be easier to support if we defined a field strength point below which complaints would not be considered.

125. ABES suggests imposing a reasonable burden of proof on the complaining FM broadcast licensee, although the full service FM station would not need to show that it is actually listened to by any particular number of listeners in the alleged interference area. CBS requests that the burden of proof on full service broadcasters not be too great as it is hard to obtain affidavits from listeners. CBS suggests the Commission accept an affidavit from appropriate station personnel attesting to the number of complaints received or other evidence, which could be affidavits stating the experience of the station's technical personnel or consultants with the interference, or a substantial decline in the station's audience in the affected area occurring reasonably contemporaneously with the commencement of translator operations.

126. WTI proposes defining actual interference in terms of a 20 dB desired-to-undesired ratio for co-channel operations and a measured desired station field strength at a fixed receiving location of more than 10 uV/m (not protecting mobile receivers). WTI would also protect pre-existing FM translators from interference complaints by new Channel 6 TV translators and low power TV stations.

127. NJPBA supports using "significant number of complaints" in Section 74.1203 rather than what it considers to be a very nebulous existing standard found in current Section 74.1203(a). Christian Media argues that "significant number" is ambiguous and suggests picking a specific number such as 50. Capital Broadcasting *et al.* suggest that unless any interference caused by a translator would have to be resolved, the translator station would have to cease operating.

128. *Rule*. There is general support for the proposed contour overlap method of predicting interference, and we will adopt it essentially as proposed.[111] We recognize the concern expressed regarding the proposed population and terrain exceptions, but we expect that the provision will be used very rarely due to our decision today on available frequencies. The note in the rule, along with Section 74.1203(e), will allow the processing staff to take special circumstances into account when they are brought to the staff's attention. This processing flexibility is consistent with our decision regarding conflicting applications and we believe it is appropriate for this secondary service that will still be subject to our prohibition on actual

interference. Therefore, an FM translator applicant may demonstrate that, despite predicted contour overlap, interference will not in fact occur due to such factors as absence of population in the overlap area or mountainous terrain. By the same token, pursuant to Section 74.1204(f), we will not grant an application if an objecting party provides convincing evidence that the proposed translator station would be likely to interfere with the reception of a regularly received off-the-air existing service, even if there is no predicted prohibited overlap.

129. We have decided not to require applicants to include an exhibit showing compliance with the predicted interference standards. The standards will be applied during processing and applications that do not comply will be dismissed. With that warning, we leave it to applicants to decide the level of analysis they will apply to determine the facilities they will request. We will also not specify a degree of precision for determining contours and predicting interference. In the event of objections or uncertainty as to contour location, as many radials as is necessary must be used. We will slightly modify other proposed language in Sections 74.1203 and 74.1204 to clarify its meaning.

130. We are unpersuaded that a translator station is entitled to protection against an FM radio broadcast station or that the translator should be able to cause interference to an FM station or a TV Channel 6 station if the translator was in existence first. The absence of such an entitlement is a fundamental characteristic of the secondary nature of translator service.

131. We believe it is inappropriate and unnecessary to introduce explicit standards for determining whether actual interference exists. We have modified the proposed rule to make it clear that we expect FM translator licensees to attempt to resolve all interference complaints by appropriate means. We have not included the significant number of complaints language in the rule we are adopting. Instead, when convinced that a complaint or complaints of uncorrected interference are valid, the Commission will direct an FM translator station to discontinue operation. This judgment will depend upon the individual circumstances presented in each situation.

TV Channel 6 Interference

132. *Proposal.* The existing rules provide no specific guidelines for evaluation of predicted interference caused to TV Channel 6 stations by NCE-FM translator stations operating on the reserved band. In the *Notice*, we proposed two methods for evaluating this potential interference that would apply to fill-in as well as other area translators. For predicted interference, we proposed a distance separation table. The distances were from Section 73.525 of the rules, where they are currently used to determine Channel 6 TV stations that are potentially affected by an NCE-FM application. We also proposed that any FM translator interference determinations pursuant to the Section 73.525 procedures should be done without consideration of population or need. For cases of actual interference, we proposed to require the translator to cease operation if there are a "significant number of complaints" that cannot be resolved by modification of the translator station's operations.

133. We also asked commenters to consider the feasibility of adopting a less stringent standard. We recognized that several other factors could be incorporated, including use of different polarizations, the relatively low power of translators, terrain shielding and population distribution. The signals radiated by most TV stations are horizontally polarized,[112] while the signals of NCE-FM translators may be vertically polarized only. This could greatly reduce the potential for interference. The potential for interference would be further reduced by adoption of the proposed ERP standard since this will make it easier to predict accurately the areas actually covered by FM translators. Also, since FM translators are not required to place any particular field strength contour over the community or area they propose to serve, applicants could use intervening terrain features to shield the Channel 6 service area. If this approach were favorably received, we proposed to accept an application for an NCE-FM translator unless circumstances suggest possible interference to Channel 6 signals, such as where the TV signal is elliptical or circularly polarized and the translator would be located in a populated area within the TV station's predicted Grade B contour. Where interference is theoretically conceivable we would require the translator applicant to demonstrate conclusively that the proposed translator would not cause interference to the reception of the Channel 6 TV signal. During any test periods the translator would be required to cease operation if any interference is caused.

134. *Comments.* There is general support for the direction of the Commission's proposals, but considerable confusion over their details. Only Moody and Seven Ranges felt that additional objective standards in this area were not necessary. Moody contends there is no evidence of interference complaints and describes the Commission proposal as classic overkill. Corinthians XIII, Feaster, and McKenzie support our alternative proposal to apply less restrictive standards to determine if interference will exist to Channel 6 TV stations from a proposed new NCE-FM translator. McKenzie believes that the problem will be minimized by opening all 100 FM channels to NCE-FM translator use.

135. Commenters presented a variety of ways to clarify the proposed requirements. Nearly all would modify the distance table to reflect the low power allowed translator stations. Most also suggest prohibiting the overlap of an explicitly defined FM translator interfering contour with a TV Channel 6 station's Grade B contour.[113] Christian Media, NPR, WTI and Vernier support providing for vertical polarization. CBS and Great American *et al.* oppose any such provision. A couple of parties propose more restrictive requirements. Great American *et al.* propose protection to TV Channel 6 service beyond a station's Grade B contour. du Treil suggests protecting low power TV stations on Channel 6. AFCCE, NJPBA and Vernier suggest greater use of Section 73.525. Conversely, Great American *et al.*, Jones and NPR argue against it. NPR contends that under Section 73.525, unless more than 3000 people are affected, there is no objectionable interference. Great American *et al.* claim that, as FM translators are a secondary service, interference to even one person should not be allowed. NPR suggests that we rely on field tests to determine where interference will be caused. Similarly, La Tour suggests that a more appropriate approach is to use only the actual interference criteria. MSTV opposes using field tests to determine interference and argues that an effective screening standard is essential.

136. CBS, Great American *et al.*, and MSTV oppose the significant number of complaints standard for determining actual Channel 6 interference. CBS suggests the docu-

mentation standards it proposed for FM actual interference. Great American *et al.* suggest an interference standard requiring the Commission's receipt of any "valid and substantial complaint" demonstrating the interference. At the least, Great American *et al.* urge the Commission to make clear the approximate number of complaints that it will consider "significant", and suggest 5-10. NJPBA suggests the significant number standard apply to translators on channels 221-300 and to those on the reserved channels outside the predicted Grade B contour of a TV Channel 6 station.

137. *Rule.* We believe that standards are necessary to remove the uncertainty regarding the extent to which TV Channel 6 reception is protected from interference that could be caused by FM translator stations. Standards are appropriate now that we are adopting limits on FM translator ERP and other interference protection criteria. We have decided to prohibit contour overlap between the predicted interference contours of NCE-FM translators on channels 201 through 220 and the predicted Grade B contours of TV stations operating on Channel 6. FM translators operating on these channels must remain outside the TV Channel 6 stations' Grade B contours to avoid potential interference. The standards for protection ratios are consistent with the NCE-FM broadcast station rules. We expect these criteria to be administratively workable and not excessively burdensome since additional channels are being made available for NCE-FM translator use. Accordingly, we have derived a replacement for the proposed distance separation table based on the maximum facilities limits adopted here, and produced an additional table, derived from the Grade B protection ratios used for Section 73.525 interference prediction. If an FM translator application proposes a site within the appropriate distance in the first table, then the second table must be used to determine if prohibited overlap with a TV Channel 6 Grade B contour is predicted. The TV Channel 6 actual interference complaint standard will be the same as discussed in the preceding section for FM actual interference.

OTHER MATTERS

Grandfathering criteria for existing translators

138. We stated in the *Notice* that we wished to consider a number of alternatives with respect to the regulatory treatment of existing translators following our adoption of new or revised translator service rules. These alternatives included requiring compliance: (1) with all new rules ultimately adopted as a result of this proceeding, granting waivers where needed; (2) with only the new technical rules; (3) within 5 years, at which time the old rules would sunset; (4) at the next renewal cycle; or (5) with the new technical rules when applying for modifications to the existing authorization. We further proposed that pending, non-mutually exclusive applications should be processed under any new rules that are adopted as a result of this *Notice*.[114]

139. *Comments.* NAB states that the Commission should strictly enforce an anti-grandfathering policy. Every translator should be required, following a period of not greater than 60 days, to either cease operation or comply with the new technical standards. For non-technical operation, NAB contends that the Commission should generally oppose any grandfathering. However, NAB states that there may be limited situations where strict, anti-grandfathering rules may not inure to the public benefit. For FM translator stations owned or funded by primary stations that have existed for over a decade NAB states that the Commission might consider adopting a waiver policy that would allow certain of these much older translators to continue operation under current ownership and direct funding mechanisms, but would require full compliance with more stringent interference protection rules. NAB also argues that primary station-operated or funded translators providing service to white areas should be allowed to continue operation under these existing relationships. However, NAB believes that upon the institution of new, full-service FM radio broadcast operations providing coverage, or new AM primary daytime service area coverage, such translators would then lose their grandfather status.[115]

140. La Tour, as well as a few other commenters, particularly those currently operating FM translators, favor complete grandfathering of existing facilities on the grounds of significant "sunk" investments in translator equipment as well as substantial audiences. Commenters that favor grandfathering underscore that these investments and successful cultivation of listeners occurred under the existing translator rules and "in good faith" that such rules were the legitimate basis for long term decisions. Furthermore, these commenters argue that a Commission decision reversing prior rules would cause significant damage to existing operators, potentially causing discontinued service to the public.[116]

141. Some commenters offer grandfathering positions in between these two extremes. du Treil, for example, states that translators should be required to comply with the new technical rules only when requesting modifications to their existing authorizations,[117] or when a change to an FM station results in the station receiving interference from an existing translator. Alternatively, Corinthians XIII as well as a few other commenters propose that FM translators should have a grace period to comply with new technical rules, which should last from one to five years. Corinthians XIII also urges that FM translators which have been providing service for many years should be allowed to continue to do so even though they might not comply with the proposed new non-technical rules. Other commenters suggest a different grace period apply for any new service rules. The suggestions range from one year to permanent grandfathering.

142. *Rule.* We note that requiring translators to come into compliance with new technical rules could cause licensees to withdraw service from areas currently served, a result contrary to the public interest. At the same time we wish to ensure that existing translators do not cause interference to FM radio broadcast stations. We believe that most translators are already in compliance with the technical rules we are adopting. If an existing FM translator station is not in compliance with some aspects of the new technical rules, but is not causing interference to the regular reception of any broadcast signal, we conclude that the public interest does not require the immediate modification of that facility simply to satisfy the new rule requirements. Thus, stations authorized prior to the effective date of these rules may continue to operate even if they do not comply with the technical rules set forth in the new Sections 74.1204, 74.1205, and 74.1235, provided that they comply with the interference rules in Section 74.1203. Moreover, if an interference problem comes to

our attention, or the station seeks to modify its facilities, we will then require compliance with the technical rules in Section 74.1204.

143. We believe that existing FM translator operations should not be permanently exempt from the application of the new service rules. The original purpose of FM translators is to provide supplementary service to areas in which direct reception of radio broadcast stations is unsatisfactory due to distance or intervening terrain barriers. A decision to permanently grandfather existing operations would undermine this purpose. Also, permanent exemption would create two "classes" of translators to which different rules would apply. We believe that the rules pertaining to existing FM translators would be inconsistent with those governing future FM translators.

144. The new service requirements for independently owned FM translators are, however, more stringent than those imposed by our earlier rules. For example, under the new rules commercial primary stations will not be permitted to provide financial support for independently owned translators located in other areas. We believe that because many FM translator licensees have limited financial means, service to the public could be unnecessarily disrupted if we were to require rapid compliance with these new rules. Existing FM translator operations will need some time to obtain alternative sources of funds. Therefore, we will require existing FM translator operations to come into compliance with the new service rules within three years of the effective date of these new rules. The Commission recognizes the limited resources of many FM translator licensees affected by the new rules and desires to refrain from imposing an extraordinary burden through the compliance process. Therefore, we will also entertain waivers for extended grandfathering periods for those licensees showing that the public would unduly lose service if compliance with the new service rules were required within three years. We emphasize that in showing a loss of service to the public, licensees should demonstrate their attempts to substitute other sources of financial support, the lack of availability of alternative funding, extraordinary cost structure concerns, as well as any other aural services available to the area.

Revised Rule Section

145. We stated in the *Notice* that with the numerous modifications to the existing translator rules proposed in this proceeding, it would also be appropriate to undertake a general revision of Part 74, Subpart L, of our rules governing the FM translator and booster services. We proposed to reorganize these rules to make them easier to apply and to clarify the language of the rules to avoid misinterpretation. We noted that the only substantive changes to the proposed rules set forth in Appendix B were those discussed in the *Notice* itself. Any other modifications in the proposed rules reflected only our desire to clarify this subpart.

146. *Comments.* WTI states provision should be made to allow Part 74 type acceptance for transmitters of any power.

147. *Rule.* As proposed in the *Notice*, we are taking this opportunity to clarify and reorganize some of our rules. In particular, we are adopting changes along the lines proposed for the transmitting equipment approval requirements, IF separation protection of FM broadcast stations, FM translator frequency tolerances and time of operation. At the same time, we are adopting clearer language on station identification, copies of the rules, emissions and bandwidth, purpose and permissible service, and eligibility and licensing requirements.

Other Matters

148. NAB states that in recent years it has become clear that the television translator service has been presenting similar problems as those experienced in the FM translator service. NAB concedes that the issue is more complicated, as the television translator service operates along with the low power television service. Nevertheless, they argue that the same alleged "abuses" that are the subject of this proceeding are also arising in the television translator service. NAB concludes that the alleged abuse should be considered seriously and the Commission should promptly adopt a notice of proposed rule making to eliminate these television translator abuses. Abuses in the television translator service to which NAB refers are beyond the scope of this proceeding and will not be addressed here. If NAB wishes to pursue this matter, it may file a petition for rule making in accordance with § 1.401 of the FCC's Rules.

ADMINISTRATIVE MATTERS

Final Regulatory Flexibility Analysis

I. Need and Purpose of this Action: The revision of the FM translator rules and policies adopted herein is necessary in order to promote the intended purposes of the FM translator service. There is a need to clarify and tighten several rules in order to ensure that FM radio broadcast stations are not adversely impacted by translator operations.

II. Summary of Issues raised by the Public Comments in Response to the Initial Regulatory Flexibility Analysis: La Tour states that the proposed rule changes may cause many FM translators to cease operating. La Tour states that all of these translator operators have gross annual revenues of less than 2.5 million dollars and are, therefore, small businesses. La Tour also believes that equipment manufacturers, some of them small businesses, will be put out of business; small market radio stations will be harmed if they cannot support a translator; and small businesses will also be harmed. Cowan urges the Commission to establish a small business exception. Specifically, Cowan suggests that translators with a power output of 10 watts or less should not be required to comply with any extensive engineering standards or showings.

III. Significant Alternatives Considered and Rejected: In this proceeding, the Commission examined the full range of options for FM translator service and paid careful attention to the effects of the various options on small entities. For example, to minimize burdens on applicants, we have decided not to require applications to include an exhibit showing compliance with the predicted interference standards.

149. The Secretary shall cause a copy of this *Report and Order*, including the Final 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. No. 96-354, 94 Stat. 1164, 5 U.S.C. Section 601 *et seq.* (1981).

PAPERWORK REDUCTION ACT STATEMENT

150. The decision contained herein has been analyzed with respect to the Paperwork Reduction Act of 1980, and found to impose new or modified requirements or burdens upon the public. Implementation of any new or modified requirements will be subject to approval by the Office of Management and Budget as prescribed by the Act.

151. Accordingly, IT IS ORDERED THAT pursuant to the authority contained in Sections 4(i) and 303 of the Communications Act of 1934, as amended, Parts 1, 73 and 74 of the Commission's rules and regulations ARE AMENDED as set forth in Appendix B below. These rules and regulations ARE EFFECTIVE **March 1, 1991.**

152. IT IS FURTHER ORDERED THAT the freeze on new commercial FM translator applications and major changes to existing commercial FM translators SHALL CONTINUE for 60 days after the effective date of these new rules and, THAT within sixty days thereafter, applicants with pending applications on file SHALL AMEND their applications to conform with the new rules.

153. IT IS FURTHER ORDERED THAT the request for waiver of Section 74.1231 of the Commission's Rules filed by Gerald A. Turro on July 28, 1989 IS DENIED.

154. IT IS FURTHER ORDERED THAT this proceeding IS TERMINATED.

155. For further information on this proceeding, contact James R. Coltharp, (202) 632-6302, or Gordon Godfrey, (202) 632-9660, Policy and Rules Division, Mass Media Bureau.

FEDERAL COMMUNICATIONS COMMISSION

Donna R. Searcy
Secretary

APPENDIX A

INITIAL COMMENTS

1. Alpine Broadcasting Corporation
2. Arizona Broadcasting Association
3. Association for Broadcast Engineering Standards, Inc.
4. Association of Federal Communications Consulting Engineers
5. Association for Maximum Service Television
6. Brill Media Company, LP.
7. Joint comments of Capitol Broadcasting Corporation, Infinity Broadcasting Corporation, L.M. Communications, Inc., L.M. Communications of South Carolina, Inc., Shamrock Broadcasting, Inc., South Fork Broadcasting Corporation, and WAHR, Inc.
8. CBS, Inc.
9. Cedar Ridge Children's Home and School, Inc.
10. Christian Media Associates, Inc.
11. Columbia Bible College Broadcasting Company
12. Terry A. Cowan
13. Corinthians XIII Broadcasting Company, Inc.
14. Bill Croghan
15. du Treil, Lundin & Rackley, Inc.
16. Electronic Communication Service
17. Bruce F. Elving, Ph.D.
18. David W. Feaster
19. FM Technology Associates, Inc.
20. Joint comments of Great American Television and Radio Company, Inc. and McGraw-Hill Broadcasting Company, Inc.
21. Dan Hendrix
22. Hoffman Media of Louisiana, Inc.
23. Robert A. Jones, P.E.
24. K-BEST
25. KBUR/KGRS
26. King Broadcasting, Inc.
27. Kneller Broadcasting of Charlotte County., Inc.
28. KPBX Spokane Public Radio
29. KRXV, Inc.
30. KSOR (FM) Southern Oregon State College
31. KSPK
32. John S. La Tour
33. London Bridge Broadcasting, Inc.
34. Lotus Communications Corporation
35. M B C Grand Broadcasting, Inc.
36. Michael A. McKenzie
37. Minnesota Public Radio
38. Moody Bible Institute of Chicago
39. Mosaic Development Company
40. National Association of Broadcasters
41. National Public Radio
42. National Translator Association
43. New Jersey Broadcasters Association
44. New Jersey Public Broadcasting Authority
45. New Life Christian Academy
46. Northland Broadcasting, Inc.
47. Pleasant Broadcasters
48. Prairie Broadcasting Company
49. Prescott Valley Broadcasting Company, Inc.
50. Radio South, Inc.
51. Dan Ransom
52. William Paxton Rogers
53. Seven Ranges Radio Co., Inc.
54. Byron W. St. Clair
55. Stereo Broadcasters, Inc.
56. Sunbelt Television, Inc.
57. Temple University of the Commonwealth System of Higher Education
58. Thomson Consumer Electronics, Inc.
59. Tower Communications
60. Tucson Broadcasters Association

* * * * *

5. Section 74.531 is amended by redesignating paragraphs (c) through (g) as (d) through (h) and adding new paragraph (c) to read as follows:

§ 74.531 Permissible service.

* * * * *

(c) An aural broadcast intercity relay station is authorized to transmit aural program material between an FM radio station and an FM translator station operating within the coverage contour of its commercial primary FM station. This use shall not interfere with or otherwise preclude use of these broadcast auxiliary stations transmitting aural programming between the studio and transmitter location of a broadcast station or between broadcast stations as provided in paragraphs (a) and (b) above.

* * * * *

6. Section 74.532 is amended by revising paragraph (a) to read as follows:

§ 74.532 Licensing requirements.

(a) An aural broadcast STL or intercity relay station will be licensed only to the licensee or licensees of broadcast stations, other than international broadcast stations, and for use by a broadcast station or an FM booster station owned entirely by or under common control of the licensee or licensees, or for use by an FM translator station operating within the coverage contour of the commercial primary FM station being rebroadcast.

* * * * *

7. Section 74.1201 is amended by adding paragraphs (g), (h) and (i) to read as follows:

§ 74.1201 Definitions.

* * * * *

(g) Translator coverage contour. The coverage contour for an FM translator providing "fill in" service is congruent with its parent station: for a fill in translator for a commercial Class B station it is the predicted 0.5 mV/m field strength contour; for a fill in translator for a commercial Class B1 station it is the predicted 0.7 mV/m field strength contour; and for a fill in translator for all other classes of commercial stations as well as all noncommercial educational stations it is the predicted 1 mV/m field strength contour. A fill in FM translator's coverage contour must be contained within the primary station's coverage contour. The protected contour for an FM translator station is its predicted 1 mV/m contour.

(h) Fill in area. The area where the coverage contour of an FM translator or booster station is within the protected contour of the associated primary station (*i.e.*, predicted 0.5 mV/m contour for commercial Class B stations, predicted 0.7 mV/m contour for commercial Class B1 stations, and predicted 1 mV/m contour for all other classes of stations).

(i) Other area. The area where the coverage contour of an FM translator station extends beyond the protected contour of the primary station (*i.e.*, predicted 0.5 mV/m contour for commercial Class B stations, predicted 0.7 mV/m contour for commercial Class B1 stations, and predicted 1 mV/m contour for all other classes of stations).

8. Section 74.1202 is amended by revising paragraphs (b), (b)(1) and (b)(2); by removing paragraphs (c), (d) and the Note to this section; and by redesignating paragraph (e) as paragraph (c) to read as follows:

§ 74.1202 Frequency assignment.

* * * * *

(b) Subject to compliance with all the requirements of this subpart. FM broadcast translators may be authorized to operate on the following FM channels, regardless of whether they are assigned for local use in the FM Table of Allotments (§ 73.202(b) of this chapter):

(1) Commercial FM translators: Channels 221-300 as identified in § 73.201 of this chapter. (2) Noncommercial FM translators: Channels 201-300 as identified in § 73.201 of this chapter. Use of reserved channels 201-220 is subject to the restrictions specified in § 73.501 of this chapter.

* * * * *

(c) An FM broadcast booster station will be assigned the channel assigned to its primary station.

9. Section 74.1203 is revised to read as follows:

§ 74.1203 Interference.

(a) An authorized FM translator or booster station will not be permitted to continue to operate if it causes any actual interference to:

(1) the transmission of any authorized broadcast station; or

(2) the reception of the input signal of any TV translator, TV booster, FM translator or FM booster station; or

(3) the direct reception by the public of the off-the-air signals of any authorized broadcast station including TV Channel 6 stations, Class D (secondary) noncommercial educational FM stations, and previously authorized and operating FM translators and FM booster stations. Interference will be considered to occur whenever reception of a regularly used signal is impaired by the signals radiated by the FM translator or booster station, regardless of the quality of such reception, the strength of the signal so used, or the channel on which the protected signal is transmitted.

(b) If interference cannot be promptly eliminated by the application of suitable techniques, operation of the offending FM translator or booster station shall be suspended and shall not be resumed until the interference has been eliminated. Short test transmissions may be made during the period of suspended operation to check the efficacy of remedial measures. If a complainant refuses to permit the FM translator or booster licensee to apply remedial techniques which demonstrably will eliminate the interference without impairment to the original

61. Gerard A. Turro
62. The University of Alaska
63. The University of Utah
64. Douglas L. Vernier
65. Weiner Broadcasting, Inc.
66. Western Inspirational Broadcasters, Inc.
67. Western Translators, Inc.
68. Thurstan Williams
69. WTCX/WDNT

REPLY COMMENTS

1. Association for Maximum Service Television, Inc.
2. Capital Cities/ABC, Inc.
3. Communications Investment Corporation
4. Corporation for Public Broadcasting
5. Terry A. Cowan
6. Electronic Communication Service
7. David W. Feaster
8. Freedom WLNE-TV Inc., WRGB Broadcasting Inc., and Freedom-TV Sub Inc.
9. Dan Hendrix
10. KBBU-FM
11. Klimek Communications Corp.
12. KSBY, Inc. and Gillett Communications of Milwaukee, Inc.
13. John S. La Tour/J and J Broadcasting/Power Du Pree Broadcasting Corporation
14. M B C Grand Broadcasting, Inc.
15. Moody Bible Institute of Chicago
16. National Association of Broadcasters
17. National Public Radio
18. National Translator Association
19. Temple University
20. Gerard A. Turro

LATE-FILED COMMENTS

1. du Treil, Lundin & Rackley, Inc.

APPENDIX B

Rule Changes

Title 47 CFR Parts 1, 73, and 74 are amended as follows:

1. The authority citation for Parts 1, 73, and 74 continues to read as follows:

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

2. Section 1.1307, paragraph (b), is amended by revising Note 1 to read as follows:

§ 1.1307 Actions which may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.

* * * * *

(b) * * *

NOTE 1: Paragraph (b) shall apply to facilities and operations licensed or authorized under the following Parts of the Commission's Rules: 5, 21 (Subpart K), 25, 73, 74 (Subparts A, G, I, and L), and 80. With respect to Part 21 (Subpart K) and Part 74 (Subpart I), paragraph (b) is applicable only to MDS and ITFS stations transmitting with an equivalent isotropically radiated power (EIRP) in excess of 200 watts. With respect to Part 74 (Subpart L), paragraph (b) is applicable only to FM booster and translator stations transmitting with an effective radiated power (ERP) in excess of 100 watts. With respect to Part 80, paragraph (b) is applicable only to ship earth stations. Facilities and operations licensed or authorized under all other parts, subparts, or sections of the Commission's Rules shall be categorically excluded from consideration under paragraph (b).

* * * * *

3. Section 73.3573 is amended by revising the section heading, by removing the fourth sentence in paragraph (a)(1), by redesignating the Note at the end of the section as Note 1, and by adding a Note 2, to read as follows:

§ 73.3573 Processing FM broadcast station applications.

(a) * * *

(1) * * * Other requests for change in frequency or community of license for FM stations must first be submitted in the form of a petition for Rule Making to amend the Table of Allotments. For noncommercial educational FM stations a major change is any change in frequency or community of license or any change in power or antenna location or height above average terrain (or combination thereof) which would result in a change of 50 percent or more in the area within the station's predicted 1 mV/m field strength contour. * * *

* * * * *

Note 1: Processing of applications for new low power educational FM applications:

* * * * *

Note 2: For rules on processing FM translator and booster stations, see Section 74.1233 of this chapter.

4. Section 74.501 is amended by revising paragraph (b) to read as follows:

§ 74.501 Classes of *aural broadcast auxiliary* stations.

* * * * *

(b) Aural broadcast intercity relay station. A fixed station for the transmission of aural program material between radio broadcast stations, other than international broadcast stations, between FM radio stations and FM translator stations operating within the coverage contour of their commercial primary FM stations, between FM radio stations and their co-owned FM booster stations, or for such other purposes as authorized in § 74.531.

reception, the licensee of the FM translator or booster station is absolved of further responsibility for that complaint.

(c) An FM booster station will be exempt from the provisions of paragraphs (a) and (b) of this section to the extent that it may cause limited interference to its primary station's signal, *provided* it does not disrupt the existing service of its primary station or cause such interference within the boundaries of the principal community of its primary station.

(d) A fill-in FM translator operating on the first, second or third adjacent channel to its primary station's channel will be exempt from the provisions of paragraphs (a) and (b) of this section to the extent that it may cause limited interference to its primary station's signal, *provided* it does not disrupt the existing service of its primary station or cause such interference within the boundaries of the principal community of its primary station.

(e) It shall be the responsibility of the licensee of an FM translator station or FM booster station to correct any condition of interference which results from the radiation of radio frequency energy by its equipment on any frequency outside the assigned channel. Upon notice by the Commission to the station licensee or operator that such interference is being caused, the operation of the translator station or booster station shall be immediately suspended and shall not be resumed until the interference has been eliminated or it can be demonstrated that the interference is not due to spurious emissions by the FM translator station or FM booster station; *provided*, however, that short test transmissions may be made during the period of suspended operation to check the efficacy of remedial measures.

10. A new Section 74.1204 is added to read as follows:

§ 74.1204 Protection of FM broadcast stations and FM translators.

(a) An application for an FM translator station will not be accepted for filing if the proposed operation would involve overlap of predicted field strength contours with any other authorized station, including commercial and noncommercial educational FM broadcast stations, FM translators and Class D (secondary) noncommercial educational FM stations, as set forth below:

(1) Commercial Class B FM Stations (Protected Contour: 0.5 mV/m)

Frequency separation	Interference contour of proposed translator station	Protected contour of commercial Class B station
Co-channel	0.05 mV/m (34 dBu)	0.5 mV/m (54 dBu)
200 kHz	0.25 mV/m (48 dBu)	0.5 mV/m (54 dBu)
400 kHz	5.00 mV/m (74 dBu)	0.5 mV/m (54 dBu)
600 kHz	50.0 mV/m (94 dBu)	0.5 mV/m (54 dBu)

(2) Commercial Class B1 FM Stations (Protected Contour: 0.7 mV/m)

Frequency separation	Interference contour of proposed translator station	Protected contour of commercial Class B1 station
Co-channel	0.07 mV/m (37 dBu)	0.7 mV/m (57 dBu)
200 kHz	0.35 mV/m (51 dBu)	0.7 mV/m (57 dBu)
400 kHz	7.00 mV/m (77 dBu)	0.7 mV/m (57 dBu)
600 kHz	70.0 mV/m (97 dBu)	0.7 mV/m (57 dBu)

(3) All Other Classes of FM Stations (Protected Contour: 1 mV/m)

Frequency separation	Interference contour of proposed translator station	Protected contour of any other station
Co-channel	0.1 mV/m (40 dBu)	1 mV/m (60 dBu)
200 kHz	0.5 mV/m (54 dBu)	1 mV/m (60 dBu)
400 kHz	10 mV/m (80 dBu)	1 mV/m (60 dBu)
600 kHz	100 mV/m (100 dBu)	1 mV/m (60 dBu)

(b) The following standards must be used to compute the distances to the pertinent contours:

(1) The distances to the protected contours are computed using Figure 1 of § 73.333 [F(50,50) curves] of this chapter.

(2) The distances to the interference contours are computed using Figure 1a of § 73.333 [F(50,10) curves] of this chapter. In the event that the distance to the contour is below 16 kilometers (approximately 10 miles), and therefore not covered by Figure 1a, curves in Figure 1 must be used.

(3) The effective radiated power (ERP) to be used is the maximum ERP of the main radiated lobe in the pertinent azimuthal direction. If the transmitting antenna is not horizontally polarized only, either the vertical component or the horizontal component of the ERP should be used, whichever is greater in the pertinent azimuthal direction.

(4) The antenna height to be used is the height of the radiation center above the average terrain along each pertinent radial, determined in accordance with § 73.313(d) of this chapter.

(c) An application for a change (other than a change in channel) in the authorized facilities of an FM translator station will be accepted even though overlap of field strength contours would occur with another station in an area where such overlap does not already exist, if:

(1) The total area of overlap with that station would not be increased;

(2) The area of overlap with any other station would not increase;

(3) The area of overlap does not move significantly closer to the station receiving the overlap; and,

(4) No area of overlap would be created with any station with which the overlap does not now exist.

(d) The provisions of this section concerning prohibited overlap will not apply where the area of such overlap lies entirely over water. In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.

(e) The provisions of this section will not apply to overlap between a proposed fill-in FM translator station and its primary station operating on a first, second or

third adjacent channel, *provided* that such operation may not result in interference to the primary station within its principal community.

(f) An application for an FM translator station will not be accepted for filing even though the proposed operation would not involve overlap of field strength contours with any other station, as set forth in paragraph (a) of this section, if the predicted 1 mV/m field strength contour of the FM translator station will overlap a populated area already receiving a regularly used, off-the-air signal of any authorized co-channel, first, second or third adjacent channel broadcast station, including Class D (secondary) noncommercial educational FM stations and grant of the authorization will result in interference to the reception of such signal.

(g) An application for an FM translator station specifying a channel that is separated by 53 or 54 channels from the channel of an FM radio broadcast station will not be accepted for filing if it fails to meet the required separation distance set out in § 73.207 of this chapter. For purposes of determining compliance with § 73.207, translator stations will be treated as Class A stations; provided, however, that translator stations operating with 10 watts or less ERP will be treated as Class D stations and will not be subject to intermediate frequency separation requirements.

(h) An application for an FM translator station will not be accepted for filing if it specifies a location within 320 kilometers (approximately 199 miles) of either the Canadian or Mexican borders and it does not comply with § 74.1235(d) of this part.

(i) FM booster stations shall be subject to the requirement that the signal of any first adjacent channel station must exceed the signal of the booster station by 6 dB at all points within the protected contour of any first adjacent channel station, except that in the case of FM stations on adjacent channels at spacings that do not meet the minimum distance separations specified in § 73.207 of this chapter, the signal of any first adjacent channel station must exceed the signal of the booster by 6 dB at any point within the predicted interference free contour of the adjacent channel station.

(j) FM translator stations authorized prior to March 1, 1991 with facilities that do not comply with the predicted interference protection provisions of this section, may continue to operate, *provided* that operation is in conformance in § 74.1203 of this part regarding actual interference. Applications to modify such FM translator stations must specify facilities that comply with the provisions of this section.

11. A new Section 74.1205 is added to read as follows:

§ 74.1205 Protection of Channel 6 TV broadcast stations.

(a) An application for a construction permit for new or modified facilities for a noncommercial educational FM translator station operating on Channels 201-220 must include a showing that demonstrates compliance with paragraph (b), (c) or (d) of this section if it is within the following distances of a TV broadcast station which is authorized to operate on Channel 6.

FM Channel	Distance (kilometers)
201 . . .	. . . 148
202 . . .	. . . 146
203 . . .	. . . 143
204 . . .	. . . 141
205 . . .	. . . 140
206 . . .	. . . 137
207 . . .	. . . 135
208 . . .	. . . 135
209 . . .	. . . 135
210 . . .	. . . 135
211 . . .	. . . 135
212 . . .	. . . 135
213 . . .	. . . 135
214 . . .	. . . 134
215 . . .	. . . 134
216 . . .	. . . 133
217 . . .	. . . 133
218 . . .	. . . 132
219 . . .	. . . 132
220 . . .	. . . 131

(b) *Collocated Stations.* An application for a noncommercial educational FM translator station operating on Channels 201-220 and located at 0.4 kilometer (approximately 0.25 mile) or less from a TV Channel 6 station will be accepted if it includes a certification that the applicant has coordinated its antenna with the affected TV station.

(c) *Contour overlap.* Except as provided in paragraph (b) of this section, an application for a noncommercial educational FM translator station operating on Channels 201-220 will not be accepted if the proposed operation would involve overlap of its interference field strength contour with any TV Channel 6 station's Grade B contour, as set forth below.

(1) The distances to the TV Channel 6 station Grade B (47 dBu) field strength contour will be predicted according to the procedures specified in § 73.684 of this chapter, using the F(50,50) curves in § 73.699, Figure 9 of this chapter.

(2) The distances to the applicable noncommercial educational FM translator interference contour will be predicted according to the procedures specified in § 74.1204(b) of this part.

(3) The applicable noncommercial educational FM translator interference contours are as follows:

FM Channel	Interference Contour F(50, 10) curves (dBu)
201 . . .	. . . 54
202 . . .	. . . 56
203 . . .	. . . 59
204 . . .	. . . 62
205 . . .	. . . 64
206 . . .	. . . 69
207 . . .	. . . 73
208 . . .	. . . 73
209 . . .	. . . 73
210 . . .	. . . 73
211 . . .	. . . 73
212 . . .	. . . 74
213 . . .	. . . 75
214 . . .	. . . 77
215 . . .	. . . 78
216 . . .	. . . 80
217 . . .	. . . 81
218 . . .	. . . 85
219 . . .	. . . 88
220 . . .	. . . 90

authorized within the protected contour of the class of station being rebroadcast as predicted on the basis of the maximum powers and heights set forth in that section for the applicable class of FM broadcast station concerned.

13. Section 74.1232 is amended by revising paragraph (b) and adding a Note, by revising paragraph (d), removing the notes following paragraph (d), by redesignating paragraphs (e) through (g) as paragraphs (f) through (h), revising new paragraphs (f) through (h) and adding new paragraph (e) to read as follows:

§ 74.1232 Eligibility and licensing requirements.

* * * * *

(b) More than one FM translator may be licensed to the same applicant, whether or not such translators serve substantially the same area, upon an appropriate showing of technical need for such additional stations. FM translators are not counted as FM stations for the purpose of Section 73.3555, concerning multiple ownership.

Note: As used in this section need refers to the quality of the signal received and not to the programming content, format, or transmission needs of an area.

* * * * *

(d) An authorization for an FM translator whose coverage contour extends beyond the protected contour of the commercial primary station will not be granted to the licensee or permittee of a commercial FM radio broadcast station. Similarly, such authorization will not be granted to any person or entity having any interest whatsoever, or any connection with a primary FM station. Interested and connected parties extends to group owners, corporate parents, shareholders, officers, directors, employees, general and limited partners, family members and business associates. For the purposes of this paragraph, the protected contour of the primary station shall be defined as follows: the predicted 0.5 mV/m contour for commercial Class B stations, the predicted 0.7 mV/m contour for commercial Class B1 stations and the predicted 1 mV/m field strength contour for all other FM radio broadcast stations. The contours shall be as predicted in accordance with Section 73.313(a) through (d) of this chapter. In the case of an FM radio broadcast station authorized with facilities in excess of those specified by Section 73.211 of this chapter, a co-owned commercial FM translator station will only be authorized within the protected contour of the class of station being rebroadcast, as predicted on the basis of the maximum powers and heights set forth in that section for the applicable class of FM broadcast station concerned. An FM translator station in operation prior to March 1, 1991, which is owned by a commercial FM (primary) station and whose coverage contour extends beyond the protected contour of the primary station, may continue to be owned by such primary station until March 1, 1994. Thereafter, any such FM translator station must be owned by independent parties.

(e) An FM translator station whose coverage contour goes beyond the protected contour of the commercial primary station shall not receive any support, before or after construction, either directly or indirectly, from the commercial primary FM radio broadcast station. Such support also may not be received from any person or entity having any interest whatsoever, or any connection with the primary FM station. Interested and connected parties extends to group owners, corporate parents, shareholders, officers, directors, employees, general and limited partners, family members and business associates. Such an FM translator station may, however, receive technical assistance from the primary station to the extent of installing or repairing equipment or making adjustments to equipment to assure compliance with the terms of the translator station's construction permit and license. FM translator stations in operation prior to March 1, 1991 may continue to receive contributions or support from the commercial primary station for the operation and maintenance of the translator station until March 1, 1994. Thereafter, any such FM translator station shall be subject to the prohibitions on support contained in this section.

(f) An FM broadcast booster station will be authorized only to the licensee or permittee of the FM radio broadcast station whose signals the booster station will retransmit, to serve areas within the protected contour of the primary station, subject to Note, Section 74.1231(h).

(g) No numerical limit is placed upon the number of FM booster stations which may be licensed to a single licensee. A separate application is required for each FM booster station. FM broadcast booster stations are not counted as FM broadcast stations for the purposes of Section 73.5555 concerning multiple ownership.

(h) Any authorization for an FM translator station issued to an applicant described in paragraphs (d) and (e) of this section will be issued subject to the condition that it may be terminated at any time, upon not less than sixty (60) days written notice, where the circumstances in the community or area served are so altered as to have prohibited grant of the application had such circumstances existed at the time of its filing.

14. New Section 74.1233 is added to read as follows:

§ 74.1233 Processing FM translator and booster station applications.

(a) Applications for FM translator and booster stations are divided into two groups:

(1) In the first group are applications for new stations or for major changes in the facilities of authorized stations. In the case of FM translator stations, a major change is any change in frequency (output channel), or change (only the gain should be included in determining amount of change) or increase (but not decrease) in area to be served greater than ten percent of the previously authorized 1 mV/m contour. All other changes will be considered minor. All major changes are subject to the provisions of Sections 73.3580 and 1.1104 of the rules pertaining to major changes.

(2) In the second group are applications for licenses and all other changes in the facilities of the authorized station.

(b) Applications for FM translator and booster stations will be processed as nearly as possible in the order in which they are filed. Such applications will be placed in the processing line in numerical sequence, and will be drawn by the staff for study, the lowest file number first. In order that those applications which are entitled to be grouped for processing may be fixed prior to the time processing of the earliest filed application is begun, the FCC will periodically release a Public Notice listing applications which have been accepted for filing and announcing a date (not less than 30 days after publication)

on which the listed applications will be considered available and ready for processing and by which all mutually exclusive applications and/or petitions to deny the listed applications must be filed.

(c) In the case of an application for an instrument of authorization, other than a license pursuant to a construction permit, grant will be based on the application, the pleadings filed, and such other matters that may be officially noticed. Before a grant can be made it must be determined that:

(1) There is not pending a mutually exclusive application filed in accordance with paragraph (b) of this section.

(2) The applicant is legally, technically, financially and otherwise qualified;

(3) The applicant is not in violation of any provisions of law, the FCC rules, or established policies of the FCC; and

(4) A grant of the application would otherwise serve the public interest, convenience and necessity.

(d) Applications for FM translator stations proposing to provide fill-in service (within the primary station's protected contour) of the commonly owned primary station will be given priority over all other applications.

(e) Where applications for FM translator stations are mutually exclusive and do not involve a proposal to provide fill-in service of a commonly owned primary station, the FCC may stipulate different frequencies as necessary for the applicants.

(f) Where there are no available frequencies to substitute for a mutually exclusive application, the FCC will base its decision on the following priorities: (1) first full-time aural service; (2) second full-time aural service; and (3) other public interest matters including, but not limited to the number of aural services received in the proposed service area, the need for or lack of public radio service, and other matters such as the relative size of the proposed communities and their growth rate.

(g) Where the procedures in paragraphs (d), (e) and (f) of this section fail to resolve the mutual exclusivity, the applications will be processed on a first-come-first-served basis.

15. Section 74.1235 is revised in its entirety to read as follows:

§ 74.1235 Power limitations and antenna systems.

(a) An application for an FM translator station filed by the licensee or permittee of the primary station to provide fill-in service within the primary station's coverage area will not be accepted for filing if it specifies an effective radiated power (ERP) which exceeds 250 watts.

(b) An application for an FM translator station, other than one for fill-in service which is covered in paragraph (a) of this section, will not be accepted for filing if it specifies an effective radiated power (ERP) which exceeds the maximum ERP (MERP) value determined in accordance with this paragraph. The antenna height above average terrain (HAAT) shall be determined in accordance with § 73.313(d) of this chapter for each of 12 distinct radials, with each radial spaced 30 degrees apart and with the bearing of the first radial being true north. Each radial HAAT value shall be rounded to the nearest meter. For each of the 12 radial directions, the MERP is the value corresponding to the calculated HAAT in the following table that is appropriate for the location of the translator. For an application specifying a nondirectional transmitting antenna, the specified ERP must not exceed the smallest of the 12 MERP's. For an application specifying a directional transmitting antenna, the ERP in each azimuthal direction must not exceed the MERP for the closest of the 12 radial directions.

(1) For FM translators located east of the Mississippi River or in Zone I-A as described in § 73.205(b) of this chapter:

Radial HAAT (meters)	Maximum ERP (MERP in watts)
less than or equal to 32	250
33 to 39	170
40 to 47	120
48 to 57	80
58 to 68	55
69 to 82	38
83 to 96	27
97 to 115	19
116 to 140	13
greater than or equal to 141	10

(2) For FM translators located in all other areas:

Radial HAAT (meters)	Maximum ERP (MERP in watts)
less than or equal to 107	250
108 to 118	205
119 to 130	170
131 to 144	140
145 to 157	115
158 to 173	92
174 to 192	75
193 to 212	62
213 to 235	50
236 to 260	41
261 to 285	34
286 to 310	28
311 to 345	23
346 to 380	19
381 to 425	15.5
426 to 480	13
481 to 540	11
greater than or equal to 541	10

(c) The effective radiated power of FM booster stations shall be limited such that the predicted service contour of such stations computed in accordance with § 73.313, paragraphs (a) - (d) of this chapter, may not extend beyond the area covered by the predicted service contour of the primary station that they rebroadcast and that such FM booster effective radiated power may not exceed 20 percent of the maximum allowable effective radiated power for the primary station's class.

(d) Applications for FM translator stations located within 320 km of the Canadian border will not be accepted if they specify more than 50 watts effective radiated power in any direction or have a 34 dBu interference contour, calculated in accordance with Section 74.1204 of this part,

that exceeds 32 km. FM translator stations located within 320 kilometers of the Mexican border must be separated from Mexican allotments and assignments in accordance with § 73.207(b)(3) of this chapter and are limited to a transmitter power output of 10 watts or less. For purposes of compliance with that section, FM translators will be considered as Class D FM stations.

(e) In no event shall a station authorized under this subpart be operated with a transmitter power output (TPO) in excess of the transmitter type-accepted rating. A station authorized under this subpart for a TPO that is less than its transmitter type-accepted rating shall determine its TPO in accordance with § 73.267 of this chapter and its TPO shall not be more than 105 percent of the authorized TPO.

(f) Composite antennas and antenna arrays may be used where the total ERP does not exceed the maximum determined in accordance with paragraph (a), (b) or (c) of this section.

(g) Either horizontal, vertical, circular or elliptical polarization may be used provided that the supplemental vertically polarized ERP required for circular or elliptical polarization does not exceed the ERP otherwise authorized. Either clockwise or counterclockwise rotation may be used. Separate transmitting antennas are permitted if both horizontal and vertical polarization is to be provided.

(h) All applications must comply with § 73.316, paragraphs (d)-(h) of this chapter.

(i) An application that specifies use of a directional antenna must comply with § 73.316, paragraphs (c)(1)-(c)(3) of this chapter. Prior to issuance of a license, the applicant must: 1) certify that the antenna is mounted in accordance with the specific instructions provided by the antenna manufacturer; and 2) certify that the antenna is mounted in the proper orientation. In instances where a directional antenna is proposed for the purpose of providing protection to another facility, a condition may be included in the construction permit requiring that before program tests are authorized, a permittee: 1) must submit the results of a complete proof-of-performance to establish the horizontal plane radiation patterns for both the horizontally and vertically polarized radiation components; and, 2) must certify that the relative field strength of neither the measured horizontally nor vertically polarized radiation component shall exceed at any azimuth the value indicated on the composite radiation pattern authorized by the construction permit.

(j) FM translator stations authorized prior to March 1, 1991, with facilities that do not comply with the ERP limitation of paragraph (a) or (b) of this section, as appropriate, may continue to operate, *provided* that operation is in conformance in § 74.1203 of this part regarding interference. Applications to modify such FM translator stations must specify facilities that comply with paragraph (a) or (b) of this section, as appropriate.

16. Section 74.1236 is amended by revising paragraph (a) to read as follows:

§ 74.1236 Emission and bandwidth.

(a) The license of a station authorized under this subpart allows the transmission of either F3 or other types of frequency modulation (see § 2.201) upon a showing of need, as long as the emission complies with the following:

* * * * *

17. Section 74.1237 is amended by revising paragraph (d) to read as follows:

§ 74.1237 Antenna location.

* * * * *

(d) The transmitting antenna of a commonly owned FM translator or booster station shall be located within the protected contour of its FM station, subject to Note, Section 74.1231(h).

18. Section 74.1250 is revised to read as follows:

§ 74.1250 Transmitters and associated equipment.

(a) FM translator and booster transmitting apparatus, and exciters employed to provide a locally generated and modulated input signal to translator and booster equipment, used by stations authorized under the provisions of this subpart must be type accepted or notified upon the request of any manufacturer of transmitters in accordance with this section and Subpart J of Part 2 of this chapter. If acceptable, the apparatus will be included in the FCC's "Radio Equipment List, Equipment Acceptable for Licensing." In addition, FM translator and booster stations may use FM broadcast transmitting apparatus notified or type accepted under the provisions of Part 73 of this chapter.

(b) Transmitting antennas, antennas used to receive signals to be rebroadcast, and transmission lines are not subject to the requirement for type acceptance.

(c) The following requirements must be met before translator, booster or exciter equipment will be notified or type accepted in accordance with this section:

(1) Radio frequency harmonics and spurious emissions must conform with the specifications of § 74.1236 of this part.

(2) The local oscillator or oscillators, including those in an exciter employed to provide a locally generated and modulated input signal to a translator or booster, when subjected to variations in ambient temperature between minus 30 degrees and plus 50 degrees centigrade, and in primary supply voltage between 85 percent and 115 percent of the rated value, shall be sufficiently stable to maintain the output center frequency within plus or minus 0.005 percent of the operating frequency and to enable conformance with the specifications of § 74.1261 of this part.

(3) The apparatus shall contain automatic circuits to maintain the power output in conformance with § 74.1235(e) of this part. If provision is included for adjusting the power output, then the normal operating constants shall be specified for operation at both the rated power output and the minimum power output at which the apparatus is designed to operate. The apparatus shall be equipped with suitable meters or meter jacks so that the operating constants can be measured while the apparatus is in operation.

(4) Apparatus rated for transmitter power output of more than 1 watt shall be equipped with automatic circuits to place it in a nonradiating condition when no input signal is being received in conformance with § 74.1263(b) and to transmit the call sign in conformance with § 74.1283(c)(2).

(5) For exciters, automatic means shall be provided for limiting the level of the audio frequency voltage applied to the modulator to ensure that a frequency swing in excess of 75 kHz will not occur under any condition of the modulation.

19. Section 74.1251 is amended by revising the section heading, revising paragraphs (b), (b)(7), (b)(8), removing paragraph (b)(9), and adding paragraph (c) to read as follows:

§ 74.1251 Technical and equipment modifications.

* * * * *

(b) Formal application on FCC Form 349 is required of all permittees and licensees for any of the following changes:

* * * * *

(7) Any change of authorized effective radiated power.

(8) Any change in area being served.

(c) Changes in the primary FM station being retransmitted must be submitted to the FCC in writing.

20. Section 74.1261 is revised to read as follows:

§ 74.1261 Frequency tolerance.

(a) The licensee of an FM translator or booster station with an authorized transmitter power output of 10 watts or less shall maintain the center frequency at the output of the translator within 0.01 percent of its assigned frequency.

(b) The licensee of an FM translator or booster station with an authorized transmitter power output greater than 10 watts shall maintain the center frequency at the output of the translator or booster station in compliance with the requirement of Section 73.1545(b)(1).

21. Section 74.1263 is revised to read as follows:

§ 74.1263 Time of operation.

(a) The licensee of an FM translator or booster station is not required to adhere to any regular schedule of operation. However, the licensee of an FM translator or booster station is expected to provide a dependable service to the extent that such is within its control and to avoid unwarranted interruptions to the service provided.

(b) An FM translator or booster station rebroadcasting the signal of a primary station shall not be permitted to radiate during extended periods when signals of the primary station are not being retransmitted.

(c) The licensee of an FM translator or booster station must notify the Commission of its intent to discontinue operations for 30 or more consecutive days. Notification must be made within 10 days of the time the station first discontinues operation and Commission approval must be obtained for such discontinued operation to continue beyond 30 days. The notification shall specify the causes of the discontinued operation and a projected date for the station's return to operation, substantiated by supporting documentation. If the projected date for the station's return to operation cannot be met, another notification and further request for discontinued operations must be submitted in conformance with the requirements of this section. Within 48 hours of the station's return to operation, the licensee must notify the Commission of such fact. All notification must be in writing.

(d) The licensee of an FM translator or booster station must notify the Commission of its intent to permanently discontinue operations at least two days before operation is discontinued. Immediately after discontinuance of operation, the licensee shall forward the station license and other instruments of authorization to the FCC, Washington, D.C. for cancellation.

(e) Failure of an FM translator or booster station to operate for a period of 30 or more consecutive days, except for causes beyond the control of the licensee or as authorized pursuant to paragraph (c) of this section, shall be deemed evidence of permanent discontinuance of operation and the license of the station may be canceled at the discretion of the Commission.

22. Section 74.1269 is revised to read as follows:

§ 74.1269 Copies of rules.

The licensee or permittee of a station authorized under this subpart shall have a current copy of Volumes I (Parts 0, 1, 2 and 17) and III (Parts 73 & 74) of the Commission's Rules and shall make the same available for use by the operator in charge. Each such licensee or permittee shall be familiar with those rules relating to stations authorized under this subpart. Copies of the Commission's Rules may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

23. Section 74.1283 is revised to read as follows:

§ 74.1283 Station identification.

(a) The call sign of an FM broadcast translator station will consist of the initial letter K or W followed by the channel number assigned to the translator and two letters. The use of the initial letter will generally conform to the pattern used in the broadcast service. The two letter combinations following the channel number will be assigned in order and requests for the assignment of particular combinations of letters will not be considered.

(b) The call sign of an FM booster station will consist of the call sign of the primary station followed by the letters "FM" and the number of the booster station being authorized, *e.g.*, WFCCFM-1.

(c) A translator station authorized under this subpart shall be identified by one of the following methods.

(1) By arranging for the primary station whose station is being rebroadcast to identify the translator station by call sign and location. Three such identifications shall be made during each day: once between 7 a.m. and 9 a.m., once between 12:55 p.m. and 1:05 p.m. and once between 4 p.m. and 6 p.m. Stations which do not begin their broadcast before 9 a.m. shall make their first identification at the beginning of their broadcast days. The licensee of an FM translator whose station identification is made by the primary station must arrange for the primary station licensee to keep in its file, and available to FCC personnel, the translator's call letters and location, giving the name, address and telephone number of the licensee or his service representative to be contacted in the event of malfunction of the translator. It shall be the responsibility of the translator licensee to furnish current information to the primary station licensee for this purpose.

(2) By transmitting the call sign in International Morse Code at least once each hour. Transmitters of FM broadcast translator stations of more than 1 watt transmitter output power must be equipped with an automatic keying device that will transmit the call sign at least once each hour, unless there is in effect a firm agreement with the translator's primary station as provided in § 74.1283(c)(1). Transmission of the call sign can be accomplished by:

(i) Frequency shifting key; the carrier shift shall not be less than 5 kHz nor greater than 25 kHz.

(ii) Amplitude modulation of the FM carrier of at least 30% modulation. The audio frequency tone use shall not be within 200 hertz of the Emergency Broadcast System Attention signal alerting frequencies.

(d) FM broadcast booster stations shall be identified by their primary stations, by the broadcasting of the primary station's call signs and location, in accordance with the provisions of Section 73.1201 of this chapter.

(e) The Commission may, in its discretion, specify other methods of identification.

FOOTNOTES

[1] Currently, there are approximately 1,849 FM translators on-the-air. Construction permits have been granted for another 290 translators.

The current rules also recognize FM booster stations which receive, amplify and retransmit signals on the same frequencies as the FM radio broadcast station. Booster stations are authorized only to the licensee of the primary station they rebroadcast and afford a means whereby the licensee of a primary station may provide service to areas at low signal strength within its primary service contour. *See* 47 CFR § 74.1231(h). The Commission revised its FM booster rules to authorize higher power FM boosters and to permit them to rebroadcast signals received by any distribution technology the licensee deems suitable. *See Report and Order* in MM Docket No. 87-13, 2 FCC Rcd 4625 (1987). Other than clarifications in the booster rules necessitated by this *Report and Order*, we make no changes to the rules governing the FM booster service. *See* §§ 1.1307, 73.3573, 74.1202, 74.1203, 74.1204, 74.1231, 74.1232, 74.1233, 74.1235, 74.1237, 74.1250, 74.1261, 74.1263 and 74.1283.

[2] An FM radio broadcast station whose signal is rebroadcast by an FM translator is referred to as the "primary station." *See* 47 CFR § 74.1201(d).

[3] Recently, the rules were modified to permit licensees of noncommercial educational FM stations to use any distribution technology they deem suitable to transmit programming to their own translators operating on reserved channels subject to certain conditions. *See Report and Order* in MM Docket No. 86-112, 3 FCC Rcd 2196 (1988), *recon. granted in part, denied in part. Memorandum Opinion and Order* in MM Docket No. 86-112, FCC 89-216, 4 FCC Rcd 6459 (1989). *See also Further Notice of Proposed Rule Making* in MM Docket No. 86-112, 3 FCC Rcd 2202 (1988).

[4] *See Notice of Proposed Rule Making* in Docket No. 17159, 34 FR 761 (1969), *Report and Order* in Docket No. 17159, 20 Rad. Reg. 2d (P&F) 1538 (1970).

[5] 47 CFR § 74.1231(a).

[6] 20 Rad. Reg. 2d at 1541.

[7] The FM translator rules are set forth at 47 CFR §§ 74.1201-74.1284. The Commission has also issued a *Guide to FM Translator Rules and Policies* to emphasize the need for translator licensees and applicants to conform to the existing FM translator rules. *See Public Notice*, 55 Rad. Reg. 2d (P&F) 1247 (1984). *See* Note 47, *infra*.

[8] *Notice of Inquiry*, 3 FCC Rcd.3664 (1988).

[9] These petitions, and responsive comments to them, were discussed in detail in the *NOI*. *See* 3 FCC Rcd at 3665-3668.

[10] 5 FCC Rcd 2106 (1990).

[11] Appendix A lists parties commenting in this proceeding. du Treil, Lundin, & Rackley, Inc. filed late comments which we have accepted in the interest of compiling as complete a record as possible.

[12] The existing rule regarding the secondary status of FM translators requires that their operation not cause interference to any other broadcast station. *See* 47 CFR § 74.1203.

[13] The amended rules are set forth in Appendix B.

[14] 47 CFR § 74.1232(d).

[15] 20 Rad. Reg. 2d at 1541, para. 6.

[16] 47 CFR § 74.1232(d)(1).

[17] 20 Rad. Reg. 2d at 1541, para. 6.

[18] *See Report and Order* and *Memorandum Opinion and Order* in MM Docket No. 86-112, *supra*. The rules require that, during a three-year transition period, applicants for such NCE-FM translators proposing to use alternative signal delivery must demonstrate that an alternative frequency providing comparable coverage is available. Applicants need not make a showing if the proposed translator is either within 80 kilometers (50 miles) of the predicted 1 mV/m contour of the primary station or is greater than 160 kilometers (100 miles) from any NCE-FM station.

[19] The Commission's rules state that a translator license may be granted to "any qualified individual, organized group of individuals, or local civil government body" in addition to the licensee of an FM radio broadcast station. *See* 47 CFR § 74.1232(a). This category of licensee will be referred to as an "independent" party.

[20] 20 Rad. Reg. 2d (P&F) at 1541, para. 6.

[21] The commenters supporting the Commission's ownership proposal include NAB, du Treil, Kneller Broadcasting of Charlotte County, Inc. (Kneller), KSOR-FM Southern Oregon State College (KSOR), Northland Broadcasting, Inc. (Northland), Seven Ranges Radio Co. (Seven Ranges), Tower Communications (Tower), Douglas Vernier (Vernier), Western Translators, Inc. (WTI), Arizona Broadcasting Association (ABA), London Bridge Broadcasting, Inc. (London Bridge), CBS, Inc. (CBS), Moody Bible Institute of Chicago (Moody), Brill Media Company, LP. (Brill), and Joint Comments of Capital Broadcasting Corporation *et al.* Prairie Broadcasting Company (Prairie Broadcasting) states that the prohibition regarding primary station ownership of "other area" FM translators should extend to family members of the primary station licensee.

[22] Terry Cowan (Cowan) and Alpine Broadcasting Corporation (Alpine) support this aspect of the NAB proposal.

[23] NAB also suggests that the FCC consider, following adoption of new translator rules, permitting independently owned translators in fill-in and white areas only.

[24] Throughout this *Report and Order*, we will refer to these two classifications when one rule is not appropriate for both categories. When no classification is specified, the rule will be

for all translators. Further, we want to emphasize that under these revised rules, where the predicted coverage contour of a proposed commercial FM translator would serve an area that meets the fill-in definition in part and the other area definition in part, the primary station would be prohibited from translator ownership.

[25] The rules will also be amended to prohibit translator ownership by any person or entity having any interest or connection with the primary FM station. Interested and connected parties extend to group owners, corporate parents, shareholders, officers, directors, employees, general and limited partners, family members and business associates. Due to the potential for abuse, we intend for this provision to be broader than the Commission's general attribution rules.

[26] Consistent with the translator policies that have been in effect for the past two decades, we decline to adopt NPR's proposal to impose additional restrictions on independent party ownership of translators. We believe that the need to attract funding from listeners will adequately ensure responsiveness to consumers' preferences.

[27] A commercial primary station applying for an FM translator whose coverage area is partially fill-in but also extends into a "white area" should follow the "white area" waiver procedure by demonstrating a lack of service in the area beyond the primary station's coverage contour.

[28] 47 CFR § 74.1232(d)(2). We note that there is no prohibition against financial support by FM station licensees to independent parties for the construction, operation or maintenance of FM translators either within the primary station's 1 mV/m predicted contour or in areas where there is no predicted FM service.

[29] 47 CFR § 74.1232(d), Note 2.

[30] We did not propose to impose a financial support restriction on NCE-FM translators.

[31] CBS, ABA, TBA, New Jersey Public Broadcasting Authority (NJPBA), Bill Croghan (Croghan), du Treil, FM Technology Associates, Inc. (FM Technology), London Bridge, Robert A. Jones, P.E. (Jones), KRXV, Inc. (KRVX), and Vernier. In addition, Pleasant Broadcasters (Pleasant) states that financial support should be prohibited not only by an FM radio station but also by any person or entity having any interest whatsoever, or any connection with an FM station.

[32] Klimek Communications Corp. (Klimek) and Communications Investment Corporation (CIC) state that primary FM stations should be permitted to provide financial support to FM translators operating beyond their protected contours.

[33] Tower, MBC Grand Broadcasting, Inc. (MBC Grand), and KBBU-FM agree with NTA on this point. KBBU states that the Commission should permit local origination and advertisements on FM translators as an alternative to primary station support.

[34] Informal comment submitted into the record of this proceeding by R. Kent Parsons on behalf of Wayne, Piute, and Garfield counties in Utah.

[35] The rules will be amended to prohibit financial support to an "other area" translator by any person or entity having any interest or connection with the primary station. *See* Note 25, *supra*.

[36] Primary stations will still be permitted, however, to provide "technical assistance" to FM translators in other areas, to the extent of installing, repairing, or making adjustments to equipment to assure compliance with the terms of the translator station's construction permit or license. In this regard, technical assistance will be excepted from the indirect support proscription in our rule.

[37] We also believe the Commission has ample authority under Sections 4(i) and 303 to adopt rules limiting financial assistance to translators.

[38] 47 CFR § 74.1231(g).

[39] *Id.*

[40] *See Guide to FM Translator Rules and Policies*, 55 Rad. Reg. 2d (P&F) at 1248. This policy against profit-making from translator operation was not codified in the rules. We stated that any new rules we may adopt in this proceeding will, of course, supersede any guidelines set forth in the *Guide to FM Translator Rules and Policies*, *supra*. *See* n. 47, *infra*.

[41] *See* FCC Public Notice, FCC 86-161, April 11, 1986.

[42] CBS, London Bridge, ABA, du Treil, FM Technology, Kneller, and Sunbelt Television, Inc. (Sunbelt).

[43] Seven Ranges, Northland, Vernier, and ABA suggest that a standardized format for acknowledgements and solicitations should be established to prevent FM translator licensees from airing disguised commercials.

[44] Dan Hendrix, referenced above in comments by KBUR/KGRS, states that FM translators do not divert advertising revenues from full service stations because of their comparatively small listenership.

[45] WTI also asks that independently-owned fill-in translators should have access to fundraising to supplement any primary station support. We note that our rules prohibit commercial primary station support of "other area" translators, limit on-air solicitations to 30-seconds per hour, and restrict the kinds of announcements that can be made by NCE-FM translators, but impose no other restrictions on the fundraising ability of FM translator licensees.

[46] We also reject WTI and La Tour's proposal that translators be permitted to use multiplex subcarriers as a source of revenues in addition to charitable contributions. Translators are intended to rebroadcast signals into areas experiencing reception problems rather than to originate programming and information services. We believe that the subcarrier option would improperly establish FM translators as an origination service while also undermining incentives for broadcast stations to develop where financially viable.

[47] The guidelines set forth in the *Guide to FM Translator Rules and Policies*, *supra*, are superseded by the new rules adopted here. However, those existing translators eligible for "grandfathering" as discussed *infra*, will remain subject to the Policy Statement's provision stating that "translators may not make fundraising announcements for the purpose of making a profit." The non-profit aspect of the Policy Statement will be retained for three years following the effective date of the new rules, coinciding with the "grandfathering" section's similar parameter. We note that the new rules no longer require licensees of FM translators to operate non-profit facilities.

[48] *See* 47 CFR §§ 74.1201(a), 74.1231(a) and 74.1284(a).

[49] 47 CFR § 74.1231(g).

[50] 47 CFR § 74.1284(b). 47 U.S.C. § 325(a).

[51] Brill Media, Capital Broadcasting *et al.*, Cowan, du Treil, Bruce F. Elving, Ph.D. (Elving), New Jersey Broadcasters Association (NJBA), NJPBA, Kneller, McKenzie, Seven Ranges, Vernier, and Corinthians XIII Broadcasting Company, Inc. (Corinthians XIII), as well as others, categorically oppose authorizing program origination authority for FM translators. Pleasant states that the rules should expressly forbid the stripping out or introduction of subcarriers or other multiplex signals by the translator.

[52] We underscore the statutory requirement that an independently owned translator, providing fill-in service or service to other areas, must obtain the permission of the primary station to rebroadcast its programming. *See* 47 U.S.C. § 325(a).

[53] On July 28, 1989, Turro filed a request for waiver of Section 74.1231 of the Commission's Rules to permit his FM translator station to originate local programming. By Public Notice, DA 89-933, released August 3, 1989, the Commission requested comment on this waiver petition.

[54] *See FM Broadcast Rules (First Report and Order)*, 40 FCC 662, 664, 665 (1962); *AM Station Assignment Standards (NPRM)*, 25 Rad. Reg. (P & F) 1615, 1617-1618 (1963); *Cf. Pillar of Fire*, 2 FCC Rcd 519 (1987); *Plainview Radio*, 24 FCC 405, 421 (1958), citing *North Plains Broadcasting*, 7 Rad. Reg. (P & F) 93, 106a (1951).

[55] *See* 47 CFR §§ 74.1231(f) and (g).

[56] 47 CFR § 74.1231(b).

[57] *See Memorandum Opinion and Order* in MM Docket No. 86-112, *supra*. A proposal to expand this authority to independently owned NCE-FM translators is contained in the *Further Notice of Proposed Rule Making* in MM Docket No. 86-112, 3 FCC Rcd 2202 (1988).

[58] Association of Federal Communications Consulting Engineers (AFCCE), Brill, Cowan, CBS, Capital Broadcasting et al., Electronic Communication Service (ECS), FM Technology, Kneller, Northland, Seven Ranges, TBA, and Corinthians XIII are among the commenters supporting the Commission's proposal. KBBU supports the Commission's proposal and also recommends that all FM translators should be permitted to use terrestrial microwave transmission facilities.

[59] Proposals by NAB, NPR, and Temple that we revisit the NCE-FM satellite delivery authority decision made in MM Docket No. 86-112 are beyond the scope of this proceeding. Furthermore, the comments presented by NPR asking that we overturn the exception that permits NCE-FM translators owned by their primary stations to receive signals using any technical means do not offer any new substantive reasons to revisit the issue at this time.

We intend that our decisions herein not alter in any fashion the special treatment we accord Alaska. *Wrangell Radio Group*, 75 FCC 2d 404 (1980). Upon appropriate showing the Commission has accommodated Alaska's unique lack of adequate communications services by granting waivers allowing program origination, alternative signal delivery, and cross-service translating.

[60] *See* 47 CFR § 74.1231(b) and *Memorandum Opinion and Order* in MM Docket No. 86-112, *supra*. These frequencies are primarily available for aural intercity relay and studio transmitter links (STL) usage, but may be used on a secondary basis by FM booster stations and NCE-FM translator stations assigned to reserved channels and owned and operated by their primary station.

[61] Authorization on a secondary basis would mean that aural intercity relay frequencies could be used to deliver signals to FM translators only where such use would not interfere with or preclude the use of those channels by full service radio broadcast stations.

[62] 47 CFR § 74.1231(b) and (c).

[63] AFCCE, CBS, TBA, Corinthians XIII, du Treil, McKenzie, Seven Ranges, WTI and Vernier.

[64] 47 CFR § 74.1232(b).

[65] Supporting commenters include AFCCE, Seven Ranges, TBA, Jones, WTI, and McKenzie. AFCCE qualifies its support as it is opposed to multiple FM translators serving the same area on different frequencies carrying one station's signal.

[66] ABES and Capital Cities/ABC support this proposal.

[67] TBA offers a similar proposal.

[68] Comments submitted into the record of this proceeding by the Bureau of Economics of the United States Federal Trade Commission, August 15, 1988.

[69] *See* BC Docket No. 80-130, 90 FCC 2d 88 (1982). The Commission employs four criteria to compare proposals to amend the FM Table of Allotments. These criteria are: 1) first full-time aural service; 2) second full-time aural service; 3) first local service; and 4) other public interest matters. Consideration of "other public interest matters" includes the number of aural services received in the proposed service area, the number of local services, the need for or lack of public radio service and other matters such as the relative size of the proposed communities and their growth rate. We proposed to employ these criteria to evaluate mutually exclusive applications for FM translator stations, with the exception of the "local service" criterion. Since FM translators have no program origination authority, we stated that we would not consider whether an applicant will be providing a local service. Thus, we proposed that the third criterion would not be considered, and "the number of local services" would not be considered as one of the "other public interest matters."

[70] Jones states that the primary station should not receive a priority for translator licenses, and all applications should be processed on a first-come-first-served basis. This will prevent the licensee of a primary station from obtaining translator licenses in order to preclude competitive entry of other FM translators. Tower supports the idea that a lottery system should be used to grant FM translator licenses.

[71] 47 CFR § 73.3573(a)(1). As long as the community or area of service (some translator stations are licensed to rural areas with no defined communities) which was initially served continues to be served, and there is only an incidental expansion of service, a proposed modification has been interpreted as a "minor" change.

[72] This percentage cut-off to define a "major change" in area of coverage was first set forth in *Ted Tucker and Jana Tucker*, 4 FCC Rcd 2816 (1989) (*San Manuel, AZ*).

[73] Klimek opposes this proposal, stating that a change in primary station does not affect any of the technical characteristics of the FM translator and therefore should not be considered.

[74] Capital Cities/ABC also states that a change in primary station should be considered a major change.

[75] The Commission emphasizes that, in calculating coverage area changes for major change applications, only the gain area may be included in the measurement.

[76] In response to the comments expressing concern regarding the potential abuses through cumulative minor change applications, we believe that the review procedure in the existing application process in conjunction with the observations of competitors will adequately monitor excessive changes.

[77] *See* 47 CFR § 73.3555.

[78] *See First Report and Order* in MM Docket No. 87-7, 4 FCC Rcd 1723 (1989). The Commission modified the radio contour overlap rules so that common ownership of two or more commercial stations in the same broadcast service is prohibited if their principal city contours overlap -- *i.e.*, a 5 mV/m contour for AM stations and a 3.16 mV/m contour for FM stations.

Although the new rules continue to prohibit common ownership of two AM or two FM stations in the same community of license, they do permit dual ownership in some cases within the same ADI market. The revised rules are set forth at 47 CFR § 73.3555(a)(1) and (2).

[79] TBA, Seven Ranges, WTI, du Treil, FM Technology, Jones, and McKenzie.

[80] Capital Broadcasting Corporation *et al.* state that independent parties should not be permitted to own translators with overlapping or adjacent service areas.

[81] 47 CFR § 74.1284(c).

[82] du Treil, ABES, Byron W. St. Clair (St. Clair), and London Bridge.

[83] Klimek also opposes the Commission's proposal stating that AM stations would have added exposure and enhance program diversity if they were permitted to rebroadcast via an FM translator.

[84] *See Notice of Proposed Rule Making* in MM Docket No. 87-267, 2 FCC Rcd 5014 (1987); *Report and Order* in MM Docket No. 89-46 (Policies to Encourage Interference Reduction Between AM Broadcast Stations), 5 FCC Rcd 4492 (1990; and *Report and Order* in MM Docket No. 88-376 (Amendment of the Commission's Rules to Improve the Quality of the AM Broadcast Service by Reducing Adjacent Channel Interference and by Eliminating Restrictions Pertaining to the Protected Daytime Contour), 4 FCC Rcd 3835 (1989).

[85] 47 CFR §§ 74.1202(b)(1) and (2).

[86] NAB, CBS, ABA, TBA, KPBX, Northland and Kneller.

[87] Commenters supporting the Commission's proposal are Capital Broadcasting *et al.*, ABES, du Treil, Elving, David W. Feaster (Feaster), FM Technology, Corinthians XIII, Jones, Seven Ranges, St. Clair, NPR, Minnesota Public Radio (MPR), NJPBA, Moody, Temple, Association for Maximum Service Television (MSTV), McKenzie, Vernier, WTI, and AFCCE.

[88] NPR, MPR, NJPBA, Moody, MSTV, St. Clair, McKenzie, WTI and Temple.

[89] *See Report and Order* in BC Docket No. 80-90, 94 FCC 2d 152 (1983).

[90] Moody has requested that the Commission not require a showing of nonavailability of reserved-band channels. Current practices do not require such a showing and we will not impose one at this time.

[91] 47 CFR § 74.1235(a).

[92] Additionally, rules were proposed to advise applicants of further limits on the power of FM translators in the areas within 320 kilometers of either the Canadian or Mexican border.

[93] An ERP of 1 kW at 77 meters produces a 1 mV/m contour at 16 km based upon the FCC FM F(50.50) chart.

[94] *See Report and Order* in Gen. Docket No. 87-551, 3 FCC Rcd 7332 (1988), and *Erratum* in Gen. Docket No. 87-551, 4 FCC Rcd 1761 (1989).

[95] Supporting commenters include London Bridge, AFCCE, MPR, TBA, KSOR, Elving, McKenzie, Cedar Ridge Children's Home and School, Inc. (Cedar Ridge), Seven Ranges, Moody, La Tour, ABES, Capital Broadcasting *et al.*, and Corinthians XIII.

[96] CBS, NAB, NTA, du Treil, Croghan, WTI, Pleasant, Northland and Prairie.

[97] NPR, ABES, La Tour, The University of Alaska (Alaska), KPBX, Dan Ransom (Ransom), St. Clair, Vernier, and Western.

[98] We will discuss the border area proposals during upcoming meetings with the Canadian and Mexican governments. Any changes that are agreed upon will be reflected by an appropriate change in § 74.1235(d). In the meantime, individual situations will be evaluated on a case-by-case basis and, if necessary, referred to Canada or Mexico.

[99] Applicants proposing higher power must determine whether or not their facility would expose workers or the general public to excessive levels of RF radiation. A worst case calculation for a single 100 watts ERP source results in RF radiation exceeding the existing standard for human exposure within about 2 meters of the antenna. Assuming that FM translators will not be located where significant RF radiation is contributed by other stations and that the transmitting antennas are normally more than 2 meters from accessible locations, such exposure should not occur.

[100] It is also more consistent with the current rule, which is based on 10 watts TPO. Most FM boosters and translators use a transmitting antenna with sufficient gain to produce an ERP that is between two and ten times their TPO.

[101] 47 CFR §§ 74.1235 and 74.1250.

[102] 47 CFR § 74.1235.

[103] Those commenters supporting the directional antenna proposal were FM Technology, CBS, NAB, TBA, NJPBA, Moody, WTI, NPR, St. Clair and AFCCE.

[104] Moody concurs with AFCCE's position.

[105] Some of the rules are derived from FM broadcast station directional antenna rules adopted in MM Docket No. 87-121. Despite pending reconsideration petitions in that proceeding, we believe the rules we are adopting here will be adequate for this secondary service in which FM translator stations remain responsible for correcting any actual interference that may result from unpredicted directional antenna performance.

[106] *See* 47 CFR § 74.1203(a)-(d).

[107] *See Report and Order* in MM Docket No. 87-13, *supra*.

[108] CBS, Corinthians XIII, Moody, ABES, NAB, Brill Media, Feaster, Elving, Seven Ranges, Vernier, WTI, and Capital Broadcasting *et al.*

[109] Pleasant, McKenzie, du Treil, NPR, and ABES.

[110] NAB submitted a copy of its "interference complaint" study documenting its concern. *See* "Broadcast Technical Interference Complaint Survey: What Does the Public Do When They Experience Signal Interference?", R. V. Ducey, Research and Planning Department, NAB, June, 1987.

[111] To improve the organization of the new rules, we have rearranged them with actual interference in § 74.1203, predicted FM interference in § 74.1204 and predicted TV Channel 6 interference in § 74.1205. Thus, the proposed note to § 74.1203(a) is now part of § 74.1204(d) and the proposed § 74.1203(e) is now § 74.1204(f).

[112] 47 CFR Section 73.682(a)(14).

[113] Christian Media, du Treil, the Joint Comments of Great American Television and Radio Company, Inc. *et al.* (Great American *et al.*), MSTV, NAB, Thomson Consumer Electronics, Inc. (Thomson), and WTI.

[114] Upon adoption of the *NOI*, we imposed a freeze on applications for new commercial FM translators and major changes to authorized commercial FM translators. *See* 3 FCC Rcd at 3673. Applications for new NCE FM translators seeking assignment to the reserved frequency band were exempt from the freeze so that the revised noncommercial signal delivery technology rule could be given effect. *See Report and Order* in MM Docket No. 86-112, *supra*. We took this action because of our concern that the volume of applications for FM translators could increase substantially during the pendency of this proceeding. The freeze will continue for 60 days after the effective date of any new rules adopted and, thereafter, we will provide a

60 day period for applicants to amend their applications to conform with the new rules. We noted that if a pending modification application would become a "major change" under the new rules, applicants would be required to pay new processing fees in order for the Commission to process those applications.

[115] Several commenters generally support NAB's anti-grandfathering position. These commenters include Alpine, Brill Media, CBS, Capital Cities/ABC, ABA, TBA, Croghan, Northland, Prairie, Prescott Valley Broadcasting Company, Inc. (Prescott), Radio South, and London Bridge (which also specifically supports NAB's proposed "white area" exception). Pleasant supports grandfathering only primary station-owned translators of long-standing and translators providing service in white areas.

[116] Christian Media, Columbia Bible College, NPR, ECS, Elving, Feaster, MBC Grand and Moody Bible support permanent grandfathering of existing FM translator stations. AFCCE and Cowan state that existing FM translators should be grandfathered under the old rules, but should be made to come into conformance with the new rules if, at some future time, they cause any interference to a full-facility station. Hendrix suggests that translators licensed prior to the imposition of the freeze should continue under financial agreements permitted at the time of their licensing, and translator applications submitted during the freeze should be allowed five years to comply with the new rules.

[117] KSOR and Western Inspirational Broadcasters, Inc. (Western Inspirational) support this proposal. KBBU also expresses support for this grandfathering option if full grandfathering is unacceptable. WTI states that a translator should be grandfathered until it proposes to expand its population coverage area by more than 20 percent.

SEPARATE STATEMENT OF COMMISSIONER SHERRIE P. MARSHALL

In the Matter of Amendment of Part 74 of the Commission's Rules Concerning FM Translator Stations

I have no doubt that translators have the potential to undermine our FM allocations scheme. But in its efforts to protect against improper uses of FM translators, this decision goes too far and throws the baby out with the bathwater. Indeed, the effect of this decision may well be to deny the benefits of FM translator service to significant portions of rural America. Thus, at a minimum, I would have, first, removed our severe restrictions on translators that would bring FM to nearby communities which receive no radio service at all and, second, invited requests to waive those restrictions for translators bringing an FM signal to neighboring communities not already enjoying a minimal level of radio service. I therefore vote for this item subject to these reservations.

SEPARATE STATEMENT OF COMMISSIONER ERVIN S. DUGGAN

In the Matter of Amendment of Part 74 of the Commission's Rules Concerning FM Translator Stations

I find myself somewhat torn between two competing policy goals raised by this item.

On the one hand, we need to be concerned about localism: about the viability of full-service stations, especially in small and rural markets; about their continued public service to local communities. Too many imported signals may indeed undermine continued local service by incumbent FM stations.

On the other hand, we need to be concerned also about the public's interest in diverse voices and viewpoints. This action of the Commission, in my judgment, does not adequately grapple with these competing concerns. Instead, it focuses on returning FM translators to their original, "proper" role as a fill-in service.

In addition, while I do not necessarily want to see the development of a full-scale "low power FM service," I think it might have been valuable for the Commission to explore the potential of FM translators as a way for small entrepreneurs, in certain special circumstances, to gain a foothold in the broadcast industry.

I am voting for this item because, on balance, I believe that our overriding public policy concern must be the need to help full-service FM stations, which have explicit public service obligations, serve the needs of the listening public.