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Federal Communications Commission

FCC MAIL REC 96-58

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

DISPATCHED

In the Matter of )  
Amendments of Parts 73 and 74 )  
of the Commission's Rules To )  
Permit Certain Minor Changes in Broadcast ) MM Docket 96-58  
Facilities Without a Construction Permit )

REPORT AND ORDER

Adopted: August 14, 1997

Released: August 22, 1997

By the Commission:

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## INTRODUCTION

1. In the Notice of Proposed Rulemaking ("*Notice*") in this proceeding,<sup>1</sup> the Commission proposed revisions to the rules for radio and television broadcast stations to reduce the burden on applicants applying for certain types of minor modifications to existing facilities. The rule revisions adopted herein were made possible through changes by Congress, at the request of the Commission, in Section 319(d) of the Communications Act, 47 U.S.C. 319(d), which were included in the recently enacted Telecommunications Act of 1996, Pub. L. No 104-104, 110 Stat 56 (1996). The changes to Section 319(d) eliminated the prohibition against waiving the permit requirement for applicants wanting to make minor changes to broadcast station facilities.<sup>2</sup> We therefore proposed revisions to our broadcast regulations to replace, in certain instances, the two step construction permit-license process with a single step licensing procedure. The rules adopted in this *Order* permit implementation without prior Commission authority of AM, FM, and television minor modifications in a limited number of situations which are unlikely to have an adverse effect on other broadcast facilities or service to the public, and we will allow "single step" licensing of the modified facilities. In addition, we proposed and hereby adopt other revisions to certain rules to simplify those rules and several additions to existing rules to codify existing policies.

2. The proposals in the *Notice* generally received widespread support in the 12 comments and 3 reply comments received. The National Association of Broadcasters ("NAB") "supports FCC rule and policy changes [which will] expedite the use of changed facilities without endangering interference-free broadcast service." NAB comments at Page 8. The comments of The Association of America's Public Television Stations ("APTS"), which represents 351 public television stations across the country, support the proposed revisions applicable to television licensees which will "simplify[ ] the regulatory process [and] give broadcasters greater flexibility without any adverse effect on the public interest." APTS comments at Page 3. The Association of Federal Communications Consulting Engineers ("AFCCE") "finds the proposed changes constructive and supports the concept of replacing a two-step FCC processing procedure with a single step while maintaining the technical fabric of the broadcast system." AFCCE Comments at Page 1. The consulting engineering firm of duTreil, Lundin & Rackley ("DLR") supports with several modifications the proposed changes which "will protect the integrity of broadcast stations while eliminating unneeded and unwanted additional effort in the licensing process." The remaining commenters address specific portions of the *Notice* which they believe merit additional consideration or believe do not go far enough toward relaxation.<sup>3</sup>

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<sup>1</sup> *Notice of Proposed Rulemaking* in MM Docket 96-58, 11 FCC Rcd 8800, 61 Fed. Reg. 15439 (April 8, 1996).

<sup>2</sup> Section 319(d) has been modified to read in relevant part as follows: "With respect to any broadcasting station, the Commission shall not have authority to waive the requirement of a permit for construction, except that the Commission may by regulation determine that a permit shall not be required for minor changes in the facilities of authorized broadcast stations." Pub. L. 104-104, Section 403(m), 110 Stat 56 (1996).

<sup>3</sup> Appendix B contains a list of commenters and reply commenters.

3. The implications of eliminating a construction permit for certain changes go well beyond the simple actions of reducing paperwork and processing time. A construction permit application serves as an engineering blueprint of the proposed facility, which can be examined by the staff and other parties to ascertain compliance with the Commission's rules and policies prior to any construction. Thus, the construction permit assures Commission approval for the facilities specified therein, and those facilities are protected from later-filed conflicting applications. On the other hand, a license application covers facilities which have already been constructed and in most cases are already operating. The staff does not perform interference or coverage studies in a license application, as it would for a construction permit application. The staff simply performs a brief review of the license application to confirm that the actually constructed facilities match the construction permit or former license, as appropriate. Usually, no determination of compliance with Commission rules and policies is required at the license application stage, since those determinations were made prior to grant of the construction permit.

4. One step licensing places the burden for compliance with the Commission's rules squarely on the applicant. Because the Commission's staff has not reviewed the station changes prior to implementation, the applicant cannot rely on staff concurrence to guarantee compliance with the rules. There exists the possibility that a licensee or permittee will have expended funds on a facility which cannot be licensed or which requires further financial outlays to bring the facility into compliance. Therefore, we want to emphasize at the outset that it will be the licensee's or permittee's sole responsibility to determine, prior to making any changes or the filing of a license application, whether the proposed changes comply with the new rule sections adopted in this Order. Any facilities changes made under the relaxed one-step licensing procedures adopted here will be made at the licensee's or permittee's own risk. We will be strongly disinclined to consider waivers or requests for special temporary authority, or approve expedited processing, to accommodate applicants who have filed one step applications which fail to comply with our rules and policies. We retain the authority to require changes to program test authority or to require the cessation of operation with the changed facilities, or if necessary require submission of a construction permit application on FCC Forms 301 or 340 to bring a station into compliance with our rules and policies, or to resolve instances of interference. Ineligible applicants who nonetheless file a one step application may be required to restore their facilities to the authorized parameters on short notice. However, because we are permitting one step license applications only in instances where there will be little or no adverse impact on other broadcast facilities or the public, we believe that major adjustments will not be required in most instances to bring errant stations into compliance.

5. We also clarify that applicants will not be compelled to use the one step procedures to make changes if the applicant chooses not to. A construction permit granting Commission approval for construction may be necessary for the applicant to secure financing or local zoning clearances, for example, or to facilitate the sale of a station. These applicants may still continue to file a construction permit application on FCC Form 301 for commercial stations or Form 340 for noncommercial educational stations. However, the applicant should be aware that a construction permit application to make a change which could be implemented in a one step license application will not be considered ahead of previously filed routine construction permit applications.

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**SUMMARY OF NOTICE PROPOSALS**

6. On March 19, 1996 we initiated this proceeding through the adoption of a *Notice of Proposed Rulemaking* ("Notice") setting forth the proposed rule changes, which were intended to eliminate the existing two-step application process for AM, FM, and television stations under certain conditions and to make certain other rules and policies are more readily understandable. Specifically, we proposed to

- (1) allow those FM commercial broadcast stations not governed by the provisions of 47 C.F.R. Sections 73.213 and 73.215, or limited by certain other narrow restrictions, to increase effective radiated power (ERP) to the maximum permitted for the station class without the prior requirement of a construction permit;
- (2) modify 47 C.F.R. Section 73.1620 to allow directional FM stations to commence program test operations at half power or the ERP corresponding to the deepest null of the authorized antenna pattern;
- (3) employ simplified procedures where an FM directional antenna is replaced with another directional antenna and no changes to the authorized radiation pattern or ERP are proposed, or where the applicable data is provided for a television station changing directional antennas;
- (4) allow FM contour protection stations authorized pursuant to 47 C.F.R. Section 73.215 which become fully spaced through a change made by another station, to remove the contour protection designation by a modification of license application;
- (5) use a simplified procedure for obtaining authority to use a former main AM, FM, or television facility as an auxiliary broadcast facility (47 C.F.R. Section 73.1675);
- (6) allow FM commercial and certain noncommercial educational FM stations, as well as television stations, to change the vertically polarized ERP without prior authorization, within limits;
- (7) increase the permitted variance in the location of the antenna radiation center for FM and TV stations to facilitate antenna mounting;
- (8) eliminate the requirement to use FCC Form 301 or FCC Form 340 for main studio waiver requests;
- (9) permit AM, FM, and television stations to change from commercial to noncommercial educational status on a license application rather than a construction permit application;

(10) revise the program test authority rule (47 C.F.R. Section 73.1620) and the modification of transmission systems rule (47 C.F.R. Section 73.1690) to simplify and clarify these rule sections, as well as add the additional changes necessitated by the *Notice*;

(11) incorporate into a new rule section the current policies designed to protect AM broadcast stations from adverse effects caused by other broadcast stations;

(12) add a provision to the FM-interference-to-Channel 6 TV rule (47 C.F.R. Section 73.525) that was left out when the rule was adopted in 1985; and

(13) codify the existing staff policy concerning how much of the authorized composite directional pattern for FM stations must be filled by the measured directional composite pattern.

We also asked for suggestions concerning other rules and procedures which could be modified to utilize a one-step licensing process, in addition to the specific proposals advanced in the *Notice*.

#### RESOLUTION OF INDIVIDUAL PROPOSALS

**7. Increases in ERP for Nondirectional, Non-Grandfathered and Non-Contour Protection FM Commercial Stations, Decreases in ERP.** The *Notice* proposed to revise 47 C.F.R. Section 73.1690 to permit FM commercial stations which meet the minimum distance separations specified in 47 C.F.R. Section 73.207, and are operating with less than the maximum facilities permitted for the authorized station class, to increase the effective radiated power to the maximum permitted for the station class, followed by the filing of a modification-of-license application on FCC Form 302-FM within 10 days of the power increase. As proposed, a radiofrequency radiation analysis would have to be submitted with the license application to demonstrate adequate protection to the public and workers. This proposed change would eliminate the requirement for the filing and grant of a construction permit application on FCC Form 301 before the power increase could be implemented. However, the *Notice* indicated that not all stations could be permitted to use this process and set forth five proposed exclusions:

(a) where the station in question was authorized under the grandfathered short-spaced rule (47 C.F.R. Section 73.213), since the opposite short-spaced station could be adversely affected by the increased power;

(b) where the station in question was authorized under the contour protection rule (47 C.F.R. Section 73.215), since the opposite contour-protected station could be adversely affected by the increased power;

(c) where the station in question could potentially affect a Commission monitoring station or a designated radio quiet zone;

(d) where the increased power would result in contour overlap which would violate the multiple ownership restrictions of 47 C.F.R. Section 73.3555; and

(e) where the station in question is located within the Canadian or Mexican border zones and does not meet the minimum separations of 47 C.F.R. Section 73.207 with respect to a foreign station or foreign allotment, or where the station's authorized International Class does not permit operation with the maximum facilities permitted for that station's domestic station class. In both cases, prior international coordination by the Commission is required.

The *Notice* also sought comment on whether the Commission should permit *decreases* in effective radiated power, noting our concerns that the community of license may no longer be adequately served by a reduced station operation. Comment was also sought as to whether suitable procedures for power decreases could be incorporated into the proposed license application procedure.

8. *Comments.* Of the seven parties providing initial comments on this proposal, and the one applicable reply comment, all concur with the basic import of the proposal. DLR, noting that while requests for power decreases are not common, concludes that power decreases as well as increases should be included under this procedure provided that proper coverage of the community of license is maintained. DLR also believes that stations located near quiet zones should be permitted to secure the concurrence of the affected entity prior to increasing ERP and supply that concurrence with the license application. Mullaney Engineering, Inc. ("Mullaney") agrees with DLR's assessment regarding quiet zones, and would extend it to include Table Mountain and Commission monitoring stations. Crawford Broadcasting Company ("Crawford") states that the new procedure would give many FM stations greater latitude and eliminate several months' processing time as well as reduce engineering and filing fee costs. AFCCE and NAB express concern that improperly determined power levels filed in the covering Form 302-FM license applications may result in interference. Finally, Graham Brock, Inc. ("GBI"), argues that power increases or decreases for stations which involve contour overlap pursuant to 47 C.F.R. Section 73.3555 between commonly owned stations should not be exempted from use of this procedure. GBI submits that license applications submitted with multiple ownership showings may require that program authority be withheld pending Commission review of the application.

9. *Discussion.* We believe that it would be beneficial to permit commercial FM broadcast stations, and those noncommercial educational FM stations which operate in the non-reserved portion of the FM band (except Class D stations)<sup>4</sup>, which are not grandfathered under Section 73.213 or authorized under the contour protection provisions of Section 73.215, to increase ERP without the prior requirement of a granted construction permit, providing that FAA clearance is not an issue,<sup>5</sup> and

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<sup>4</sup> Reserved band stations are those noncommercial educational FM stations that operate on Channels 201 to 220 (as well as existing Class D stations licensed to operate on Channel 200), which have been specially reserved for noncommercial educational use. Non-reserved band stations are all stations which operate on Channels 221 through 300, with the exception of Class D noncommercial educational stations, and include commercial stations as well as some noncommercial educational FM stations. For the purposes of this document, all non-reserved band stations (again excepting Class D stations) will simply be referred to as "commercial FM" stations.

<sup>5</sup> If the Federal Aviation Administration ("FAA") has issued a determination limiting the ERP of the station to a specific value due to electromagnetic interference (EMI) concerns, the licensee or permittee must obtain a new written determination of no hazard from that agency for the proposed power level *prior* to implementing the power increase and filing the license application with the FCC. The FAA's determination must be supplied with the license

provided that the Commission's radiofrequency radiation guidelines are met.<sup>6</sup> We will permit those commercial FM stations in the Canadian and Mexican border zones which meet the tests set forth in the new rule section to use the streamlined procedure. We believe that the tests set forth in 47 C.F.R. Section 73.1690(c)(7) will provide a sufficient safeguard against power increases by stations which are not eligible to do so. For convenience, we will periodically release a Public Notice containing a list of those stations known to be eligible under the revised rule.<sup>7</sup> Applicants filing under this procedure will be operating on automatic program test authority pursuant to 47 C.F.R. Section 73.1620 pending the completion of the staff's review of the license application and the issuance of the covering license. Where necessary due to interference, excessive radiofrequency radiation, improper construction, or ineligibility to increase ERP in this manner, the Commission will require changes in the operating power while the station operates on automatic program test authority and before acting on the license application.

10. With respect to those FM commercial stations located near designated radio quiet and radio coordination zones, including Table Mountain and the Commission's monitoring stations (*see* 47 C.F.R. Sections 73.1030 and 0.121(c)), we will, as suggested by some commenters, extend eligibility to permit increases in ERP where the station in question has obtained prior written concurrence for the proposed ERP from the operator of the quiet zone, or the Commission's Compliance and Information Bureau in the case of a monitoring station. A copy of the written concurrence must be submitted with the license application to document that the necessary protection required by 47 C.F.R. Section 73.1030 has been provided.

11. As suggested by the commenters, we concur that many proposals for FM stations to decrease ERP can be accommodated within a one step license process without undue difficulty.<sup>8</sup> Power decreases for eligible commercial stations, including grandfathered stations under 47 C.F.R.

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application to cover the increased power. Failure to do so will be sufficient grounds for the Mass Media Bureau to require that station to reduce power to the value specified on its construction permit or license pursuant to 47 C.F.R. Section 73.1620(c) regardless of whether or not any actual interference has been reported to the FCC.

<sup>6</sup> Applicants should be aware that the Commission has adopted stricter radiofrequency radiation guidelines for broadcast stations, which become effective on September 1, 1997. *See Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation (Report and Order)*, ET Docket 93-62, 11 FCC Rcd 15123 (1996); *First Memorandum Opinion and Order*, 11 FCC Rcd 17512 (1996).

<sup>7</sup> While a list in a Public Notice may not capture every station eligible to increase power in this manner (e.g., because another station changes transmitter site and thereby removes an existing spacing deficiency, or where the station in question does not comply with 47 C.F.R. Section 73.207 but was protected by the short-spaced station under the contour protection rule, 47 C.F.R. Section 73.215), it will eliminate any question of eligibility for those stations on the list. Potential applicants should be aware, however, that the Commission will not confirm the eligibility of stations on an individual basis, because in most instances the researching of station records and computer studies performed by the staff would require almost the same amount of work as a construction permit application. Therefore, it is not cost effective for the Commission to provide this service, nor is it fair to other applicants who do their own research.

<sup>8</sup> For example, an applicant may want to reduce ERP to avoid creation of a potentially hazardous radiofrequency radiation area, particularly in light of the Commission's more restrictive radiofrequency radiation requirements (*see* Footnote 6).

Section 73.213 and contour protection stations under 47 C.F.R. Section 73.215, as well as most noncommercial educational FM stations, will be covered by new rule section 47 C.F.R. Section 73.1620(c)(8).<sup>9</sup> Eligible commercial FM applicants may submit a modification of license application to cover the reduced power, and no construction permit will be required. However, for stations in the commercial band, power reductions will only be accepted where the 70 dBu contour as predicted by the standard contour prediction method in 47 C.F.R. Section 73.313 (i.e., no supplemental contour prediction method) still continues to cover at least 80% of the area or population within the legal boundaries of the community of license, which under present policy corresponds to the minimum level necessary for substantial compliance with the city coverage rule (47 C.F.R. Section 73.315(a)).<sup>10</sup> The commercial station's class must also remain unchanged from the authorized station class, as any change in classification would require a corresponding change to the Table of Allotments in 47 C.F.R. Section 73.202(b). For a noncommercial educational FM station to qualify for a decrease in ERP in a modification of license application, that station must still continue to provide 60 dBu (1 mV/m) service, which is protected from interference from other stations, to at least a portion of the community of license.<sup>11</sup> For both commercial and educational stations, the location of the main

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<sup>9</sup> However, we will not allow a noncommercial educational FM station to eliminate an authorized horizontally polarized component via this process, in favor of operation with the vertically polarized component only. Because educational stations operating with horizontal - only polarization, or horizontal and vertical components, are entitled to employ a 6 dB adjustment when computing an interference to Channel 6 television reception (*see* 47 C.F.R. Section 73.525(e)(1)(iii)), while those employing vertical - only polarization are not (*see* 47 C.F.R. Section 73.525(e)(4)(i)), total elimination of the horizontally polarized component may result in a larger predicted interference area to Channel 6, and thus create a possible violation of § 73.525. Therefore, we will continue to require a construction permit application for these few noncommercial educational FM applicants.

Similarly, we will continue to require construction permits to change either the horizontal or vertical ERP for those FM noncommercial educational stations operating on Channels 200 through 220 which operate with separate antennas (one horizontally polarized and one vertically polarized, mounted at different heights. In some cases, particularly if one of the antennas is directional, the protected and interfering contours produced from the lower antenna can extend beyond the corresponding contours produced by the higher mounted antenna, thus potentially causing interference. Such stations comprise only a small number of the total number of noncommercial educational FM stations.

<sup>10</sup> We will not accept supplemental showings pursuant to 47 C.F.R. Sections 73.313(e) with a license application to show that the 70 dBu contour for commercial stations or the 60 dBu contour for noncommercial educational FM stations, as predicted by an alternate contour prediction method, extends further than (or less than) the same contour as predicted by the standard contour prediction method, for the reasons covered in Paragraph 71 below. Any applicant seeking to provide a supplemental showing in conjunction with a power increase or decrease must obtain a construction permit from the Commission before changing power.

<sup>11</sup> Traditionally, noncommercial educational FM stations have not been required to specify a minimum signal strength for coverage over a community of license. The reasons for this policy were as follows. First, the Commission recognized that many noncommercial educational FM stations, being very low power, simply could not provide 70 dBu (3.16 mV/m) coverage to the entire area within the legal boundaries of the community of license. Second, the Commission recognized that noncommercial stations are generally dependent on listener support, and that the necessary revenues may not be available to support a station reaching a wider audience. Third, educational stations' programming is often oriented toward a particular group of people (*e.g.*, a college campus or a particular ethnic or religious group) which may not be evenly distributed within the confines of a community's boundary. Consequently, we do not require that a noncommercial educational FM station's 60 dBu contour cover all of the

studio must also remain within the 70 dBu principal community contour as required by 47 C.F.R. Section 73.1125. We will require the submission of a showing with the modification of license application to demonstrate compliance with the city coverage, station classification, and main studio requirements.<sup>12</sup> Upon review of the license application, the staff may require the licensee to resume operation with increased ERP if it is determined that coverage of the community of license or the main studio location is inadequate, or if the power reduction is found not to serve the public interest (e.g., where the power reduction would eliminate existing service to an otherwise unserved or under-served area (only one other service)).<sup>13</sup>

12. We do not believe that GBI's proposed revision permitting multiple ownership showings pursuant to 47 C.F.R. Section 73.3555 with an FM license application to increase or decrease ERP should be adopted. A license application signifies that the station is already operating in accordance with the parameters specified therein, or is ready to commence operation in the case of a directional FM station. As a result, submission of a multiple ownership showing with a license application undoubtedly would be understood by some licensees or permittees to mean that the ownership showing would be automatically approved, and that operations could commence accordingly. This is not necessarily true. Moreover, in some cases a proposed or approved assignment or transfer of a station to another owner does not come to fruition. Should that occur, it may not be readily apparent that the station can continue operation at the changed power level without violation of 47 C.F.R. Section 73.3555 or whether operation must resume at the previously authorized power level. We do not believe that GBI's suggestion that we delay program test authority for these license applications will provide sufficient protection against potential violations of the multiple ownership rules. Therefore, we will not adopt GBI's suggestion.

### 13. Program Test Operation for FM Stations With Directional Antennas.

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community of license.

However, where no portion of the community of license is covered by the noncommercial educational FM station's 60 dBu contour, public interest questions must be addressed. The association of a broadcast station with a community of license is a basic tenet of the Commission's allocations scheme for broadcast stations. Section 307(b) of the Communications Act of 1934, 47 U.S.C. Section 307(b), mandates that the "Commission shall make such distribution of licenses, frequencies, hours of operation, and of power among the several States and communities as to provide a fair, efficient, and equitable distribution to each of the same." Implicit in this statement is a recognition that the Commission must protect service to the community of license from interference caused by other stations. Where no part of that community receives protected service, the community may lose all service from that station. Consequently, for those rare FM educational applications which do not provide any 60 dBu service to the community of license, we believe that the public interest aspect is best considered -- before implementation and loss of any existing or authorized service -- by way of a construction permit application on FCC Form 340.

<sup>12</sup> We will not accept supplemental showings to predict contour locations or to demonstrate main studio compliance with 47 C.F.R. Section 73.1125 with a license application, for the reasons set forth Paragraph 71 below.

<sup>13</sup> FM applicants to reduce power should also be aware that reductions in ERP and the related reductions in service area may cause an authorized auxiliary facility to violate 47 C.F.R. Section 73.1675. If this occurs, the station must modify the auxiliary facility at the same time the power of the main station is reduced, so as to maintain compliance with that rule. Alternatively, the station may surrender the auxiliary license for cancellation.

Currently, FM commercial and noncommercial educational FM stations which have completed construction pursuant to a construction permit are precluded from commencing operation with a directional antenna until after the staff has reviewed the Form 302-FM application for license covering the directional operation. As a result, FM stations generally have faced a 10 day delay in which operation could not commence, until the staff had received the license application and reviewed it. The *Notice* proposed to revise the program test authority rule (47 C.F.R. Section 73.1620) to permit directional FM commercial and noncommercial educational FM applicants to commence operations on program test authority immediately upon installation at either half power or the power corresponding to that of the deepest null of the directional pattern, whichever is greater. The *Notice* indicated that we would continue to authorize program test operations at full power by letter once the staff has had the opportunity to review the license application, verify that the antenna installation had been made as directed by the manufacturer, and confirm that the measured directional pattern did not exceed the authorized composite pattern.

14. *Comments.* Of the seven comments received specifically addressing this issue, all favor relaxation of the present program test authority rule. AFCCE and GBI support the revision of the rule as proposed. DLR would limit ERP for program test operations to one half of the authorized ERP, concluding that the calculation of ERP corresponding to the deepest null can be complex. Mullaney agrees with DLR that the program test authority ERP should be limited to half power, and states that a clarification should be issued to require that the authorized ERP, transmitter operating constants, and transmitter output power be specified in the license application submitted, rather than specifying those values applicable to the reduced power operation which would occur under program test authority. Crawford feels that directional FM stations should be permitted to commence program test operations at the full authorized ERP, stating that the surveyor's and supervising engineer's certifications are sufficient to ensure that the antenna was installed pursuant to the manufacturer's instructions, and that any interference which could be created as compared to half power operation would be "minimal". Thomas Gary Osenkowsky ("Osenkowsky") also believes that full power operation should be permitted under program test authority automatically, unless a complaint of interference is received, on the ground that many transmitters cannot operate efficiently at reduced power levels. Similarly, Communications General Corporation ("CGC") supports full power operation on program test authority, because half-power operation (which corresponds to 3 dB less than the authorized ERP) is, according to CGC, insufficient for interference control.

15. *Discussion.* Like NAB and other commenters in this proceeding, we are concerned that the rule changes adopted by this *Order* not result in interference to other stations. The staff has encountered instances in FM license applications where the directional antenna was not installed in accordance with the manufacturer's instructions, where the tower faces were not oriented in the directions given by the antenna manufacturer, or where the final measured directional pattern exceeded the composite directional pattern authorized for the station. In each of these situations, interference to other FM stations could be created were full power operation to commence. However, little if any interference would occur where the program test ERP is limited to a power level less than that specified on the station's authorization. For these reasons, we cannot conclude that the best approach would be to permit automatic program test operations at full power as suggested by Crawford, CGC, and Osenkowsky. DLR's and Mullaney's suggestions for a half power limitation, on the other hand, in all cases is administratively simple, easy to calculate, and requires no special conditions on the construction permit. Consequently, we will adopt a limit of half the authorized effective radiated power for FM directional stations operating under automatic program test authority, and revise 47

C.F.R. Section 73.1620(a) accordingly.<sup>14</sup>

**16. Replacing One FM or Television Directional Antenna With Another.**

The *Notice* proposed to revise the program test authority rule (47 C.F.R. Section 73.1620) and the transmission systems rule (47 C.F.R. Section 73.1690) to eliminate the requirement in many circumstances for a construction permit before implementing a change to an FM or TV directional antenna. For FM stations, we proposed to permit the submission of a modification-of-license application on FCC Form 302-FM, with appropriate exhibits, after the new directional antenna had been installed, provided that the composite radiation pattern of the new directional pattern is completely encompassed by the authorized composite radiation pattern at all azimuths,<sup>15</sup> and that the new measured pattern maintains compliance with the principal community coverage requirements of 47 C.F.R. Section 73.315(a). The FM station would be permitted to commence program test authority at reduced power immediately pursuant to the revised program test authority rule (47 C.F.R. Section 73.1620). We also proposed to add a definition of "composite pattern" to 47 C.F.R. Section 73.310(a), for clarity. We proposed to permit television stations to change directional antennas using a modification-of-license application on FCC Form 302-TV with the directional antenna information required in 47 C.F.R. Section 73.685(f), and to commence program test operations immediately at full power pursuant to Section 73.1620(a)(1).

17. *Comments.* The comments received addressing the proposed rule revisions are generally supportive. AFCCE and GBI agree with the proposed rule changes. DLR also agrees, but would exclude those noncommercial educational FM stations which are collocated with a television Channel 6 station and must maintain vertical radiation characteristics emulating the vertical radiation characteristics of the television antenna.<sup>16</sup> Osenkowsky believes that the replacement of one directional

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<sup>14</sup> As we stated in the *Notice*, the rule revisions will not prevent a licensee from continuing operations with its existing licensed facility in lieu of reduced operations on program test authority with the directional permit facility pending the approval of full program test authority.

<sup>15</sup> In nearly all instances, the composite antenna pattern in the Commission's FM database corresponds to the composite antenna pattern authorized by the underlying construction permit. The measured composite antenna pattern submitted in the license application must always be completely encompassed by the composite antenna pattern listed in the database. We clarify that no change will be made to the authorized composite antenna pattern in the database provided that the new measured directional antenna pattern submitted with the license application is completely encompassed by the authorized composite antenna pattern, except as follows. If the directional station is authorized pursuant to 47 C.F.R. Sections 73.509 or 73.215, the RMS of the measured composite antenna pattern must be 85% or more of the RMS of the composite antenna pattern. If the measured antenna pattern for a station authorized under 47 C.F.R. Sections 73.509 or 73.215 does not meet the 85% RMS requirement, we will continue to require a granted construction permit prior to implementation to bring the station into compliance, or alternatively allow an exhibit to the license application to reduce the authorized composite antenna pattern to meet the 85% RMS limitation. See Paragraph 63 below.

<sup>16</sup> See 47 C.F.R. Section 73.525(d)(2). The "vertical radiation characteristic" (also called the vertical plane pattern) refers to the emissions of the antenna at some angle directly below the antenna, where 0 degrees represents the signal radiated toward the horizon (parallel with the ground, assuming flat terrain) in all directions, and 90 degrees represents up and down along the tower structure itself. This should not be confused with "vertically polarized component", which represents the manner of signal polarization at 0 degrees (parallel with the ground).

antenna by an exact duplicate antenna should not necessitate any notification to the Commission. CGC would also permit program test operations by FM stations at the full authorized power upon installation of the new antenna. With respect to the proposed revision of 47 C.F.R. Section 73.310(a), CGC believes that the proposed wording of that rule section for the "Composite Pattern" for FM stations is ambiguous, and would rewrite the proposed definition.

18. *Discussion.* Where a new FM directional antenna differs from the old antenna, we believe that the ERP should be limited to half power while the station operates on program test authority for the reasons stated in Paragraph 15 above. However, where an FM antenna is an *exact* duplicate of the one being replaced -- i.e., where the manufacturer, model number, and measured composite pattern are *identical* -- we see no reason why program test operations should not be permitted to commence at full power. We will revise 47 C.F.R. Section 73.1620 accordingly.

19. We do not agree with Osenkowsky's suggestion that the replacement of a television or FM directional antenna with an exact duplicate directional antenna need not be reported to the Commission. It is critical to achieving the measured directional antenna pattern that the new antenna be mounted at the proper azimuth in the manner specified by the antenna manufacturer to eliminate the potential for interference to other stations. Thus, we feel it prudent to continue our practice of having the staff review the directional data submitted with the license application to verify proper installation. Television stations, therefore, still need to provide the information required by 47 C.F.R. Section 73.685(f), while FM stations must provide the data specified in new rule section 47 C.F.R. Section 73.1690(c)(2) as adopted herein.

20. We agree that the wording for the proposed definition in 47 C.F.R. Section 73.310(a) for the term "Composite Pattern" could be reworded to be more understandable than the language proposed in the *Notice*. Consequently, we will adopt a revised definition of this term at CGC's suggestion. See 47 C.F.R. Section 73.310(a) in Appendix E below.

21. We do not believe that the specific exception requested by DLR for a directional noncommercial educational FM station collocated with a Channel 6 TV station is necessary. The number of collocated FM educational stations which actually have been authorized pursuant to 47 C.F.R. Section 73.525(d)(2) is very small, and even fewer of these employ FM directional antennas due to the difficulties inherent in achieving a particular horizontal directional pattern while at the same time achieving a vertical radiation characteristic matching that of the television Channel 6 station. Existing noncommercial educational stations collocated with Channel 6 television stations are well aware that they are required to comply with the interference-limiting provisions of 47 C.F.R. Section 73.525. Indeed, in most instances of collocated educational FM and TV Channel 6 television stations, the parties have entered into a private agreement concerning antenna requirements.<sup>17</sup> Consequently, we do not believe that the adoption of a specific rule section in this instance would enhance compliance with 47 C.F.R. Section 73.525.

## 22. Deletion of Contour Protection Status for FM Commercial Stations.

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<sup>17</sup> These agreements, which are made between the Channel 6 television station and the noncommercial educational FM station only, generally set forth the power and antenna height for the FM station to which the Channel 6 station will not object, and may contain a private understanding as to how interference complaints will be handled.

The *Notice* proposed to allow contour protection stations authorized under 47 C.F.R. Section 73.215 (the contour protection rule) to file a modification-of-license application to delete the contour protection designation, where the station in question had become fully spaced in compliance with 47 C.F.R. Section 73.207 (the minimum distance separation rule). The revised process would eliminate the need to file a construction permit application to make this change. The *Notice* indicated that the license applications would be treated on a first come / first served basis with respect to any other station's minor change application. The removal of the contour protection designation would occur upon grant of the license application.

23. *Comments.* AFCCE and DLR agree with the proposal as set forth in the *Notice*. GBI agrees with the spirit of the proposal, but questions how the first come / first served processing system will apply in the case of another station filing against the contour protected facility prior to receipt of the license application to delete the contour protection status.

24. *Discussion.* Applications to delete the contour protection designation will be processed on a first come / first served basis (based on the filing date) with respect to other minor change applications or other license applications to delete the contour protection designation, and as such will be processed no differently than minor change applications presently are.<sup>18</sup> We see little if any advantage to be gained by retaining the more burdensome and lengthy construction permit process for deletion of the contour protection designation for stations which become fully spaced under 47 C.F.R.

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<sup>18</sup> It must be noted that this procedure does not differ materially from the scenario where the contour protection station files FCC Form 301 to delete the contour protection designation. Three scenarios could develop between a license application to delete the contour protection designation (A) and a conflicting minor change application (B):

1. A files before B. The license application A will be processed first. If license application A is granted, the contour protection designation for station A is removed. B must then amend its queue application to protect the maximum facilities of station A's class, in accordance with 47 C.F.R. Sections 73.207 or 73.215.

2. A and B file the same day. These conflicting applications will be considered mutually exclusive. The applicants will be apprised of the conflict and afforded an opportunity to eliminate the conflict. If A and B cannot do so, the applications will be designated for a comparative hearing. If A wins, the contour protection designation for station A is dropped and B is dismissed. If B wins, the minor change application is granted, and station A must immediately resume operations with the facilities specified in its contour protection authorization.

3. B files before A. Minor change application B will be processed first. If minor change application B is granted, the license application A to delete contour protection status will be dismissed, and station A will have to resume operations in accordance with its contour protection authorization.

In response to the query posed by GBI, concerning the risks involved in a simultaneous power increase under the procedures described above for fully spaced stations with a request to delete the contour designation, the applicant could proceed as follows to minimize the risk. Station A could first file a modification-of-license application to request deletion of the contour protection designation. After that application has been granted, Station A could then file a second modification-of-license application to implement the desired power increase under the increased ERP procedures for fully spaced stations.

Section 73.207, and we will adopt the rule as proposed.<sup>19</sup> Applicants filing under this rule section will be expected to provide an analysis with the license application to demonstrate compliance with 47 C.F.R. Section 73.207.

25. **Use of Formerly Licensed Main Facilities As Auxiliary Facilities (AM, FM, and Television).** The *Notice* proposed to revise 47 C.F.R. Section 73.1675 to eliminate the requirement for a construction permit where a formerly licensed main facility is to be used as an auxiliary (backup) facility. The *Notice* also proposed to allow FM and TV auxiliary stations to increase or decrease ERP, and AM auxiliary stations to decrease ERP, in a modification-of-license application.<sup>20</sup> Where the frequency of the main station has changed, the proposed rule revisions would permit reactivation of the formerly licensed facilities (which were licensed to the old frequency) on the new frequency via this process.

26. *Comments and Discussion.* No dissenting comments were received from any party on this proposal. AFCCE, APTS, and DLR support the revisions to 47 C.F.R. Section 73.1675 proposed in the *Notice*. Crawford also supports the proposal, and asks that processing of auxiliary applications be expedited. Consequently, we will revise 47 C.F.R. Section 73.1675.<sup>21</sup> We decline to put processing of auxiliary applications on a "fast track" as compared to other types of applications because doing so would unfairly remove resources from the processing of other license applications. Instead, auxiliary license applications will be processed along with other types of license applications in order by the date filed, as nearly as practical. Applications submitted under this rule will be expected to contain an exhibit demonstrating that the specified contour for the auxiliary facility does not exceed the corresponding contour for the main facility (*see* 47 C.F.R. Section 73.1675(a)), and FM and TV applications proposing increases in ERP for the auxiliary facility must also include a showing of compliance with the Commission's radiofrequency radiation guidelines. We are also adding a definition of auxiliary facility to 47 C.F.R. Sections 73.14 for AM, 73.310(a) for FM, and 73.681 for TV.

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<sup>19</sup> As the language in the *Notice* indicated, the deletion of the FM contour protection designation would not become effective until the new license application was granted.

<sup>20</sup> FM and TV increases in ERP would require the inclusion of a radiofrequency radiation analysis with the Form 302-FM or Form 302-TV application for license to demonstrate compliance with the Commission's radiofrequency radiation exposure limit.

<sup>21</sup> The concerns raised by Region-20 Public Safety ("Region-20") about potential interference to land mobile operations from television stations operating on Channels 14 through 20 and Channel 69 (*see* paragraphs 29 and 31 below) will not affect the authorization of TV auxiliary facilities, since the distances to the contours for a given auxiliary facility will always be less than the corresponding contours of the main facility. *See* 47 C.F.R. Section 73.1675. In addition, where the Federal Aviation Administration ("FAA") has issued a determination limiting the ERP of the station to a specific value due to electromagnetic interference (EMI) concerns, the licensee or permittee must obtain a new written determination of no hazard from that agency for the proposed power level *prior* to implementing the power increase and filing the license application with the FCC. The FAA's determination must be supplied with the license application to cover the increased power. Failure to do so will be sufficient grounds for the Mass Media Bureau to require that station to reduce power to the value specified on its construction permit or license pursuant to 47 C.F.R. Section 73.1620(c) regardless of whether or not any actual interference has been reported to the FCC.

27. **Changes to the Vertically Polarized ERP for FM and Television Stations.** The *Notice* proposed to eliminate the requirement in 47 C.F.R. Section 73.1690(b)(2) that an application for construction permit be filed on FCC Form 301 for omnidirectional commercial FM stations, as well as omnidirectional commercial and nondirectional noncommercial educational TV stations, which propose to increase or decrease the amount of vertical polarization employed by the station, and where the horizontally polarized component was not being changed. Noncommercial educational FM stations not located within the distance separations specified in Table A of 47 C.F.R. Section 73.525 with respect to a television Channel 6 station could also employ this relaxed procedure to specify an increased or decreased vertically polarized ERP, not to exceed the maximum authorized ERP. In addition, the *Notice* proposed that those noncommercial educational stations within the distances specified in Table A of 47 C.F.R. Section 73.525 with respect to a Channel 6 television station would be permitted to reduce (but not increase) the vertically polarized component by this process, provided that the authorized horizontally polarized component was already greater than or equal to the authorized vertically polarized radiation component. A modification-of-license application on FCC Form 302-FM for the FM stations and Form 302-TV for the TV stations would be required, along with a showing to demonstrate compliance with the Commission's radiofrequency radiation requirements where the vertically polarized ERP was increased.

28. *Comments.* APTS and DLR agree with the proposed rule as set forth in the *Notice*. AFCCE also concurs, subject to the proviso that those FM educational stations which are collocated with television Channel 6 TV stations cannot change their antenna under the modification of license process, as a precaution to ensure that the vertical radiation characteristic of the FM educational station's antenna is properly coordinated with the vertical radiation characteristic of the affected Channel 6 station's antenna (see 47 C.F.R. Section 73.525(d)(2)). NAB also emphasizes that the Commission must take "special care" to protect viewers' reception of Channel 6 television from interference caused by noncommercial educational FM stations. However, NAB finds nothing in the present proposal which would potentially create additional interference to Channel 6 reception. Osenkowsky, on the other hand, would allow all licensees to choose polarization at will.<sup>22</sup>

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<sup>22</sup> Osenkowsky questions why we are concerned with vertical polarization at all, suggesting that we simply license one ERP and let the broadcaster choose whatever polarization would best serve the station's audience. Both horizontal and vertical polarization figures are necessary for a variety of reasons. Horizontal polarization is standard for both the FM and TV services and is required for all FM commercial and TV stations, with the vertically polarized component permitted should the licensee desire to employ it. However, propagation of the vertically polarized component differs from that of the horizontally polarized component in that attenuation of the vertical polarization is greater. The Commission declined to adopt separate propagation curves for the vertically polarized component. See *Amendment of the Commission's Rules*, 8 FCC Rcd 4166 (1993); *City College of New York*, 47 R.R. 2d 1095 (1980); *Use of Horizontal or Vertical Polarization for FM Stations*, 16 R.R. 1563 (1958). In 1985 the Commission recognized that the vertical polarization could be employed to minimize interference from noncommercial educational FM stations to horizontally polarized Channel 6 television reception. In that context, it became important to know the actual horizontal and vertical ERP values for the FM noncommercial educational station in order to predict the extent to which interference could be caused to Channel 6 reception. *Memorandum Opinion and Order*, Docket 20735, 58 R.R. 2d 629, 50 Fed. Reg. 27954 (1985). Moreover, as discussed in Paragraph 29, the vertically polarized component for TV stations can adversely affect land mobile operations. Also, the addition of a vertically polarized ERP to a horizontally polarized ERP requires additional transmitter power, and also increases the predicted levels of radiofrequency radiation. Consequently, we will not adopt Osenkowsky's suggestion that we use a single ERP for FM and TV stations.

29. The Region-20 Public Safety Review Committee ("Region-20") filed comments against permitting TV stations to increase vertically polarized ERP via the modification of license process. Region-20 represents land mobile users whom it contends could receive objectionable interference should TV stations increase their vertically polarized ERP in the manner set forth in the *Notice*. Region-20 notes that the Commission previously addressed the issue of cross-service interference to land mobile operations from UHF television stations in the context of *Resolution of Interference Between UHF Channels 14 and 69 and Adjacent-channel Land Mobile Operations*, Docket 87-465, 6 FCC Rcd 5148, 56 Fed. Reg. 46729 (1991). Were television stations permitted to increase vertically polarized ERP to the maximum permitted, according to Region-20, severe interference could be caused to land mobile operations (which also employ vertical polarization).<sup>23</sup> Permitting such changes as increased ERP via a modification-of-license application would, according to Region-20, eliminate the "right" of land mobile licensees to file comments in opposition to any proposed TV vertically polarized ERP changes. Region 20 suggests that the Commission continue to require a construction permit application on FCC Form 301 for those TV stations on channels which could potentially affect land mobile operations (Channels 14 through 20 and Channel 69).<sup>24</sup>

30. *Discussion*. For FM stations, we will adopt revisions to 47 C.F.R. Section 73.1690 to permit eligible FM stations to increase or decrease their vertically polarized ERP in a Form 302-FM application for license. However, eligible noncommercial educational FM stations located within the distances specified in Table A of 47 C.F.R. Section 73.525 with respect to a Channel 6 television station which seeks to use the streamlined procedures will be limited to reductions in ERP only.<sup>25</sup> By excluding from the one-step licensing process increases in ERP in either polarization for noncommercial educational stations located near a Channel 6 station, we avoid any worsening of existing interference caused by these stations to viewers' reception of television Channel 6.<sup>26</sup>

31. With respect to television stations, we find meritorious and will adopt Region-20's recommendation to exclude those television stations authorized on Channels 14 and Channel 69 from

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<sup>23</sup> Region-20 characterizes the addition of vertical polarization as a "major" action, and concludes that the Commission does not have any authority to waive the requirement for a construction permit for TV stations adding vertical polarization under the *Telecommunications Act of 1996, supra*. However, 47 C.F.R. Section 73.3572(a) does not include the addition of vertical polarization as an element which is defined as a major change. Consequently, an application to accomplish this result is defined as a minor change, and is eligible for conversion to a one-step process under the *Telecommunications Act of 1996*.

<sup>24</sup> In its comments in this proceeding, Region-20 also asks the Commission to address the general issue of interference to land mobile operations, based on the similarity to issues raised in the Commission's blanketing interference proceeding, MM Docket 96-62. This matter is outside the scope of the present proceeding.

<sup>25</sup> For the reasons explained in Footnote 9, noncommercial educational FM stations which employ separate horizontal and vertical antennas mounted at different levels remain ineligible to increase or decrease the vertical ERP from its authorized value without a construction permit.

<sup>26</sup> Even where increased ERP in one polarization could not adversely affect another FM station (e.g., where a horizontally polarized only station adds an equal vertically polarized ERP), the increased ERP can still adversely affect reception of television Channel 6 (as defined by the procedures in 47 C.F.R. Section 73.525). This necessitates a new interference analysis pursuant to 47 C.F.R. Section 73.525 in a construction permit application on FCC Form 340.

the simplified procedure set forth in the *Notice*. In particular, *Resolution of Interference Between UHF Channels 14 and 69 and Adjacent-channel Land Mobile Operations*, 6 FCC Rcd at 5153, stated that television stations on Channels 14 and 69

must take steps before construction to identify potential cases of interference caused by out-of-band emissions, land mobile receiver desensitization or intermodulation. They must install necessary filters, take other precautions and submit evidence that no interference is being caused before they will be permitted to transmit programming on the new facilities. Thus, they will not be allowed to commence automatic program tests pursuant to Section 73.1620 or to commence operation with the modified facilities pursuant to Section 73.1615. The responsibility of a new or modified TV channel 14 or 69 station to correct interference to an existing land mobile facility [has been] incorporated into the Commission's rules [as 47 C.F.R. Section 73.687(e)].

Accordingly, we will exclude those television stations on Channels 14 and 69 from the simplified procedures proposed in the *Notice* for increases to the vertically polarized ERP, and continue to require those television stations to apply for such changes via a construction permit application on FCC Form 301 or FCC Form 340.

32. Similarly, since the spectrum used by television Channels 15 to 20 is also shared with land mobile users in particular urban areas, we believe that caution is warranted to prevent the creation of new interference to land mobile users on these frequencies in these areas. As we have not to date conducted an inquiry in a rulemaking proceeding as to the potential for interference to land mobile operations from television Channels 15 to 21, we will not now revise 47 C.F.R. Section 73.687(e) to incorporate specific procedures for these television stations. Nevertheless, because of the potential for disruptive interference to land mobile operations, the large expense attendant in replacing a television antenna, the potentially larger costs of resolving interference created by the changed television facilities, and the lack of any additional information addressing the potential for such interference, we adopt in part Region-20's suggestion to continue to require the filing of a construction permit application for proposed increases to the vertical ERP for television stations on these channels. Specifically, with regard to television applicants for changes on Channels 15 to 21, we will require a construction permit for television stations on Channels 15 through 21 where the television station will be located within 341 km (212 miles) of the reference coordinates of a land mobile operation operating on the same channel, or within 225 km (140 miles) from the reference coordinates of a first-adjacent channel land mobile operation. These distances correspond to the separations presently in use for creating new TV allotments on these channels while protecting land mobile operations.<sup>27</sup> The locations of the urban areas and corresponding reference coordinates which must be protected are listed in 47 C.F.R. Section 74.709(a) and (b). We believe that the continuation of the existing construction permit process for television stations near a land mobile operation generally will bring to light likely cross-service interference problems before they exist in fact. Accordingly, we will revise the language of 47 C.F.R. Section 73.1690 to address these matters.

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<sup>27</sup> See *Second Further Notice of Proposed Rulemaking, Advanced Television Systems*, 57 Fed. Reg. 38652, 7 FCC Rcd 5376, 5384 (1992) at Footnote 53.

33. **Changes in Height of Antenna Radiation Center (FM and TV).** Presently, 47 C.F.R. Section 73.1690(c)(1) limits FM and TV stations from mounting their antenna radiation centers more than two meters above or below the authorized antenna radiation center height without first obtaining a construction permit. The *Notice* proposed to maintain the permitted variance without the requirement for a construction permit at two meters above the authorized antenna radiation center height, but expand it to permit installation up to four meters below the authorized antenna radiation center height. This change would provide permittees and licensees additional flexibility in mounting the antenna, which can be affected by the location of guy wires, cross braces, adjacent antennas, etc. It would also eliminate the need in many cases for a construction permit application for a minimal change in antenna height, and without a noticeable change in coverage. The *Notice* indicated that we would retain the authorized values, not the actual values, on the license authorization.

34. *Comments.* APTS supports the proposed rule change. DLR, Gallagher, Crawford, and Mullaney also support the proposed rule revision, but would permit unlimited decreases in the antenna radiation center height by this procedure, provided that the necessary signal strength is maintained over the community of license. Similarly, Crawford, CGC, and Charles I. Gallagher, P.E. ("Gallagher") would extend the proposed procedure to permit increases or decreases in the height of the antenna radiation center as well as ERP, provided that the new combination of ERP and antenna height above average terrain did not exceed the maximum permitted for the station's class. Mullaney also questions why the license application would be issued with the authorized antenna height values and not the actually constructed values.

35. *Discussion.* As we have received no objection to expanding the permitted range of variance from the construction permit values from two meters variance from the authorized value to two meters up or four meters down, we will adopt the proposed revision to 47 C.F.R. Section 73.1690(c)(1).<sup>28</sup> However, we decline to expand the rule to incorporate the unlimited changes in height of antenna radiation center (and thus HAAT) advocated by several commenters. While we realize that the consulting engineers who filed these comments are cognizant of the relationship between changes in ERP and the height of the antenna radiation center (and thus HAAT), many licensees and permittees do not use consulting services and may not be so well informed. Thus, a station might inadvertently place its antenna some meters higher on the tower, but not lower its ERP to conform the ERP / HAAT combination to meet the maximum parameters specified in 47 C.F.R. Section 73.211(b) for an FM station or 47 C.F.R. Section 73.614 for television stations. This could result in interference caused to other stations. On the other hand, significant reductions in the height of the antenna radiation center could create a radiofrequency radiation hazard which did not exist for the authorized facility, as well as jeopardize coverage of the community of license.<sup>29</sup> These matters could prove very costly to correct, with the applicant paying twice for construction -- once for the

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<sup>28</sup> Applicants should be aware that a redetermination of the levels of radiofrequency radiation produced may be required if a reduction in the height of the antenna radiation center is made, particularly where the antenna was initially authorized very close to ground level or a rooftop.

<sup>29</sup> Also, reductions in antenna radiation center height beyond the tolerance level would likely result in an increase in the number of informal objections received alleging shadowing or lack of line-of-sight to the community of license. This would slow processing of these applications since additional processing would be needed, and result

deficient construction and once to correct it.<sup>30</sup> We also believe that unlimited changes in the height of antenna radiation center would invite abuse by permitting applicants to seek authorizations for facilities which will not be built to the authorized values. None of these outcomes are easily resolved, and thus they are inimical to our intent in this rulemaking of specifying ways to streamline processing of certain applications without causing undue burden on applicants or the Commission. Consequently, we will not adopt the commenters' suggestions that we allow unlimited changes in the antenna radiation center height.

36. Regarding Mullaney's question concerning what values are to be placed on the license authorization, the *Notice* at Paragraph 17 stated that the reason behind the proposal to retain the authorized values on the license application, and not specify the actual values for the antenna radiation center heights, was to prevent "creep" of the authorized antenna radiation height. We remain concerned that a licensee may employ successive modification-of-license applications to achieve a result which would otherwise require consideration of additional factors in a construction permit application.<sup>31</sup> Further, specifying the actual values on the granted license could result, in some instances, in a corresponding reduction in station classification.<sup>32</sup> It could also require a reduction in power to maintain station class where a two meter increase in antenna radiation center height causes the ERP / HAAT combination to exceed the maximum permitted values for the station class.<sup>33</sup> These difficulties are avoided by retaining the authorized values on the license. Thus, while the actually constructed values must be specified on the license application, we will retain the authorized values on the license and in the Commission's engineering database. Those licensed values will be used for the prediction of contours and coverage.

37. **Main Studio Waiver Requests (AM, FM, and TV).** The *Notice* proposed to eliminate the requirement for an application on FCC Form 301 for commercial applicants or Form 340 for noncommercial educational applicants seeking a waiver of the main studio rule (47 C.F.R. Section 73.1125). Instead, the *Notice* proposed to allow applicants to file these requests in a letter. The *Notice* proposed retention of the filing fee applicable to commercial applications of this type, whereas

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<sup>30</sup> In contrast, a correction in ERP generally can be accomplished by making adjustments to the transmitter at little or no cost.

<sup>31</sup> For example, a licensee may propose to reduce the height of the antenna radiation center by four meters, under our proposed procedure, in a modification-of-license application. Once that application was approved, the licensee could again request another four meter reduction in a modification-of-license application. This process could be repeated several times.

<sup>32</sup> For example, consider a Class B FM station operating with 25 kW ERP at a HAAT of 103 meters. A four meter reduction in the antenna radiation center height would produce a corresponding decrease in the HAAT to 99 meters. Because 25 kW ERP at 99 meters HAAT is classified as a Class B1 station, grant of a license with the actual facilities would also have the effect of downgrading the station and allotment to Class B1. See *Lower Classification of an FM Allotment*, MM Docket 88-118, 4 FCC Rcd 2413, 54. Fed. Reg. 11953 (1989).

<sup>33</sup> Again using a Class B FM station as an example, assume that the station was authorized for operation with maximum Class B facilities of 50 kW ERP at 150 meters HAAT. A two meter increase in the height of the antenna radiation center would cause the HAAT to increase to 152 meters, thus exceeding maximum permitted Class B facilities. Thus, the station would be compelled to reduce ERP to compensate for this minimal change.

noncommercial educational applicants would continue to be exempt from the filing fee requirement.<sup>34</sup> This process would separate the main studio waiver requests, which generally do not require engineering analysis, from the minor change applications which do require technical review.

38. *Comments.* DLR, APTS, AFCCE, and Mullaney's comments indicate agreement with the revisions to the main studio rule as set forth in the *Notice*. Osenkowsky, on the other hand, argues that in this era where licensees own multiple stations, the main studio concept is outdated and should be revised to allow any location to serve as a main studio location. AFCCE and GBI also ask the Commission to clarify the procedure for the processing of requests which employ alternate contour prediction methods to demonstrate compliance with the main studio rule.

39. *Discussion.* An overall review of the main studio rule, as suggested by Osenkowsky, falls outside the scope of this rulemaking proceeding, which is primarily concerned with simplifying existing procedures and reconciling broadcast rules with existing policy. Therefore, we will adopt the changes to 47 C.F.R. Section 73.1125 as proposed in the *Notice* and permit requests for variance of the main studio location to be filed by letter, together with the applicable fee and fee processing form (FCC Form 159). With respect to supplemental showings for FM stations, which employ alternate contour prediction methods and are filed to obtain Commission concurrence that a particular location complies with the main studio rule, we cover that issue in Paragraphs 68 through 72 below. We note, however, that a *Notice of Proposed Rulemaking*, in MM Docket 97-137, FCC 97-182, 12 FCC Rcd ----, was released on May 28, 1997 to examine what additional changes should be made to the main studio rules.

40. **Commercial Stations Changing to Noncommercial Educational Status (AM, FM, and TV).** The *Notice* proposed to delete the two-step requirement that AM or FM commercial stations changing to noncommercial educational status use a construction permit application for the change, followed by a covering license application. Instead, these licensees would be permitted to file for the change on a modification of license application, with an appropriate exhibit containing the information which is required in Sections II and IV of FCC Form 340. The change in the licensed status would occur upon grant of the license application, and the station license would be reissued under the license application's file number. Conversely, the *Notice's* proposed 47 C.F.R. Section 73.1690(c)(8) would permit noncommercial educational FM stations in the commercial portion of the FM band, noncommercial AM radio stations, or TV stations, to use this process to become licensed as commercial stations.

41. *Comments and Discussion.* Osenkowsky, AFCCE, and DLR all support the revisions as proposed in the *Notice*, and no dissenting comments were received. However, we wish to emphasize that FM or TV licensees operating on a channel specifically reserved for noncommercial educational use in the Table of Allotments will be unable to change to commercial status via this

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<sup>34</sup> Effective September 12, 1996, this filing fee was increased to \$690.00. See *Amendment of the Schedule of Application Fees Set Forth in Sections 1.1102 through 1.1107*, Gen. Docket 86-285, 11 FCC Rcd 10231, 61 Fed. Reg. 41967 (August 13, 1996), released August 7, 1996.

process.<sup>35</sup> This represents an allotment issue, not a licensing issue, and must be dealt with in the context of a rulemaking proceeding to change the designation of the allotment. We will revise the final rule 47 C.F.R. Section 73.1690(c)(9) accordingly.<sup>36</sup>

42. **Additional Clarifications to 47 C.F.R. Sections 73.1620 and 73.1690.** These two rule sections deal with program test authority and modification of transmission system requirements, respectively. In addition to incorporating the substantive rule changes proposed in the *Notice* for these two rule sections, the *Notice* proposed to rewrite existing portions of these sections to simplify and clarify them. We noted that these two rules have been the sources of repeated requests for interpretation. While the proposed rule changes lengthen the rule, we indicated that the revisions would better serve permittees and licensees.

43. **Comments and Discussion.** CGC's and Mullaney's comments indicate that the proposed revision to 47 C.F.R. Section 73.1690(b)(1), which prohibits the construction of a new tower for broadcast purposes, would also appear to prohibit the replacement of a tower structure with another tower structure of the same height, coordinates, and site elevation. However, we clarify that this rule section would not apply to a replacement tower structure under these circumstances, and revise 47 C.F.R. Section 73.1690(b)(1) accordingly. On the other hand, if the coordinates, structure height, or site elevation change, the prohibition would apply, and a construction permit would be required prior to tower replacement.

44. CGC and Mullaney also state that the proposed revision to 47 C.F.R. Section 73.1690(b)(2) could be construed to prohibit a licensee from changing an antenna from one tower to another tower located at the same coordinates without a construction permit.<sup>37</sup> For a nondirectional FM or TV station, permitting such change without the filing of a construction permit application would not appear to pose a problem provided that the antenna height above average terrain (HAAT) remains unchanged (and assuming that the new tower was properly registered with the Commission). We will therefore permit this change through a modification-of-license application, and will revise 47 C.F.R. Section 73.1690(b)(2) accordingly. However, we will not extend this procedure to a directional FM or TV station, since antenna placement on the tower, as well as the orientations of the tower faces themselves, are critical to achieving the measured directional pattern, and would require a revised pattern measurement and an installation which differs from the old antenna configuration. In such a case, we will continue to require a construction permit prior to making the change.

45. AFCCE suggests that a provision be added to 47 C.F.R. Section 73.1690(b) to require a construction permit application for changes to the antenna system of a noncommercial educational FM station if it is collocated with a television Channel 6 station. Although not stated in AFCCE's comments, it is clear that this provision is suggested out of concern that interference will be caused to Channel 6 reception. However, as we stated in Paragraphs 11 and 30 above, we have determined that

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<sup>35</sup> The Tables of Allotments are contained in 47 C.F.R. Section 73.202(b) for FM commercial radio and 47 C.F.R. Section 73.606(b) for television.

<sup>36</sup> The *Notice's* 47 C.F.R. Section 73.1690(c)(8) was changed to 73.1690(c)(9) to accommodate additional rule changes adopted by this *Order*.

<sup>37</sup> CGC acknowledges that present FCC procedures do not permit such a change without a construction permit.

most FM noncommercial educational applicants may reduce both the horizontal and vertical ERP from the authorized values without the need for a construction permit. This will pose no increased risk of interference to Channel 6 reception. Moreover, as we noted in Paragraph 21 above, only a few FM educational stations have been authorized to be collocated with a Channel 6 station pursuant to 47 C.F.R. Section 73.525(d)(2), where the vertical radiation characteristic of the antenna is important. Existing noncommercial educational stations collocated with Channel 6 television stations are well aware that they are required to comply with the interference-limiting provisions of 47 C.F.R. Section 73.525. Indeed, in most instances of collocated educational FM and TV Channel 6 television stations, the parties have entered into a private agreement concerning antenna requirements. Therefore, we do not believe that adoption of a specific rule section on this issue would enhance compliance with 47 C.F.R. Section 73.525.

46. No other comments were submitted regarding the proposed rule section changes, except as covered in other sections of this *Order*.

47. **Continuation of Protection to AM Stations.** The *Notice* proposed to codify into a new rule section (47 C.F.R. Section 73.1692) our present policies with regard to protecting AM stations from other broadcast stations locating antennas on the same tower or constructing a tower nearby. To date, these policies have taken the form of special conditions applied to broadcast station construction permits. Because many of the changes adopted in this *Order* would eliminate the need for a construction permit prior to implementation of the change, we are concerned that AM stations would lose necessary protection, with possible adverse consequences for the AM radio service.

48. *Comments.* Generally, commenters agreed with the Commission's proposals regarding AM protection, but concluded that the proposal did not go far enough to protect AM stations. AFCCE states that the same policy for broadcast stations should also be applied to towers for other services (e.g., cellular and personal communications services (PCS), specialized mobile radio (SMR)), indicating that the present rule governing land mobile towers (*see* 47 C.F.R. Section 22.371) differs from the rules proposed in the *Notice*. Crawford, Mullaney, and DLR agree with this assessment. NAB "enthusiastically supports" the proposal to codify the protection policy, but would add an explicit provision to state that the broadcast licensee or permittee is responsible for all costs incurred in determining the impact of a new or modified broadcast facility on an AM station. Mullaney, DLR, and Osenkowsky each suggest instances in which AM proof of performance requirements could be reduced; for example, exempting proofs related to the installation of an antenna 20 feet or less above an existing building, or where an FM antenna is replaced with another antenna of approximately the same length. Osenkowsky also states that AM proof-of-performance measurements taken in different seasons may skew a comparison of the results. Osenkowsky suggests that the Commission should consider waivers of the protection requirements.

49. *Discussion.* Our intent in this rulemaking proceeding was simply to insure that AM stations continue to be afforded the protection from other broadcast installations which they have received in the past, despite the elimination of the requirement for a construction permit for certain types of changes. We therefore will adopt a new rule (47 C.F.R. Section 73.1692), so as to preclude

any lapse in protection.<sup>38</sup> We recognize, however, that the points made by the commenters about inconsistent protection to AM radio stations by different services and also the burdens on AM licensees of unnecessary performance measurements may have merit. Issues relating to directional AM radio station signal measurements are being considered in another rulemaking proceeding (*see Notice of Inquiry* in MM Docket 93-177, 8 FCC Rcd 4345 (1993)).

50. With respect to the costs-burden issue raised by NAB, we agree that it generally remains the responsibility of the licensee or permittee making the changes to a broadcast facility to cover the costs associated with determining the impact of the changes to an AM station. However, in some instances the AM station is already operating at variance with its authorization prior to the arrival of the additional broadcast station. In that case, we do not believe that it would be appropriate for the broadcast station to have to pay to correct the existing AM variances. For this reason, we will not include NAB's suggested all-inclusive language regarding financial responsibility into the new rule section.

51. **Clarification to Channel 6 Television - FM Noncommercial Educational Rules in 47 C.F.R. Section 73.525 and 47 C.F.R. Section 73.599.** The *Notice* proposed to add a new rule section to eliminate an anomaly in the present rule 47 C.F.R. Section 73.525, under which it is not clear how an FM noncommercial educational station within the 90 dBu contour of a Channel 6 television station is to protect that TV station from interference. The proposed rule would assume that the Channel 6 field strength remains constant within the 90 dBu contour, and the interfering contour would then be based on the ratio corresponding to the 90 dBu signal level (*see* Figure 1 of 47 C.F.R. § 73.599). This procedure was originally proposed in Docket 20735 in 1982, but was not incorporated into the final rule, 47 C.F.R. Section 73.525.<sup>39</sup> Nevertheless, as we stated in the *Notice*, it has been our policy to apply this procedure in the small number of cases in which the issue has arisen.

52. *Comments and Discussion.* NAB's comments conclude that the proposed rule section would not adversely impact reception of television Channel 6. DLR agrees.<sup>40</sup> AFCCE also supports the proposed rule change. No dissenting comments were received. Accordingly, we will adopt the revision to 47 C.F.R. Section 73.525 as proposed in the *Notice*.

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<sup>38</sup> FM and TV translators, and low power TV stations, also will be subject to 47 C.F.R. Section 73.1692. *See* 47 C.F.R. Sections 74.780 and 74.1237(e) as adopted herein.

<sup>39</sup> *Second Further Notice of Proposed Rulemaking*, BC Docket 20735, FCC 82-225, 47 Fed. Reg. 24144 (1982) at Paragraphs 29 and 30.

<sup>40</sup> DLR also suggests that 47 C.F.R. Section 73.525(e)(4) be revised to refer to both "city" and "Census Designated Place (CDP)". This would, according to DLR, provide a greater degree of protection from interference created by noncommercial educational FM stations to reception of television Channel 6 in heavily populated CDPs. However, because this issue could materially affect the existing relationship between noncommercial educational FM stations and television Channel 6 stations, we believe that this issue must be raised in the context of a rulemaking proceeding specifically aimed at addressing this matter. We do not believe that the current proceeding contains a sufficiently complete record for us to properly address this matter. Consequently, we will not decide this issue in the present *Order*.