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

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

FIRST REPORT AND ORDER, FURTHER NOTICE OF PROPOSED RULE MAKING, AND NOTICE OF INQUIRY

Adopted: October 21, 2015 **Released: October 23, 2015**

Comment Date: (60 days after date of publication in the Federal Register)
Reply Comment Date: (90 days after date of publication in the Federal Register)

By the Commission: Chairman Wheeler and Commissioners Clyburn, Pai, and O'Rielly issuing separate statements.

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Heading Paragraph #

I. INTRODUCTION

1. In this *First Report and Order* we adopt several proposals to assist AM broadcasters to better serve the public, thereby advancing the Commission's fundamental goals of localism, competition, and diversity in broadcast media. Specifically, we adopt the six proposals set forth in the *NPRM*, some with modifications.[1] In the *Further Notice of Proposed Rule Making* ("*FNPRM*"), we set out further proposals, suggested by commenters in this proceeding, that we believe will further enhance the viability of the AM broadcast service. We also release a *Notice of Inquiry* ("*NOI*"), in which we pose questions regarding further utilization of the AM Expanded Band, as proposed by certain commenters.

2. Given other auction commitments, however, it is not possible at this time to open an immediate exclusive application window for AM stations to acquire a limited-purpose fill-in FM translator station. Accordingly, we announce that we will promptly open a filing opportunity for the acquisition of, and modification and/or relocation of, existing FM translator stations to be used to rebroadcast AM stations, as a means of providing short-term relief to AM broadcasters desiring it. To the extent that an AM broadcaster that has not applied in a modification window wishes to apply for a new commercial FM fill-in translator as proposed in the *NPRM*, we will afford that filing opportunity in 2017.

II. BACKGROUND

3. AM radio has traditionally served as a vital source of news and information, as well as a critical lifeline in times of emergencies and man-made or natural disasters. Commenters in response to the NPRM highlighted merits of the AM service.[2] AM listenership has nevertheless declined with the rise of newer, higher fidelity media alternatives, as well as the rise in environmental noise and interference from man-made sources. While the Commission has taken several steps to assist AM broadcasters over the last decade, the last comprehensive review of the AM service was undertaken over 25 years ago. Given the erosion in AM listenership and the above-noted technical challenges to our oldest broadcast service, the Commission initiated this proceeding to propose rule changes designed to improve the AM

[1] *Revitalization of the AM Radio Service*, Notice of Proposed Rule Making, 28 FCC Rcd 15221 (2013) ("*NPRM*").

[2] *See*, *e.g.*, Broadcast Warning Working Group ("BWWG") Comments at 2 ("Though AM is often called 'low tech' by proponents of broadband and digital technologies, it is important to remember that when we most need information that is critical to our survival, the simplicity and reliability of AM radio are major assets and enhance emergency resources."); National Association of Broadcasters ("NAB") Comments at 2-3 ("AM radio remains a critical source for news, talk, sports, foreign-language and religious programming. Many AM stations provide unique, niche formats as a means of distinguishing themselves from competitors. The overwhelming majority of all-news/talk and all-sports programming is found on the AM band . . . and AM broadcasting is often the only radio source for listeners living in and traveling through rural areas.").

service. The Commission also solicited suggestions of other measures that should be taken to revitalize the AM service and assist the approximately 4,700 licensed AM stations in serving their listeners.[3]

4. Most commenters supported the proposals set forth in the *NPRM*; many urged us to undertake additional efforts. There were several ideas put forward by commenters on which we can act in short order. Some proposals are clearly beyond the Commission's purview, and are therefore not addressed here.[4] Other proposals, such as those calling for a complete revamp of the AM rules, may have merit but require further work and study before they can be implemented.

5. There are, however, several commenters who suggest that the end result of any proceeding involving the AM service must be, in the terms of the Catholic Radio Association, "not to revitalize it, but to transition it."[5] Specifically, CRA and others believe that the medium wave AM band is too beset by environmental noise and other forms of interference to remain a viable communications medium, and instead advocate that we open up the 76-88 MHz band (VHF television Channels 5 and 6) to relocate current AM stations to that band to operate as FM broadcasters.[6] Despite the calls for this solution, we cannot consider it at this time. First, as we announced in the Further Notice of Proposed Rulemaking and Report and Order in the *2014 Quadrennial Review* proceeding,[7] migrating AM services to VHF Channels 5 and 6 has the potential to interfere with our implementation of the Congressional directive to reassign television stations following the upcoming Incentive Auction process.[8] Second, as several commenters note,[9] AM radio has distinct advantages over other media during times of disaster and emergency, including the wide area coverage of some stations.[10]

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[3] *Broadcast Station Totals as of September 30, 2015,* News Release (Oct. 9, 2015), http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db1009/DOC-335798A1.pdf.

[4] For example, suggestions that AM needs better and more local content. We can generally only assist authorizing the technical facilities necessary for AM broadcasters to serve their communities, not mandate the content they offer. *See*, *e.g*., Christopher Gay ("Gay") Comments at 1-2; DAIJ Media ("DAIJ") Comments at 1-2, 10; Joseph E. Talbot ("Talbot") Comments at 2; Les Rayburn Comments; Steve O Comments. *See also* 47 U.S.C. § 326 ("Nothing in this Act shall be construed to give the Commission the power of censorship over . . . any radio station, and no regulation or condition shall be promulgated or fixed by the Commission which shall interfere with the right of free speech by radio communication.").

[5] Catholic Radio Association ("CRA") Comments at 7.

[6] *See*, *e.g*., Minority Media and Telecommunications Council (now the Multicultural Media, Telecom and Internet Council) ("MMTC") Comments at 18-20; Broadcast Maximization Committee ("BMC") Comments at 1-7; AM Station Owners ("AMO") Joint Comments at 6; Doug Wilber ("Wilber") Comments; George Arroyo ("Arroyo") Comments at 1-2; Grant County Broadcasters ("GCB") Comments at 3; N. Al Sergi ("Sergi") Comments at 1; National Alliance of AM Broadcasters ("NAAMB") Comments at 10-11; Scott Todd ("Todd") Comments at 1-2; S-R Broadcasting ("SRB") Comments at 1; Barry Magrill Comments at 2; .

[7] *2014 Quadrennial Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996*, Further Notice of Proposed Rulemaking and Report and Order, 29 FCC Rcd 4371 (2013) ("*2014 Quadrennial FNPRM/R&O*").

[8] *Id*. at 4516.

[9] *See* Missouri Broadcasters Association ("MBA") Comments at 1-3; Named State Broadcasters Associations ("NSBA") Comments at 1-3; First Nickolaus Leggett Comments ("First Leggett Comments") at 2; Robert Meuser ("Meuser") Comments at 5.

[10] *See*, *e.g.*, BWWG Comments at 2 ("*After Action Reports from recent major disasters show the family car radio with its dashboard AM radio and/or a solar or magneto powered emergency radio receiver is often the only or the major source of emergency public information for those at risk*.") (emphasis in original); NAB Comments at 3 ("In many parts of the [Hurricane Sandy] storm zone, AM radio was the only service available to connect the public with first responders.").

6. In this document, we first address the six proposals set forth in the *NPRM*. Following that, in the *FNPRM*, we will list six commenter-generated proposals, seeking further comment on how they might best be implemented. We also put forth our own proposal regarding whether to modify the rule regarding siting of fill-in FM translators used to rebroadcast AM stations. We further initiate the NOI, in which we seek input regarding how best to continue use of the expanded AM band, 1605-1705 kHz, including the types of stations that should operate there and the technical parameters under which they should operate. Additionally, in the NOI we seek comment on whether, and in what ways, we should relax our rules and policies on maintenance and siting of AM main studios.

III. FIRST REPORT AND ORDER

A. FM TRANSLATOR FILING WINDOWS EXCLUSIVELY FOR AM LICENSEES AND PERMITTEES

7. *Background*. In the *NPRM*, the Commission recognized the successful deployment of cross-service FM translators by AM stations since the Commission's 2009 authorization to use FM translator stations to rebroadcast the signal of a primary AM station on an FM frequency.[11] Over 900 AM stations are currently re-broadcasting their signals over FM translator stations. Many of these are translator stations acquired or leased by the AM station owners from third parties, who in some cases have been required to relocate the translator in order to comply with the current AM coverage rule. As discussed in the *NPRM*, in many cases, such a move constitutes a major change to the FM translator's facilities under our Rules.[12] Because such major changes may be made only during specific announced filing windows,[13] AM stations acquiring such cross-service translators must either file multiple minor modification applications, "hopping" the translator incrementally until it can be located as a fill-in translator – a practice disfavored and typically denied by the staff – or must seek a waiver, known as a "Mattoon waiver," allowing a major-change relocation of the FM translator without waiting for a filing window.[14]

8. Some commenters whose AM stations have acquired FM translators for fill-in signal coverage state that they have enjoyed significant improvements in service.[15] Other commenters have expressed a desire to use such translators for fill-in service, or to provide some nighttime service

[11] Use of FM translators is permitted on a "fill-in" basis, that is, the cross-service FM translator may not be used to extend the AM station's coverage: the 60 dBμ contour of any such translator station must be contained within the lesser of (a) the 2 millivolts per meter (mV/m) daytime contour of the AM station, or (b) a 25-mile radius centered at the AM transmitter site. *Amendment of Service and Eligibility Rules for FM Broadcast Translator Stations*, Report and Order, 24 FCC Rcd 9642, 9658 (2009) ("*2009 Translator Order*"). *See* 47 C.F.R. § 74.1201(g).

[12] A major change is defined as proposing a translator frequency more than three channels from its currently authorized transmitting frequency that is also not an intermediate frequency, or a physical move to a location at which the translator's proposed 1 mV/m contour does not overlap with its currently authorized 1 mV/m contour. 47 C.F.R. § 74.1233(a)(1). In addition, any change in frequency relocating an unbuilt station from the non-reserved band to the reserved band (band reserved for noncommercial educational stations), or vice-versa, is considered major.

[13] *See* 47 C.F.R. § 74.1233(d)(2)(i).

[14] *John F. Garziglia, Esq.*, Letter, 26 FCC Rcd 12685 (MB 2011) ("*Mattoon Waiver Ruling*"), as described in para. 6 (granting waiver of major change rule, 47 C.F.R. § 74.1233(a)(1)).

[15] *See*, *e.g.*, Edward Henson ("Henson") Comments; Mark D. Humphrey ("Humphrey") Comments at 2-3; Peter E. Schartel ("Schartel") Comments at 1; Clear Channel Communications, Inc. Comments at 3. During the pendency of this proceeding, Clear Channel Communications, Inc., changed its name to iHeart Media + Entertainment, Inc. ("IHM").

otherwise not available to them due to the need to protect other stations.[16] As noted in the *NPRM*, however, the minor change contour overlap requirements for relocating FM translators, coupled with the fill-in coverage area restrictions on locating FM translators for use by AM broadcasters, limit the use of currently available FM translators for individual AM licensees.[17]

9. The Commission therefore proposed in the *NPRM* to open a one-time filing window, open to AM licensees and permittees only, to apply for and receive authorizations for one new FM translator station per AM station, for the sole and limited purpose of re-broadcasting the AM signal to provide fill-in and/or nighttime service. The Commission further proposed that such translator stations must strictly comply with the existing fill-in coverage area technical restrictions on FM translators re-broadcasting AM stations, that any translator acquired through this one-time window could be used only to re-broadcast the signal of the AM station acquiring it, and that such a translator could not be assigned or transferred except in conjunction with the commonly owned AM primary station.[18] The Commission sought comment on this proposal and its limitations.

10. Commenters believe that an exclusive window for AM permittees and licensees would provide the most immediate relief to those broadcasters,[19] and would "greatly benefit the AM service and its ability to serve the public."[20] IHM notes the "positive impact" a cross-service translator has on AM listening, as well as the ability to introduce listeners – especially younger listeners – to the AM format.[21] Additionally, IHM and other commenters discuss the fact that translators offer some AM stations the ability to provide more consistent and continuous service throughout their service areas.[22] Small market and smaller broadcasters also emphasize the positive impact that a cross-service translator would have on their service.[23] Some of those supporters discuss the limitations of this proposal, i.e., that allowing an AM station to broadcast on an FM translator does not, *per se*, revitalize the AM band.[24] Opposing

[16] *See*, *e.g.,* Dale Adkins ("Adkins") Comments at 2; Edward C. DeHart Comments; Henson Comments; Mariana Broadcasting, Inc. ("Mariana") Comments at 5-6; Porter County Broadcasting Holding Corp. ("Porter County") Comments at 1-2.

[17] *NPRM*, 28 FCC Rcd at 15226-27.

[18] *Id*. at 15227.

[19] *See*, *e.g.*, Schartel Comments at 1; Wright Broadcasting ("Wright") Comments at 1. Commenters generally supporting the proposal include MonsterMedia ("MM") Comments at 2-3; National Association of Broadcasters ("NAB") Comments at 5-6; National Public Radio ("NPR") Comments at 3-4; Porter County Comments at 2; Khanna & Guill, Inc. ("K&G") Comments at 2-3; Crawford Broadcasting Co. ("Crawford") Comments at 2-3 (also supports window filing for major changes to existing fill-in translators); DAIJ Comments at 1-2; New England Public Radio ("NEPR") Comments at 2-3; National Translator Association ("NTA") Comments at 2-3; Mt. Wilson FM Broadcasters, Inc. ("Mt. Wilson") Comments at 1-2; IHM Comments at 3-4; MMTC Comments at 4; Cavell, Mertz and Assoc. ("Cavell") Comments at 1-2; duTreil, Lundin, & Rackley ("DLR") Comments at 1-2; Hatfield & Dawson ("H&D") Comments at 2; Mariana Comments at 5. *See also* Letter to Ms. Marlene H. Dortch, Secretary, from James L. Winston, Esq., counsel for the National Association of Black Owned Broadcasters, at 1 (Oct. 31, 2014) (accessible at http://appsint.fcc.gov/ecfs/comment/view?id=60000976354) (suggesting two filing windows: a first for Class C and D AM stations, followed by a second for Class A and B AM stations).

[20] Bob Mark Allen Productions Comments at 1-2.

[21] IHM Comments at 3.

[22] *Id*. *See also* Steven Chanin Comments (noting that his Class D station must sign off during drive time in the winter months; a translator would enable it to implement a consistent program schedule year-round).

[23] *See*, *e.g.*, Cub Radio Comments at 2; Porter County Comments at 2.

[24] *See*, *e.g.*, H&D Comments at 2; DAIJ Comments at 1-2; Cavell Comments at 2; Mark Heller ("Heller") Comments at 2; Burt Weiner ("Weiner") Comments at 4; T.Z. Sawyer Technical Consultants, LLC ("Sawyer")

(continued . . . .)

commenters argue that the proposal would not revitalize the AM band,[25] would drive listeners away from AM radio,[26] or would be inconsistent with Commission policy because it would overcrowd the FM band with more translators.[27] A number of commenters question whether spectrum remains for significant FM translator licensing.[28]

11. *Discussion*. Although there was strong support for the AM-only new FM translator auction filing window proposed in the *NPRM*, on re-examination we find that there are issues that call into question whether we should limit our approach to opening such a window as proposed. Chief among our concerns is the time it would take for such a window to open. Commenters in this proceeding discuss the need for immediate relief.[29] But given other auction commitments, it is not possible at this time to provide such relief in the short term with a new FM translator station auction filing window. However, it is possible to provide short-term relief to AM broadcasters by providing a window where AM stations would be provided greater flexibility to move FM translators. This window would take advantage of the availability of existing FM translators that can be obtained by many AM broadcasters seeking to enhance their local service. Based upon a staff analysis of applications available in CDBS, since 2003, the number of FM translator stations has increased by 65 percent (from approximately 3,800 to approximately 6,300). This number is likely to grow in the next 12 to 18 months, as more FM translator permits are awarded from the Auction 83 filing window, to the point where there could be up to twice the number of translators that existed in 2003. Further, the secondary market for FM translator stations is robust: almost 4,000 translators have changed hands since the *2009 Translator Order* was released, of which over 600 were sold to AM stations for use as cross-service fill-in translators. A staff review of "stand alone" FM translator assignment applications granted over the past year has determined that the vast majority of stations have sold for under $100,000, and a substantial majority of those for less than $50,000. We find that providing AM broadcasters with a greater opportunity to benefit from this secondary market will provide them with tangible and immediate relief.

12. Accordingly, as set forth below, we adopt a two-pronged approach to enable more AM stations to acquire FM translators. These steps will provide AM broadcasters with substantial assistance while the Commission continues to work on addressing the AM band's long-term technical challenges. First, we direct the Media Bureau to administer in 2016 a process where an AM licensee or permittee seeking to rebroadcast on an FM translator may acquire and relocate one and only one authorized non-reserved band FM translator station up to 250 miles, and specify any rule-compliant non-reserved band

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Comments at 2-3 (supports proposal "with reluctance" and recommends strict conditions, including linking translator to AM primary station, with translator authorization canceled if AM primary's license is canceled, revoked, or relinquished; prefers AM priority in general translator window).

[25] *See*, *e.g.,* Roger Bouldin ("Bouldin") Reply at 2-5; Lloyd Bankson Roach ("Roach") Comments at 2.

[26] *See*, *e.g*., Todd Comments at 1; James Potter ("Potter") Reply at 6; Kintronic Laboratories, Inc. ("Kintronic") Reply at 6; Society of Broadcast Engineers ("SBE") Comments at 3.

[27] *See*, *e.g*., Bouldin Comments at 8; Curtis W. Flick ("Flick") Comments at 1; Grant County Broadcasters ("Grant County") Comments at 3; Scott Clifton ("Clifton") Comments at 1-2; Carl Haynes ("Haynes") Reply at 1 (although Haynes supports limited grant of translators to AM stations).

[28] *See*, *e.g*., Dana Puopolo ("Puopolo") Comments at 1; Frederick R. Vobbe ("Vobbe") Comments at 4; David L. Poole ("Poole") Comments at 1.

[29] *See* Charles M. Anderson ("Anderson") Comments at 1; Mariana Comments at 4; Schartel Comments at 1; IHM Reply at 15-16. *See also* Letter to Ms. Marlene H. Dortch, Secretary, from Rick Kaplan, Esq., General Counsel and Executive Vice President for the National Association of Broadcasters, at 1 (Sept. 22, 2015) (available at http://appsint.fcc.gov/ecfs/comment/view?id=60001299918); Letter to Ms. Marlene H. Dortch, Secretary, from Marissa G. Repp, Esq., iHeart Communications, Inc., at 1 (Sept. 3, 2015) (available at http://appsint.fcc.gov/ecfs/comment/view?id=60001299038); Letter to Ms. Marlene H. Dortch, Secretary, from James L. Winston, Esq., counsel for the National Association of Black Owned Broadcasters, at 2 (Sept. 2, 2015) (available at http://appsint.fcc.gov/ecfs/comment/view?id=60001199120).

FM channel, as a minor modification application. Second, we direct the Media Bureau, in conjunction with the Wireless Telecommunications Bureau (the "Bureaus"), to open new FM translator application auction windows, beginning in 2017, for AM stations that do not file a modification application in 2016. As explained below, Class C and D stations will be able to take advantage of the modification window and the auction window first, prior to second windows that will be available to all classes. The Commission also asked in the *NPRM* whether, between expanding the number of FM translators eligible to re-broadcast AM stations and opening the window proposed in this proceeding, there would continue to be a need for Mattoon waivers and, if not, when the policy of granting such waivers should be eliminated.[30] Most commenters favored retention of Mattoon waivers, adoption of the proposed Tell City waivers[31] and, for some cases, codifying the Mattoon waiver policy in our Rules.[32]

13. Although, as noted above, there has been and, we anticipate, will continue to be an expansion of the number of FM translator stations available to rebroadcast AM stations, our decision to delay opening an exclusive AM-new FM translator window in favor of opening a modification window may limit FM translator acquisition options for some AM licensees. Because of this, some flexibility in relocating such fill-in FM translators will continue to be necessary. The Mattoon waiver policy requires satisfaction of three criteria: (1) the applicant does not have a history of filing serial minor modification applications; (2) the proposed site is mutually exclusive with the licensed translator facility; and (3) the translator will rebroadcast the proposed AM primary station. Media Bureau staff have clarified the third criterion by imposing a four-year operating condition on any authorization for a translator facility moved pursuant to a minor modification application granted pursuant to a Mattoon waiver. This means that the relocating FM translator must rebroadcast the proposed AM primary station for a period of four years of on-air operation, exclusive of silent periods, commencing with the initiation of on-air service at the new location. Under the circumstances, we direct the Media Bureau to continue granting Mattoon waivers, including the four-year operating condition, in appropriate cases.

14. The Media Bureau has, however, denied grant of the so-called Tell City waiver, in which the waiver proponent proposed to relax the second requirement of a Mattoon waiver, that the proposed translator facility be mutually exclusive with the licensed facility. In the Tell City waiver request, the licensee sought to modify this criterion to instead require that both the licensed and proposed translator facility be within the proposed AM primary station's 0.25 mV/m interfering contour.[33] In denying this modification, the Bureau was concerned that allowing a "minor" modification pursuant to waiver would not give appropriate notice to, or protect, potential mutually exclusive applicants.[34] The applicant in the Tell City case has filed an application for review, which we do not wish to pre-judge at this time. Until and unless we announce a different procedure on review, however, the Mattoon waiver policy will not be extended beyond its current limits as described above, including as proposed by the Tell City applicant, except as discussed below for the limited purpose of the modification window we adopt in this *First Report and Order*.

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[30] *NPRM*, 28 FCC Rcd at 15229, *citing John F. Garziglia, Esq.*, Letter, 26 FCC Rcd 12685 (MB 2011). A "Mattoon Waiver" waives the Commission major change rule that practically restricts FM translator station moves.

[31] *Way Media, Inc.*, Letter, 29 FCC Rcd 11287 (MB 2014), *review pending* ("*Tell City Letter*").

[32] *See, e.g.*, NAB Comments at 9-11; CRA Reply at 6; Kyle Magrill Reply at 4; Anderson Comments at 1; CTI Comments at 2; NEPR Comments at 6; MMTC Comments at 8; IHM at 4; Salem Communications Corp. ("Salem") Reply at 2; NTA Comments at 6; MBA Comments at 4; Rama Comments at 2; Crawford Comments at 3; Foothills Comments at 2; NRB Comments at 7; Schartel Comments at 1 (allow waivers during short window only); Educational Media Foundation (EMF) Comments at 1-4 (should adopt Mattoon waiver policy as a rule, applicable to all FM translator stations); RAFTT Corporation ("RAFTT") Comments at 7-8 (should codify Mattoon waiver policy; also should eliminate fourth Mattoon criterion now that LPFM window has closed). *But see* CPE Comments at 5-6 ("The so-called 'Mattoon' waiver should be modified or deleted.").

[33] *Tell City Letter*, 29 FCC Rcd at 11287.

[34] *Id*. at 11289-91.

15. Although the availability of existing and to-be-authorized FM translator stations and the use of Mattoon waivers should, as we have observed, provide an ample supply of translators for fill-in use by many AM stations, we recognize that the availability of such translator stations may not, in many cases, completely satisfy demand. Some AM broadcasters might enjoy a sufficient supply of translators that conform with our siting rules, while others may have more difficulty in locating potentially rule-compliant translators. Still other AM broadcasters, particularly those whose stations have limited power (Class C) or lack protected nighttime service (Class D), might need additional time to arrange the financing necessary to enter the market for an FM translator station. For this reason, we direct the Media Bureau to announce, by Public Notice, two modification windows during which an AM licensee or permittee seeking to rebroadcast on an FM translator may, on a first-come, first-served basis, acquire and relocate one and only one authorized non-reserved band FM translator station up to 250 miles, and specify any rule-compliant non-reserved band FM channel, as a minor modification application, notwithstanding Section 74.1233(a)(1) of our Rules, which defines major and minor modifications of FM translator facilities.[35] This distance limitation is designed to substantially expand purchase options for AM stations, particularly those serving smaller markets and rural areas. It is also designed to not disrupt the current secondary market for translator authorizations.[36] In this regard we note that spectrum congestion in the largest markets will significantly limit opportunities for translator station relocations. The Commission will accept applications to modify authorized FM translator stations that the AM station licensee or permittee either owns, for which it is the proposed assignee or transferee in a pending application,[37] or for which it has a rebroadcasting agreement. We further direct the Bureau to open the first modification window for six months, and to make the first window available only to applications to modify and/or relocate FM translator stations rebroadcasting Class C and D AM stations, on a one translator per AM station basis. As noted above, we believe that Class C and D stations, because of their limited power or lack of protected nighttime service, will benefit most from the acquisition of a cross-service translator, and thus should be afforded the first opportunity to obtain one. The second window, to open at the end of the initial six-month window, would be open for an additional three-month period, and would be available to applications to modify and/or relocate FM translator stations rebroadcasting any AM station of any class, including Class C and D stations that did not file an application in the initial window, also on a one translator per AM station basis.

[35] 47 C.F.R. § 74.1233(a)(1). As discussed in note 12, *supra*, that rule section defines a major modification in the facilities of an FM translator station as any change in output frequency except changes to first, second, or third adjacent channels or intermediate frequencies, and any change in antenna location where the translator station would not continue to provide 1 mV/m service to some portion of its previously authorized 1 mV/m service area. All other modifications are considered minor and may be filed at any time on a first-come/first-served basis. *See* 47 C.F.R. §§ 74.1233(b)(1), (c)(1). Applications for major modifications to commercial FM translator facilities may be made only during filing windows for competitive bidding. *See* 47 C.F.R. §§ 73.5000(a), 73.5002(a). Likewise, applications for major modifications to noncommercial educational ("NCE") FM translator stations on reserved channels may be filed only during Commission-specified filing windows, and are subject to NCE point system determinations. *See* 47 C.F.R. § 73.7001(a).

[36] A substantial majority of the approximately 1300 outstanding Auction 83 construction permits are scheduled to expire in 2016. Modification applicants in one of these two modification windows may seek waivers of these construction deadlines. *See* 47 C.F.R. §1.3. Waivers can expand cross-service broadcasting opportunities for AM stations, will allow AM licensees to realize service improvements quickly, will incentivize FM translator permittee participation in the modification window process, and will provide a means to avoid the delays and administrative burdens of re-auctioning this spectrum. Accordingly, we find that a waiver of an Auction 83 FM translator construction deadline is presumptively in the public interest for applicants participating in one of the modification windows, provided that the AM station licensee proposing to use the FM translator for rebroadcasting its AM station commits to prompt FM translator station construction and initiation of broadcast operations.

[37] We note that a proposed assignee or transferee may file in its own name an application to modify the subject translator authorization. *See* 47 C.F.R. § 73.3517(a).

16. In return for this one-time rule waiver, we direct the Media Bureau to impose on translators relocated and/or modified using the waiver the same four-year operating condition that we currently attach to FM translators relocated using Mattoon waivers. Thus, the modified FM translator must rebroadcast the FM translator modification applicant's specified AM primary station for a period of four years of on-air operation, exclusive of silent periods, commencing with the initiation of on-air service at the new location. We direct the Media Bureau to expeditiously initiate a three-month outreach effort to promote Class C and Class D participation in this modification window filing process; to develop, as practicable, technical tools similar to those created for the LPFM window to assess spectrum availability and potential FM translator acquisition options; and to establish streamlined procedures for handling inquiries from the AM and FM translator broadcast community. We also direct the Media Bureau to open the modification windows upon completion of this outreach.[38]

17. The modification windows, as noted above, can provide near-term relief to AM broadcasters. However, some AM stations may not be successful in locating translators, notwithstanding the availability of rule-compliant FM translator channels in their communities. Therefore, to further promote the long-term viability of the AM service, we also direct the Bureaus to open two new FM translator application auction windows, beginning in 2017,[39] for those AM licensees and permittees that do not participate, i.e., file an application, in one of the modification windows.[40] The first FM translator auction window, as with the initial modification window, shall be limited to Class C and D AM permittees and licensees that have not participated in either modification window. Again, as discussed above with relation to the modification windows, we find that the lower powered and/or service-limited Class C and D AM broadcasters are most in need of the service enhancement a cross-service translator can provide, and therefore should receive the first opportunity to apply for one. The second FM translator auction window, to be opened as soon as possible after the first window has closed and applicants in the first window have had an opportunity to resolve mutual exclusivity through settlement or technical resolution, will be open to all AM permittees and licensees that have not participated in any of the prior modification or auction windows.[41] We believe that the threshold qualification of affording relief first to

[38] We note that the pending Tell City waiver request could likely qualify for processing under the waiver procedures announced herein. However, in order to promote a fair process for all AM stations in reallocating FM translator spectrum, including to spectrum limited markets, we will not afford that proposal cut-off rights over other filings. We also direct the Media Bureau to dismiss, without further consideration, waiver requests filed prior to and in anticipation of the opening of the modification application filing windows.

[39] In order to ensure the efficient processing of these auction applications, we direct the Bureaus to undertake and complete all revisions to Form 175 necessary to collect the FM translator technical specifications. We also direct the Bureaus to hold an auction for all remaining mutually exclusive commercial Auction 83 applications following the completion of the Incentive Auction, Auction 1000, and prior to the first FM translator auction window.

[40] The *NPRM* proposed a "one-to-a-customer" FM translator window to provide limited, targeted relief to AM stations. *See NPRM*, 28 FCC Rcd at 15228. Thus, we decline to take the radical step of permitting one class of eligible applicants to double the number of FM translator authorizations that they could acquire under these window procedures. Given the supply of translator authorizations, the palpable demand for FM translator licensees by other stakeholders, and the relief afforded by the modification windows, AM licensees and permittees will be eligible to participate in either one modification or one auction window, but not both. AM station assignments or transfers during the multi-window process will not create an opportunity for new owners to participate in an auction window when the former licensee participated in a modification window.

[41] In the *NPRM*, the Commission opined that applying a threshold qualification restricting eligibility for the proposed translator window to AM broadcasters is consistent with the *Ashbacker* rights of potential applicants, and would provide immediate benefits to the AM service without materially affecting future FM translator window applicants. *NPRM*, 28 FCC Rcd at 15228 (referencing *Ashbacker Radio Co. v. FCC*, 326 U.S. 327 (1945)). Two commenters disputed this conclusion. *See* Bouldin Comments at 2-5 (arguing that limiting window to AM incumbents is overly and unnecessarily restrictive; that FM translators were originally and primarily established for FM station fill-in service; and that many AM stations violate FCC rules, suggesting that better approach would be to establish threshold qualifications based on applicant qualifications rather than applicant class); Kyle Magrill Reply

(continued . . . .)

Class C and D stations, with limited power or no protected nighttime service, represents the best approach among the many proposed by commenters.[42] The FM translator auction windows will otherwise follow the *NPRM* proposal, insofar as participation will be limited to AM permittees and licensees, each applicant may apply for one and only one translator station that must comply with our siting rules for FM fill-in translators rebroadcasting AM stations, and any translator acquired through the FM translator auction windows will be permanently linked to the AM primary station acquiring it.[43] We note that, just as in FM Translator Auction 83, these new FM translator auction windows will include opportunities for mutually exclusive applicants to resolve their mutual exclusivity through settlements or technical resolutions.[44]

B. MODIFY DAYTIME COMMUNITY COVERAGE STANDARDS FOR EXISTING AM STATIONS

18. *Background*. A commercial AM radio station must provide daytime coverage to its entire community of license,[45] although, under a "longstanding policy," staff has considered a showing that a station will encompass 80 percent of the community of license's area or population within the station's 5

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at 2 (suggesting that Commission's tentative conclusion could lead to a slippery slope to suspend *Ashbacker* whenever the Commission felt it necessary to do so). Bouldin and Magrill's concerns, while genuine, do not dissuade us from the tentative conclusion. Neither commenter refutes the legal authority cited in the *NPRM* (28 FCC Rcd at 15228), and Bouldin in particular makes several sweeping statements without factual support. We further reject Kyle Magrill's "slippery slope" argument – as noted in the *NPRM*, we have the ability to use threshold qualifications in appropriate situations, and have done so elsewhere. *See*, *e.g*., *Policies to Promote Rural Radio Service and to Streamline Allotment and Assignment Procedures*, Third Report and Order, 26 FCC Rcd 17642, 17644 n.10, 17650 (2011).

[42] There are many different commenter suggestions regarding which AM permittees or licensees should be given preference in an FM translator window. Many commenters assert that any AM station, of any class, can benefit from an FM translator, and thus that the window should be open to all AM stations. *See*, *e.g*., NAB Comments at 7; K&G Comments at 3; MBA Comments at 3; Holston Valley Broadcasting Corp. ("Holston") Reply at 2; Crawford Comments at 3; Edward P. DeLaHunt ("DeLaHunt") Comments at 1; Kyle Magrill Reply at 3. Others state that only Class D stations, or those with no nighttime service, should be allowed to apply or should receive first priority. *See*, *e.g*., REC Comments at 2 (stand-alone Class D only); Meuser Comments at 2; Butte Broadcasting ("Butte") Reply at 1-2; KNAB, Inc. ("KNAB") Comments at 2 (preference for AM stations without nighttime service or with limited nighttime service); Thomas Osenkowsky ("Osenkowsky") Comments at 1 (preference to stations with no licensed nighttime power and those who primarily broadcast live, local programming); Cavell Comments at 2; Humphrey Comments at 3. Others believe that all but Class A or Class A and B stations should be eligible to participate (*see*, *e.g*., Communications Technologies, Inc. ("CTI") Comments at 2; John Pavlica, Jr. ("Pavlica") Comments at 4; CRA Reply at 2-4; Mt. Wilson Comments at 2; Porter County Comments at 2-3), that only stations that do not already have fill-in translators should be eligible (*see* K&G Comments at 3 (prioritizing those without translators); Clear Channel Comments at 4 (AM station of any class without an associated, licensed FM translator should be allowed to apply); Common Frequency ("CF") Comments at 2), or that only stand-alone AM stations should participate (*see, e.g.,* DAIJ Comments at 2 (stand-alone class B, C, and D stations only); WGTO Comments at 7 (stand-alone and Class C and D only)). *See also* Letter to Ms. Marlene H. Dortch, Secretary, from James L. Winston, Esq., counsel for the National Association of Black Owned Broadcasters, at 2 (Sept. 2, 2015) (accessible at http:// http://appsint.fcc.gov/ecfs/comment/view?id=60001199120) (Class C and D stations should get first opportunity to file for new FM translators). Several commenters propose multi-stage priority systems, some quite elaborate, for determining the order in which stations may participate in a window. *See*, *e.g*., Kevin Kidd ("Kidd") Comments at 5; R. Morgan Burrow ("Burrow") Comments at 1-2; Carthage Broadcasting ("Carthage") Comments at 3-7.

[43] *NPRM*, 28 FCC Rcd at 15227.

[44] *See FM Translator Auction 83 Mutually Exclusive Applications Subject to Auction*, Public Notice, 28 FCC Rcd 9716 (MB 2013); 47 C.F.R. §§ 73.5002(c), (d).

[45] *See* 47 C.F.R. §§ 73.24(i).

mV/m contour to constitute "substantial compliance" with the rule.[46] The Commission adopted this rule in order to provide sufficient signal coverage to the designated community of license, in keeping with our goal of localism.

19. In 2009, MMTC filed a petition for rulemaking,[47] suggesting, among other things, that the daytime coverage rule harms the public interest because it limits stations' ability to relocate, due to the increasing difficulty in finding sites suitable and large enough for AM transmission facilities, especially those employing multi-tower directional arrays.[48] In the *NPRM*, the Commission concurred with MMTC that reduced availability of land, along with expanding city boundaries, make it difficult for some existing licensed AM stations to relocate and continue to cover their entire communities of license. The Commission also observed that our goal of localism, derived from Section 307(b) of the Communications Act,[49] requires that a certain level of service be provided to the community of license.

20. Accordingly, the Commission proposed to modify the daytime community coverage requirement contained in Section 73.24(i) of the Rules, for licensed AM facilities only, to require that the station's predicted or measured daytime 5 mV/m contour encompass only either 50 percent of the population or 50 percent of the area of the community of license. The reasoning was that existing licensed stations, especially those of long standing in their communities, were most likely to face difficulties in finding new sites that would allow them to cover the requisite 80-plus percent of the community of license, either because they are forced from an existing site or because the community boundaries had expanded over time. In contrast, an applicant proposing a new AM station or moving an existing station to a new community of license does not face similar difficulties, because it has the ability to choose a community based on whether it can locate a site that would allow for the requisite community coverage. The Commission sought comment on this proposal.

21. While this proposal garnered support,[50] several commenters suggest we go further and eliminate all daytime community of license coverage requirements. For example, H&D and DLR believe the concept of "community of license" to be obsolete, and thus favor dropping all coverage requirements.[51] Many of those favoring the proposal also advocate extending the relaxed community

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[46] *CMP Houston-KC, LLC*, Memorandum Opinion and Order, 23 FCC Rcd 10656, 10657 n.8 (2008); *see also Barry Skidelsky*, Order, 7 FCC Rcd 5577, 5577 ¶ 3 (1992) (citing *John R. Hughes*, Memorandum Opinion and Order, 50 Fed. Reg. 5679 (1985)) ("The Commission traditionally accepts proposals that would cover at least 80 percent of the community of license as constituting substantial compliance with the rule").

[47] *Review of Technical Policies and Rules Presenting Obstacles to Implementation of Section 307(b) of the Communications Act and to the Promotion of Diversity and Localism*, MMTC Radio Rescue Petition for Rulemaking, RM-11565 (Jul. 20, 2009) ("*Radio Rescue Petition*"). *See Consumer and Governmental Affairs Bureau Reference Information Center Petitions for Rulemaking Filed*, Public Notice, Report No. 2899 (CGB Sept. 23, 2009) (announcing filing of the *Radio Rescue Petition* and seeking public comment).

[48] *Radio Rescue Petition* at 15.

[49] 47 U.S.C. § 307(b) ("In considering applications for licenses, and modifications and renewals thereof, when and insofar as there is demand for the same, 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 of radio service to each of the same."). *See Broadcast Localism*, Report and Notice of Proposed Rule Making, 23 FCC Rcd 1324, 1327 (2008).

[50] *See*, *e.g.*, Vobbe Comments at 3; MMTC Comments at 9-14; MBA Comments at 4; NAB Comments at 13-14; National Public Radio ("NPR") Comments at 2-3; Butte Comments at 3; Porter Comments at 3; James B. Potter ("Potter") Comments at 6. NRB supports the proposal on a case-by-case basis only. NRB Comments at 7-8. *See also* Letter to Ms. Marlene H. Dortch, Secretary, from James L. Winston, Esq., counsel for the National Association of Black Owned Broadcasters, at 2 (Nov. 5, 2014) (accessible at http://appsint.fcc.gov/ecfs/comment/view?id=60000976355) ("NABOB November *ex parte*").

coverage standards to applicants for new stations and those changing their community of license, arguing that these stations, too, face siting difficulties in some cases.[52]

22. Those opposing the proposal argue that reducing signal strength over the community of license will worsen the listening experience and will not advance revitalization.[53] AFCCE suggests that coverage waivers could be granted on a showing of hardship by an AM station; however, it contends that a blanket coverage reduction will only perpetuate the image of AM radio as a "noisy, low-fidelity, antiquated service that can't be received well in many locations."[54]

23. *Discussion*. For the reasons outlined above and in the *NPRM*, we adopt this proposal as originally conceived.[55] The proposals of some commenters to allow new stations and those changing community of license to avail themselves of the relaxed daytime community coverage standards would, as commenters suggest, provide greater site flexibility to all AM broadcasters. However, as cautioned in the *NPRM*, the Commission has traditionally been reluctant to authorize facilities that would provide sub-standard community coverage, and some commenters echoed that sentiment.[56] Additionally, when looking at the broader scope of the comments, it is clear that environmental interference – and the ability to overcome such interference to promote listenability – are paramount concerns.[57] The proposal was not meant to be a means through which AM broadcasters could seek to provide inferior coverage to their communities of license. Rather, the Commission proposed to relax this rule for existing stations out of recognition that many of them face daunting challenges in trying to cover a community that may have expanded to the point that long-existing facilities no longer provide the requisite level of service and limited site locations exist to improve community coverage.[58] The intent was not and is not to re-interpret community coverage in such a way that proponents of new and relocated service can be excused from providing an adequate AM signal to the majority of the chosen community of license. As discussed in the *NPRM*, new station or community of license modification proponents have the flexibility to select a community that they can serve from a site of their choosing and therefore should not choose a community

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[51] *See*, *e.g.*, DLR Comments at 2; H&D Comments at 2; Puerto Rico Broadcasters Association ("PRBA") Comments at 2; Sellmeyer Comments at 2. *See also* Cavell, Mertz and Associates ("CMA") Comments at 4 (urges significant relaxation or elimination of community coverage standard: "Market driven forces and competition will likely serve to ensure meaningful service more effectively than an arbitrary federal standard.").

[52] *See*, *e.g.*, Butte Comments at 3; CTJ Comments at 3; IHM Comments at 12; DeLaHunt Comments at 2; Timothy Z. Sawyer ("Sawyer") Comments at 4; MMTC Comments at 12. Commenter Fybush believes the relaxed community coverage standard should apply to existing stations changing community of license but not to new AM station. Fybush Comments at 9-10.

[53] *See*, *e.g.*, University of Northwestern/St. Paul ("UNSP") Comments at 4; Brian J. Henry ("Henry") Comments at 2-3; George Arroyo ("Arroyo") Comments at 2. *See also* Scott Clifton ("Clifton") Comments at 2.

[54] AFCCE Comments at 4.

[55] Some commenters additionally proposed variations on this proposal, which we choose not to adopt at this time. For example, Khanna & Guill ("K&G") believe we should require coverage of 50 percent of the community's population but not its area. K&G Comments at 4. CC, on the other hand, argues for 50 percent community area coverage but not population. IHM Comments at 11. Charles Anderson ("Anderson") would reduce the daytime AM coverage contour to 3.16 mV/m, the same as FM community coverage. Anderson Comments at 1. R. Morgan Burrow ("Burrow") suggests we define community coverage as coverage of 90 percent of the community of license with a 2 mV/m contour or, alternatively, covering 70 percent of the community with a 5 mV/m contour. Burrow Comments at 2.

[56] *See* UNSP Comments at 4; Henry Comments at 2-3.

[57] *See*, *e.g.*, BWWG Comments at 2-3; Gay Comments at 1; Crawford Broadcasting Company ("Crawford") Comments at 2; DAIJ Media ("DAIJ") Comments at 5-6; David L. Poole ("Poole") Comments at 1.

[58] *NPRM,* 28 FCC Rcd at 15231.

to which they cannot provide at least 80 percent coverage.[59] For the same reason, we believe that the relaxed community coverage requirements should not apply to permittees for unbuilt stations seeking to modify those permits, as they do not face the same siting difficulties that existing AM stations do.

24. We therefore modify the daytime community coverage requirement contained in Section 73.24(i) of the Rules, for existing licensed AM facilities only, to require that the daytime 5 mV/m contour encompasses either 50 percent of the area, or 50 percent of the population of the principal community to be served. However, in order to preserve the limited intent of this rule modification, we authorize the Media Bureau to inquire into the facts justifying any modification that would reduce the percentage of community population or area coverage within the first four years of licensed on-air operation of the applicant station, exclusive of any periods of reduced operations or silence pursuant to special temporary authorizations. Should the Bureau find there is no compelling reason warranting reduced community coverage during this period, it may dismiss the modification application.

25. We also reject proposals to re-define "community" in this context to mean something other than that established by legal, political boundaries.[60] For example, MMTC states that "the very notion of community has been recast from that of a specific geographic area defined by political boundaries to one of specific audiences, interest groups, tastes and demographics within that coverage area."[61] While we appreciate the desire expressed by MMTC and other commenters that broadcasters be able to reach underserved audiences, the Commission's rules and policies have traditionally been designed to "foster a system of local stations that respond to the unique concerns and interests of the audiences within the stations' respective service areas."[62] It has historically been the Commission's expectation that broadcasters serve their geographic communities, and part of that service involves adapting to the inexorable population and demographic shifts of those communities. Moreover, commenters have not provided an alternative definition of "community" specific enough to allow a meaningful evaluation of a licensee's compliance with its local service obligations. We are also concerned that, by allowing broadcasters too much leeway in defining the "communities" they serve, we risk giving them license to avoid serving certain other "communities" that may therefore remain unserved or underserved. We thus find no reason to deviate from the traditional definition of "community" for purposes of defining signal coverage.[63]

C. MODIFY NIGHTTIME COMMUNITY COVERAGE STANDARDS FOR EXISTING AM STATIONS

26. *Background*. Many AM radio stations are required to reduce their power or cease operating at night in order to avoid interference to other AM radio stations,[64] due to nighttime skywave

[59] *See NPRM*, 28 FCC Rcd at 15231. There are, in fact, commenters – *see*, *e.g.*, DLR at 4; H&D at 9 – who maintain that the problems with the AM band can be traced in part to the saturation of the band, who argue that we should open no more filing windows for new AM stations, and who propose that we should in fact encourage Congress to offer tax incentives to AM broadcasters who surrender their licenses. This perspective points toward a policy that would favor fewer, more robust new stations rather than additional, weaker ones.

[60] *See*, *e.g.*, Fybush Comments at 9 ("The wild diversity of forms of local government, annexation laws and population sprawl across the U.S. has made continued reliance on the Commission's community of license rules an anachronism . . . .").

[61] MMTC Comments at 9. *See also* MBA Comments at 4 ("Politically created geographical boundaries generally define the population centers, they do not always define where new service would be useful to an underserved group.").

[62] *Broadcast Localism*, Report on Broadcast Localism and Notice of Proposed Rulemaking, 23 FCC Rcd 1324, 1327 (2008).

[63] *Accord* IHM Reply at 8.

[64] 47 C.F.R. § 73.182.

propagation that can result in an AM signal traveling, in some cases, hundreds of miles.[65] Our Rules nevertheless currently require that non-Class D AM broadcasters maintain a signal at night sufficient to cause 80 percent of the area or population of the broadcaster's principal community to be "encompassed by the nighttime 5 mV/m contour or the nighttime interference-free contour, whichever value is higher."[66] Thus, most AM broadcasters must continue serving the bulk of their communities of license at night even though the Commission's Rules, in many cases, mandate reduced maximum broadcast power levels.

27. As discussed in the *NPRM*, some commenters, notably MMTC, have criticized the nighttime coverage rules. In addition to the difficulties in finding antenna sites already discussed with regard to daytime operation, including land availability, in some cases the complexities of avoiding skywave interference require complicated nighttime directional patterns involving multiple towers. In extreme cases compliant nighttime facilities must be constructed some distance from an AM station's daytime transmission facilities. The Commission also acknowledged MMTC's contention that the nighttime coverage rule creates an entry barrier to new AM broadcasters by requiring that broadcasters either demonstrate substantial compliance with the rule in an application for a new site, or submit a waiver request demonstrating that the Commission should grant an exception to the rule.[67]

28. The Commission has traditionally placed a premium on fulltime radio service, and therefore nighttime service is an important part of an AM station's public service obligation.[68] The Commission therefore proposed in the *NPRM* that the nighttime community coverage requirement be eliminated for existing licensed AM stations, and be modified to require that applicants for new AM stations and those AM stations seeking a change to their communities of license cover either 50 percent of the population or 50 percent of the area of the communities of license with a nighttime 5 mV/m signal or a nighttime interference-free contour, whichever value is higher.

29. Most commenters supported this proposal, with many favoring dropping nighttime coverage requirements entirely[69] or extending relief to all AM stations, not just existing ones.[70] Opponents of the proposal question whether reducing signals over the community of license would ultimately benefit either the AM service or the broadcasters,[71] and many commenters suggest variants on the proposal. For example, four commenters advocated case-by-case waivers of nighttime coverage requirements.[72] Fybush, noting that many AM licensees have already *de facto* relaxed their nighttime coverage requirement by downgrading from Class B to Class D, argues that an AM station should be permitted to reduce its nighttime signal while retaining Class B protection for its reduced signal

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[65] *See NPRM*, 28 FCC Rcd at 15231.

[66] 47 C.F.R. § 73.24(i). On the classes of AM stations generally, *see* 47 C.F.R. § 73.21. Class D stations, unlike other AM station classes, are not afforded nighttime interference protection and must protect other AM stations at night. Class D stations may have secondary nighttime facilities of no more than 250 watts and equivalent root mean square of less than 141 mV/m at 1 kilometer.

[67] *NPRM,* 28 FCC Rcd at 15232.

[68] *See Revision of FM Assignment Policies and Procedures*, Second Report and Order, 90 FCC2d 88 (1982) ("*FM Assignment Policies*"), in which first and second fulltime aural service are the first two allotment priorities. The FM allotment priorities are used in Section 307(b) determinations among mutually exclusive applicants for AM stations. *See, e.g., Alessandro Broadcasting Co.*, Decision, 56 RR 2d 1568 (Rev. Bd. 1984).

[69] *See*, *e.g.*, DLR Comments at 2; Thomas Osenkowsky ("Osenkowsky") Comments at 1-2; Cavell Comments at 4; MMTC Comments at 5, 14-16. *See also* NABOB November *ex parte* at 2.

[70] IHM Comments at 12.

[71] *See*, *e.g.*, NRB Comments at 8-9; Clifton Comments at 2; Henry Comments at 3; UNSP Comments at 4; Vobbe Comments at 4-5.

[72] *See* NRB Comments at 8-9; Henry Comments at 3; Carthage Comments at 7-8; Dana Puopolo ("Puopolo") Comments at 1.

regardless of community coverage.[73] Butte, while supporting the proposal, would allow increases in post-sunset power for daytime stations from a minimum of 150 watts up to 500 watts, to enable better local coverage.[74] Many other variations on the proposal, of differing levels of feasibility, have been offered.[75]

30. *Discussion*. We adopt the proposal as set forth in the *NPRM*. For the reasons discussed above, however, we decline to eliminate completely nighttime community of license coverage requirements for new AM stations and those changing community of license, as well as for permittees of unbuilt stations seeking to modify their authorizations. Again, we are mindful of striking the appropriate balance between the need to provide relief to AM broadcasters with few siting options (amplified by the added complexity of nighttime propagation and concomitant signal restrictions), and the need, expressed by opponents of the proposal, to provide the community of license with some kind of service. We note that some of the proposals set forth in the *FNPRM*, below, may also provide further relief to broadcasters seeking to provide nighttime coverage to their communities.[76] Finally, as stated in paragraph 24, above, we instruct the Media Bureau to examine closely any request by a station to reduce nighttime community coverage during its first four years of licensed on-air operation, and grant it discretion to dismiss any such application absent a compelling reason warranting reduced nighttime service.

D. ELIMINATE THE AM "RATCHET RULE"

31. *Background*. The Commission proposed in the *NPRM* to delete the so-called "ratchet rule," which effectively requires that a Class A or B AM broadcaster, seeking to make facility changes that modify its AM signal, demonstrate that the improvements will result in an overall reduction in the amount of skywave interference that it causes to certain other AM stations (primarily by "ratcheting back" radiation in the direction of certain other AM stations).[77] Two engineering firms (and commenters in this proceeding), DLR and H&D, had filed a 2009 petition to eliminate the ratchet rule,[78] contending that the rule's practical effect was to discourage station improvements, because compliance with the rule more often than not required the modifying station to reduce power to the point that net nighttime interference-free ("NIF") service was reduced.

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[73] Fybush Comments at 11.

[74] Butte Comments at 4.

[75] *See*, *e.g.*, K&G Comments at 4-5 (eliminate nighttime community coverage requirement if station can show 50 percent nighttime community coverage with an FM translator, otherwise 50 percent community coverage with 5 mV/m nighttime contour should be adequate; alternatively, require NIF coverage of 50 percent of community population, computing NIF RSS based on 50 of time rather than 10 percent); Burrow Comments at 2 (reduce coverage requirement to 50 percent of the area within the 50 percent RSS NIF contour and retain current skywave propagation curves); Charles M. Anderson ("Anderson") Comments at 2 (modify nighttime community coverage requirement to 50 percent of population or area of NIF contour, to match expanded band; eliminate nighttime community coverage requirement for any facility with a nighttime limit of 20 mV/m or higher).

[76] *See infra* Section IV(A)(2).

[77] *See* 47 C.F.R. § 73.182(q) n.1 (stating that stations that "contribute to another station's RSS [root-sum-square values of interfering field strengths] using the 50% exclusion method are required to either reduce their contributions to that RSS by 10%, or to a level at which their contributions no longer enter into the 50% RSS value.").

[78] *Modification of Section 73.182(q), Footnote 1, to Promote Improvement of Nighttime Service by AM Radio Stations by Eliminating the "Ratchet Clause,"* Petition for Rulemaking, RM-11560 (Aug. 25, 2009) ("*Ratchet Rule Petition*"). *See Consumer and Governmental Affairs Bureau Reference Information Center Petitions for Rulemakings Filed*, Public Notice, Report No. 2897 (CGB Sept. 9, 2009) (announcing filing of the *Ratchet Rule Petition* and seeking public comment).

32. Most commenters support the proposal to eliminate the rule.[79] Only two commenters who specifically discuss the ratchet rule favor its retention. DeLaHunt does not support eliminating the rule absent a similar relaxation in the nighttime skywave protection requirements for all stations, and argues that the ratchet rule was designed to reduce the nighttime interference contributions of heavy interferers and enabled otherwise rule-compliant stations to realize service improvements by protecting them from unfettered modifications by high-interfering stations.[80] Vobbe states that by allowing skywave interference to distant stations, elimination of the rule could harm those who rely on both local and skywave service.[81] Some commenters offer further suggestions regarding the rule. Pavlica would eliminate the ratchet rule except during times of local emergencies, at which time he would have all same channel and co-channel stations outside of the area of a declared emergency reduce their nighttime power to permit the station with the declared local emergency to have a solid quality signal to their listeners for the duration of the declared emergency.[82] Flick supports immediate elimination of the ratchet rule, but also states that AM stations impacted by it should be able to recover their nighttime coverage.[83]

33. *Discussion*. We will eliminate the ratchet rule, as proposed in the *NPRM*. Many commenters echo the negative consequences of the ratchet rule that were identified in the *NPRM* and the DLR/H&D *Ratchet Rule Petition*. Additionally, commenters identify several long- and short-term benefits that would result from eliminating the rule, including: cost reduction to AM broadcasters making station improvements;[84] economic benefits to local AM stations and their communities served through expanded nighttime broadcasting and consequent expansion to local advertising platforms;[85] and the ability of communities served by AM stations affected by the ratchet rule to receive information concerning local events, or emergencies at night.[86] K&G notes that eliminating the rule would enable AM stations to design simpler antenna systems and maintain the same number of towers in most cases when

[79] *See*, *e.g.*, National Public Radio ("NPR") Comments at 3; UNSP Comments at 4-5; Cavell Comments at 4; IHM Comments at 13-14 (ratchet rule has disproportionately greater negative impact on more established AMs, unduly burdens AMs while providing negligible interference relief); MMTC Comments at 16-17 (unequal tradeoff in coverage for interference not in public interest); NRB Comments at 9; Berkshire Broadcasting Corp. ("Berkshire") Comments at 2; K&G Comments at 5 (ratchet rule is counter-productive to designing directional antenna systems for relocating stations, causing many to lose original service area or require more complex antenna systems); DLR Comments at 3; Puerto Rico Broadcasters Association ("PRBA") Comments at 2; WRDN Comments at 1; Fybush Comments at 12 (rule has become a misguided impediment to AMs); Flick Comments at 2; Clifton Comments at 2 (rule only encourages broadcasters not to make any changes); Burrow Comments at 2. *See also* NABOB November *ex parte* at 2.

[80] DeLaHunt Comments at 3.

[81] Vobbe Comments at 5. *See also* Comments of Joseph E. Talbot ("Talbot") who, while not specifically mentioning the ratchet rule, emphasizes the value of large regional stations, noting listener complaints of skywave interference to same. Talbot Comments at 1.

[82] Pavlica Comments at 5. We note that 47 C.F.R. § 73.1250(f) provides for an AM station, during a period of emergency, to use its full daytime facilities during nighttime hours to broadcast emergency information on a noncommercial basis, to the extent that existing nighttime service is nonexistent or inadequate to meet the public need.

[83] Flick Comments at 2.

[84] UNSP Comments at 5.

[85] City of Durand, Wisconsin ("Durand") Comments.

[86] *Id*. *See also* WRDN Comments at 1-2. We note that WRDN's comments presuppose that elimination of the ratchet rule would automatically allow stations like its own to apply for increased nighttime power. This may or may not be the case, depending on the particular technical situation facing an individual station applicant.

changing sites.[87] Finally, previously affected AM stations would no longer be discouraged from making necessary improvements to facilities.[88]

34. We are not persuaded by those supporting retention of the ratchet rule. These arguments essentially reassert the same disproven rationale for preserving the rule that was first invoked for its creation: that the apparently negligible reduction in skywave interference effected by the ratchet rule is worth the harm its imposition has caused affected stations.[89] The majority of commenters resoundingly and persuasively reject this argument.[90] We also reject Flick's suggestion that AM stations impacted by the ratchet rule be allowed to recover their lost nighttime coverage resulting from ratchet rule compliance,[91] as this process would be administratively unwieldy and time-consuming. All AM broadcasters were equally affected by the ratchet rule: those that chose not to modify their stations voluntarily declined the opportunity to improve their service, while those that chose to modify their facilities did so with full knowledge of the costs and benefits involved. There is no reason to allow the stations that modified their facilities despite the ratchet rule to recover the nighttime coverage that they lost from such compliance, nor does compliance with a rule subsequently determined to be less than effective constitute a bar to its repeal.[92]

E. PERMIT WIDER IMPLEMENTATION OF MODULATION DEPENDENT CARRIER LEVEL CONTROL TECHNOLOGIES

35. *Background*. Since 2011, AM stations have been allowed to seek rule waiver or experimental authorization to use Modulation Dependent Carrier Level ("MDCL") control technologies or algorithms.[93] MDCL control technologies, as we explained in the *NPRM*,[94] vary either the carrier or the carrier and sideband power levels as a function of the modulation level, thus allowing the licensee to reduce transmitter power consumption while maintaining audio quality and signal coverage. Although there are two basic types of MDCL control technologies and various systems in use, each reduces the station's antenna input power to levels not permitted by Section 73.1560(a) of the Commission's Rules.[95]

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[87] K&G Comments at 5.

[88] *See*, *e.g.*, Sellmeyer Engineering ("Sellmeyer") Comments at 5-6.

[89] DeLaHunt Comments at 3.

[90] DeLaHunt's further contention that eliminating the ratchet rule would be unfair to AM stations that already complied does not dissuade us from deleting the rule. *Id.* Were such a rationale to prevail, the Commission could never change an ineffective or obsolete rule, merely because certain parties had been affected by it. We are required periodically to re-evaluate our regulations to determine whether they are still needed. *See, e.g.,* Exec. Order No. 13,579, § 2, 76 Fed. Reg. 41,587 (July 11, 2011) ("To facilitate the periodic review of existing significant regulations, independent regulatory agencies should consider how best to promote retrospective analysis of rules that may be outmoded, ineffective, insufficient, or excessively burdensome, and to modify, streamline, expand, or repeal them in accordance with what has been learned."); *Final Plan for Retrospective Analysis of Existing Rules*, Public Notice, 2012 WL 1851335 (FCC, May 18, 2012).

[91] Flick Comments at 2.

[92] *See*, *e.g.*, *Amendment of the Commission's Rules Related to Retransmission Consent*, Report and Order and Further Notice of Proposed Rule Making, 29 FCC Rcd 3351, 3384-86 (2014) (absent Congressional intent to keep cable program exclusivity rules on the books, Commission is free to modify or repeal them if it concludes such action is appropriate).

[93] *See Media Bureau to Permit Use of Energy-Saving Transmitter Technology by AM Stations*, Public Notice, 26 FCC Rcd 12910 (MB 2011) ("*MDCL Public Notice*").

[94] 28 FCC Rcd at 15235.

[95] 47 C.F.R. § 73.1560(a).

36. Based on reports from the over 60 stations that have received waivers or experimental authorizations to use MDCL control technologies, as well as the two manufacturers (Harris and Nautel) currently providing these technologies, the Commission proposed to: (1) amend Section 73.1560(a) of the Rules[96] to provide that an AM station may commence MDCL control operation without prior Commission authority, provided that the AM station licensee notifies the Commission of the station's MDCL control operation within 10 days after commencement of such operation using the Media Bureau's Consolidated Database System ("CDBS") Electronic Filing System; (2) require, regardless of the MDCL control technology employed, that the AM station's transmitter must achieve full licensed power at some audio input level, or when the MDCL control technology is disabled; and (3) require an AM station using MDCL control technology to disable it before field strength measurements on the station are taken by the licensee or others.

37. Most commenters support this proposal,[97] although support was in some cases muted,[98] with some commenters noting that the benefits of MDCL control technologies may be minimal, or the technologies may even detract from audio fidelity in some situations.[99] MMTC, while supporting the proposal, notes that the technologies' benefits are limited to newer-model transmitters.[100] Only three commenters opposed this proposal. Pavlica believes MDCL technology should not be used on AM due to the difficulty in analog tuning to an AM station using MDCL during silent periods, especially when using a receiver's "seek" and "scan" functions,[101] suggesting that we should instead require a one-minute period of standard fully modulated licensed analog power at the top and bottom of the hour, thus enabling listeners on legacy analog AM radios to tune in clearly every 30 minutes.[102] CTI, like MMTC, notes the limited value of MDCL in older AM transmitters, and opines that a licensee's return on investment after buying a new transmitter that can fully utilize MDCL technology may be minimal. CTI's principal concern is that third-party MDCL products – those not made by the transmitter manufacturer – have the potential for causing interference, and that if we are to allow such technologies we must guard against interference.[103] Word Power states that operators should use all their authorized power, or else should apply for reduced power.[104]

38. Others commented on other aspects of MDCL operation, in particular with regard to potential third-party MDCL products to be used with transmitters. NRB opines that if the manufacturer of MDCL technology is different than the manufacturer of the AM station's transmitter, the transmitter

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[96] *Id*.

[97] *See*, *e.g*., IHM Comments at 16; NPR Comments at 3; NAB Comments at 18-19; K&G Comments at 6; Crawford Comments at 6: MBA Comments at 5; Cavell Comments at 5; DLR Comments at 3; PRBA Comments at 3; AFCCE Comments at 6; Butte Comments at 5; Flick Comments at 2; H&D Comments at 3; Burrow Comments at 3; Fybush Comments at 12; Potter Reply at 7; Nathan Goossen ("Goossen") Reply at 2. *See also* NABOB November *ex parte* at 2.

[98] *See, e.g.*, WGTO Comments at 9 (observing that MDCL most useful for AM stations with less than 10 kW power).

[99] *See* NRB Comments at 10 (implementation should be left to individual stations, but MDCL may decrease AM listenership by further diminishing audio fidelity); Vobbe Comments at 5 (supports but questions whether this is "AM revitalization," as it does not improve public service, only lowers energy bills); Henry Comments at 3 (expressing concern about audio quality, and suggesting that the Commission create a measurement standard to ensure optimal MDCL operation).

[100] MMTC Comments at 17-18.

[101] Pavlica Comments at 5-6.

[102] *Id*.

[103] CTI Comments at 3.

[104] Word Power Reply at 2.

manufacturer should certify the MDCL product for compliance.[105] Mt. Wilson suggests that we take a position on third-party MDCL use that "clearly provides protection to broadcasters from potential interference."[106] Humphrey supports the proposal but suggests the Commission consider eliminating the 125 percent positive peak modulation limit.[107] Randy D. Gehman ("Gehman") suggests the Commission authorize 150 percent or higher positive peak asymmetrical modulation to help override noise, and also suggests that the Commission "facilitate research" into modulation methods that increase sideband energy.[108] iBiquity generally supports the proposal, but disagrees that stations broadcasting in hybrid digital mode should be required to reduce their digital signal, based on independently conducted studies. Stating that reductions in analog power can potentially drive the digital signal below the noise floor in the AM band, iBiquity proposes that the Commission allow broadcasters to maintain their digital power levels even if they choose to use an MDCL technology that reduces analog power.[109]

39. *Discussion*. We adopt this proposal as set forth in the *NPRM*. AM stations must electronically notify the Media Bureau of the station's MDCL control operation within 10 days after commencement of such operation using FCC Form 338 – AM Station MDCL Notification, available in the CDBS Electronic Filing System. Although some commenters question the value of MDCL control technologies, they appear to agree that the decision on whether to use such technologies should rest with the individual broadcaster. Commenters such as MMTC are correct that, for the moment at least, MDCL control technologies are available only to broadcasters using newer-model transmitters. For this reason, we are reluctant to impose additional requirements regarding certification of third-party MDCL products. We will continue to hold broadcasters responsible for their signals, and for any interference resulting from those signals (interference that, we note, has not to this point been reported from those broadcasters currently employing MDCL control technologies). We may, of course, revisit this position if interference from third-party MDCL products becomes a problem but, again, it would be up to the broadcaster employing such a product to remedy the situation should interference arise. We see no reason to raise the modulation limits set forth in Section 73.1570(b)(1),[110] as suggested by Humphrey and Gehman, as we have had no reports of difficulties adhering to those limits by those broadcasters currently using MDCL control technologies. As for iBiquity's concerns, we note that we have no requirement that AM stations operating in hybrid IBOC mode, using MDCL control technologies for their analog AM signals, concomitantly reduce their digital signal levels. The default for any broadcast station is to operate at full licensed power; there is no reason for a station to reduce that power if it opts not to do so.

40. We reiterate that the Commission's proposal did not introduce a new operating mode to AM broadcast, but rather was intended to reduce the burden on those stations wishing to employ MDCL control technologies by eliminating the need to seek authorization from the Commission. Unless and until we learn of difficulties, such as increased inter-station interference, caused by these technologies, we decline to impose any further rule changes with regard to MDCL operation.

F. MODIFY AM ANTENNA EFFICIENCY STANDARDS

41. *Background*. In the *NPRM*, the Commission discussed MMTC's Radio Rescue Petition, in which MMTC argued for the elimination of the Commission's minimum efficiency standards for AM transmission systems, replacing them with a "minimum radiation" standard. In MMTC's view, the minimum efficiency standards are often a hindrance to AM broadcasters, because they require a certain

[105] NRB Comments at 10. *See also* UNSP Comments at 6.

[106] Mt. Wilson Comments at 2. Other commenters stressing that we should protect broadcasters from potential interference due to MDCL implementation are Porter County (Comments at 3) and CTI (Comments at 3).

[107] Humphrey Comments at 7.

[108] Gehman Comments at 3.

[109] iBiquity Comments at 3-5.

[110] 47 C.F.R. § 73.1570(b)(1).

height antenna and length of ground radials for a station at a given frequency, which can cause difficulties in finding compliant sites for towers and ground systems. MMTC argued that an AM broadcaster should be able to use a less efficient – but also less space-intensive – transmission system, driving the system with more power to offset the lack of efficiency.

42. The Commission observed that MMTC's proposal lacked specifics as to the appropriate replacement "minimum radiation" standard, noting that our Rules contained similar provisions for applicants seeking to avoid the minimum antenna efficiency standards.[111] The Commission also stated that it did not believe the record was sufficiently developed to propose wholesale rule changes to the minimum antenna efficiency standards.[112] In order to provide some relief to AM broadcasters finding it increasingly difficult to locate rule-compliant antenna sites, however, the Commission proposed to reduce the AM antenna efficiency standards by 25 percent. The Commission also encouraged commenters, to the extent that they agree with MMTC that the antenna efficiency standards should be replaced, to provide specifics as to any proposed replacement or alternative standard for AM transmission systems, including radiation and/or field strength standards, antenna input power, and minimum specifications for AM towers and ground systems, and the respective potential costs and benefits of such proposals.[113]

43. While the majority of commenters agree that AM antenna efficiency standards should be reduced or eliminated,[114] few provided the specific input requested. Many commenters simply state that the efficiency standards should be relaxed or eliminated altogether, couching it as solely a business decision by the broadcaster whether to expend extra funds to power the antenna system.[115] Others add the proposed qualification that any antenna system may be used, as long as it does not interfere with other stations.[116] Some commenters generally support relaxation of the standards but add cautions. For

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[111] *NPRM*, 28 FCC Rcd at 15238 and n.108. 47 C.F.R. § 73.189(b)(1) states that good engineering practice requires an AM applicant either "to install a new antenna system or to make changes in the existing antenna system which will meet the minimum height requirements, or submit evidence that the present antenna system meets the minimum requirements with respect to field strength, before favorable consideration will be given thereto." Additionally, 47 C.F.R. § 73.189(b)(5) allows an applicant contending that the required antenna efficiency can be obtained with an antenna of height or ground system less than the minimum specified to supply a field strength survey demonstrating that the field strength at a mile without absorption fulfills the minimum requirements.

[112] *NPRM*, 28 FCC Rcd at 15239.

[113] *Id*.

[114] *See*, *e.g.*, NPR Comments at 2-3; Rama Comments at 1; Meuser Comments at 4 (should eliminate for all except Class A stations); Sellmeyer Comments at 4; Worldwide Antenna Comments at 1 (reduction of standards by 25 percent as proposed will encourage development of alternative antenna systems that do not require ground systems); Wright Comments at 1; Bittner Reply at 3 (should allow something between a Travelers' Information Service ("TIS") station and current standards; station's existence is more important than technical rules); K&G Reply at 3; Timothy Cutforth ("Cutforth") Reply. *See also* NABOB November *ex parte* at 2.

[115] *See*, *e.g.*, Broadcast Warning Working Group ("BWWG") Comments at 6; Flick Comments at 2-3; MBA Comments at 5 (tower height decisions should be made using "enlightened self-interest" weighing local zoning, cost, and coverage factors); PRBA Comments at 3; Fybush Comments at 12-13 (antenna input power and efficiency should be up to the broadcaster; relaxation of standards should also include "non-standard" antenna types, like roof-mounted and shunt-fed antennas); Kintronic Reply at 8-9.

[116] *See*, *e.g.*, AFCCE Comments at 6-7 (should retain only such efficiency standards as are necessary to "insure stability and predict interference, in recognition that existing community coverage requirements will still insure adequate signal coverage."); Butte Comments at 5-6 (should allow short towers, but station must abide by any standards the Commission imposes on such inefficient radiators); Cavell Comments at 5 (broadcaster should be able to make its own decision as to power and antenna system, provided RF exposure and inter-station interference criteria can be reasonably satisfied); DLR Comments at 3-4 (broadcaster should have complete flexibility as to transmission system and location; only concern should be avoiding interference to other stations, which can be achieved by requiring that allocation studies be based on minimum efficiency standards where actual radiation efficiency, whether due to tower height or ground system restrictions, or both, is expected to be lower); Vobbe

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example, IHM warns of the problem of high-angle skywave radiation from short antennas,[117] although DLR presents data disputing this contention.[118] CTI describes how antenna stability and bandwidth decrease with radiator height, and suggests some potential solutions and areas for further study.[119] Kidd contends that inefficient systems should be allowed only if an efficient, rule-compliant system is not feasible.[120]

44. A few commenters present more detailed ideas. H&D supports elimination of current minimum efficiency rules, suggesting that AM antenna systems should be authorized based on inverse distance fields calculated by "appropriate engineering methods."[121] H&D further states that we should require a minimum allocation value to prevent proliferation of very low effective radiated power stations; otherwise, licensees should be allowed to use antennas of lower efficiency if desired, due to the constraints of site availability and local land use restrictions.[122] Henry recommends that we require a specified inverse field that must be attained at one kilometer from the transmitter site for a given class of service, but does not suggest what field values we should use.[123] Anderson would have us reduce the current efficiency standards by 50 percent, would permit a 200-foot tower and 200-foot ground system at 540 kHz, and equivalent electrical heights at higher frequencies, compensating for coverage with higher power.[124] Crawford supports the proposed 25 percent reduction in efficiency standards, stating that this will provide some relief, while not being so inefficient as to produce unstable patterns or too many problems with excessive RF radiation near the transmitter.[125] SBE likewise concurs in the proposal to

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Comments at 6 (while rule-compliant efficient antennas may be needed in larger markets, in smaller markets inefficient antenna systems should be allowed as long as they do not cause interference; compares to the Traffic Information Service, where inefficiently radiated signals perform a public good); Mt. Wilson Comments at 2-3 (short towers and ground systems should be allowed as long as they are not unstable and thus cause interference); NRB Comments at 11-12 (reduction in minimum field strength values should be considered as long as reduction in field strength does not decrease signal strength quality within prescribed distance from transmitter site; endorses "approved alternatives to erecting tall tower that still meet radiation efficiency standards," such as Kintronic antenna); Porter County Comments at 3 (supports relaxation of standards as long as "resulting decrease in efficiency does not cause instability resulting in interference to other stations."); Flick Comments at 3 (Commission should allow any radiator as long as it meets horizontal coverage requirements, and can be shown through modeling or measurement not to produce skywave radiation more than 35 degrees – or some other reasonable figure – above the horizon to any greater level than would a quarter-wave radiator at the same nominal power level); RAMS Comments at 3 (should relax as long as broadcaster can meet a mV/m standard); Osenkowsky Comments at 2 (as long as no interference is created); WGTO Comments at 9-10 (should allow any antenna system as long as efficiency can be calculated to a degree of accuracy required for a proper showing; must be careful of increased near-field intensity due to increased power, however, and possible interference to nearby "domestic systems"); IHM Reply at 10-11 (stations should have complete flexibility in antenna system design, but station should provide allocation studies based on minimum efficiency standards demonstrating that no new interference is created).

[117] IHM Comments at 10.

[118] DLR Reply at 7-8.

[119] CTI Comments at 4. CTI states that elevating the tower feed point can reduce ground losses, and also suggests that rooftop mounting and use of short, helically wound antennas like the Valcom antenna may merit further study. It also notes that less-efficient antennas are likely more useful in non-directional settings, as mutual coupling in directional arrays can reduce antenna impedance, resulting in instability and the need to constantly monitor and adjust the antenna system.

[120] Kidd Comments at 7-8.

[121] H&D Comments at 3.

[122] *Id*. H&D also notes that current international agreements do not contain minimum AM efficiency standards.

[123] Henry Comments at 4.

[124] Anderson Comments at 2; Anderson Reply at 2.

[125] Crawford Comments at 6-7.

reduce the efficiency standards by 25 percent. While agreeing with MMTC's contention that efficiency is irrelevant as long as minimum radiation is achieved, SBE also cautions that complete abandonment of antenna efficiency and height standards is undesirable, as shorter radiators tend to be difficult to match to a transmitter, can result in unacceptable occupied bandwidth, and produce higher levels of skywave radiation.[126] Sawyer states that stations proposing operation with less than current radiation requirements as derived by Figure 8 of Section 73.190 of the Rules should be required to determine the radiation value via field strength measurements, with the value noted in CDBS and on the station license.[127]

45. There are also parties who oppose the proposal or any effort to relax the AM antenna efficiency standards. DeLaHunt states that, while this proposal appears at first to have merit, over time the use of inefficient radiators will result in inefficient use of spectrum.[128] Potter notes that shorter radiators can be unstable given seasonal variations in temperature and soil moisture, and can produce high take-off angles increasing skywave interference. While conceding that there are some non-traditional antenna designs (e.g., Kintronic, Valcom) that meet efficiency standards at some, but not all frequencies, overall Potter states that those standards exist for the good of the AM service.[129] CDE opposes the proposal because it believes it is unclear how it could be implemented while still satisfying current international agreements.[130] Arroyo believes that reducing efficiency standards will reduce coverage.[131] Clifton defends current efficiency standards, contending that shorter antennas would create more skywave interference.[132] We note again that interference is a common complaint among commenters, and interference from one AM station to another is, unlike some other forms of interference, a source within our control. UNSP, while not explicitly opposing the proposal, notes that the physics of AM broadcasting "require certain realities in the tower structures and ground systems," and that while alteration of the rules might produce cost savings, they might also harm frequency integrity to the broadcaster's detriment.[133] Additionally, as noted above, some of those generally supporting the idea of relaxing antenna efficiency standards offer cautions about the potential problems of operating without regard to such standards.[134]

46. *Discussion*. We adopt the proposal as set forth in the NPRM, reducing the existing AM antenna efficiency standards by 25 percent as a means to provide relief to AM broadcasters. While some commenters espouse an "anything goes" approach to AM antenna efficiency standards,[135] and a smaller number believe that these standards should be retained as they currently exist, the majority of commenters appear to favor the relaxation or elimination of such standards only to the extent that they do not cause interference to other AM stations. Given the oft-expressed concerns about interference to AM stations from various sources, the need to limit such interference dictates caution in our approach. We also note

[126] SBE Comments at 6-7. *See also* CRA Reply at 7 (supports SBE comments but would reduce efficiency standards by 50 percent rather than 25 percent; also proposes authorization of compact antennas such as the Valcom for all frequencies, not just higher frequencies).

[127] Sawyer Comments at 6. *See* 47 C.F.R. § 73.190 Figure 8.

[128] DeLaHunt Comments at 3.

[129] Potter Comments at 9.

[130] CDE Comments at 6.

[131] Arroyo Comments at 2.

[132] Clifton Comments at 2. *See also* Word Power Comments at 2.

[133] UNSP Comments at 6-7.

[134] *See supra* paragraph 43 and notes 117, 119.

[135] *See, e.g.*, Flick Comments at 2 ("Should a licensee choose to use a 4 foot pole, with a 4 foot radial ground system, requiring him to produce 100 kW to meet a 1 kW coverage area, of what concern is that to the Commission, the general public, or other licensees?").

that no commenters propose a specific radiation standard that would supplant the current AM antenna efficiency rules, thus the record does not support the wholesale replacement of those rules.

47. We do, however, agree that any further update to our AM antenna efficiency rules would benefit from real world data. For example, Flick, in his comments, suggests that we grant experimental waivers to AM broadcasters who propose facilities that do not conform to the current rules on antenna efficiency.[136] Data gathered from such non-conforming operation would help to provide a record on which to base consideration of further reductions in, or even elimination of, antenna efficiency standards.

48. We therefore direct the Media Bureau to entertain requests by existing AM broadcasters for experimental authorizations to operate with antenna systems that do not meet the modified antenna efficiency rules, provided that they can establish that such operation will not increase interference to other domestic or international AM stations and can demonstrate the stability of such systems. Such applications may be made by informal application pursuant to Section 5.203 of our Rules,[137] and shall be subject to the monitoring and reporting requirements in that section and such other conditions as the Bureau may require.

IV. FURTHER NOTICE OF PROPOSED RULE MAKING

A. MODIFY AM PROTECTION STANDARDS

1. Change Nighttime and Critical Hours Protection to Class A AM Stations

49. *Background*. In the NPRM, the Commission invited additional recommendations for rule changes to help revitalize the AM service. A number of commenters advocate reducing day and nighttime protection afforded to Class A AM stations.[138] Several commenters suggest reducing or eliminating critical hours protection afforded to Class A stations.[139] These stations operate at up to 50 kW of power, day and night, and have large extended service areas, especially at night when skywave propagation allows signals to travel hundreds of miles.[140]

50. The protection afforded Class A stations, especially at night, is the source of concern to many AM broadcasters. During daytime hours, over 200 licensed Class B and Class D AM stations are required to reduce power and/or change to a directional antenna system to meet the required critical hours protection afforded to Class A stations. As discussed in paragraphs 26 and 27, above, during nighttime hours – if permitted nighttime operation at all – other stations often must invest in complex directional arrays to protect one of the 73 Class A stations,[141] and/or must substantially reduce their power, sometimes resulting in their having only secondary nighttime facilities, i.e., Class D AM stations, which are those permitted to operate with less than minimum facilities that are not protected by other co- and adjacent-channel nighttime stations. Even for those Class B stations that are protected from interference by other AM stations at night, this often results in sub-standard nighttime coverage, in order to protect the

[136] *Id*. at 3.

[137] 47 C.F.R. § 5.203.

[138] 47 C.F.R. § 73.21(a)(1).

[139] 47 C.F.R. § 73.187(a)(1). Critical hours are the two-hour period immediately following local sunrise and the two-hour period immediately preceding local sunset.

[140] Class A stations located in the continental United States are protected during the day to their 0.1 mV/m groundwave contour by co-channel stations, and to their 0.5 mV/m groundwave contour by adjacent channel stations. 47 C.F.R. § 73.182(a)(1)(i)(A). At night, these stations are protected to their 0.5 mV/m-50 percent skywave contour by co-channel stations, and to their 0.5 mV/m groundwave contour by adjacent channel stations. 47 C.F.R. §§ 73.182(a)(1)(i)(B); 73.182(q). All Class A stations are protected to their 0.1 mV/m groundwave contour during critical hours. 47 C.F.R. § 73.187(a)(1).

[141] 57 Class A stations are in the continental United States, while 16 are in Alaska. Per 47 C.F.R. § 73.182(a)(1)(ii), Alaskan Class A stations receive different nighttime protection than mainland Class A AM stations.

secondary service area of a larger station a considerable distance, and often many states away. Commenters argue that they could provide better service, with more power to overcome the local noise floor, if the protections to Class A stations were relaxed.[142]

51. Class A stations have traditionally provided wide-area service to different regions of the United States, including rural areas, and to travelers driving through their relatively large coverage areas. The high power and large extended service areas of these stations have also proved invaluable in emergencies,[143] as when Entercom Communications and commenter IHM combined resources during Hurricane Katrina and its aftermath, broadcasting over six area stations with Class A WWL in New Orleans as the flagship station.[144] Other commenters, however, note that the utility of high-powered, wide-area AM stations has waned since the early days of radio, when the FM service was nonexistent or underutilized, more of the population lived outside of major metropolitan areas, and there were significantly fewer media choices than there are today.[145] Because of this, many commenters believe that the current protection afforded to Class A stations should be reduced, in order to allow other, more local stations to add or increase day and nighttime power to their listening areas.[146]

52. The advocates of reduced protection to Class A stations have differing views on exactly how to change the protection rules. Most appear to suggest eliminating nighttime skywave protection to Class A stations, and reducing the groundwave protection. There were multiple suggestions about the appropriate level of contour protection. For example, both DLR and PRBA propose protecting Class A stations to their 0.5 mV/m groundwave contour both day and night,[147] while Porter County suggests protection to the 2.0 mV/m groundwave contour, both day and night.[148] Commenters also propose modifications to critical hours protections.[149] Two commenters suggest that the protection of Alaskan Class A stations be reduced.[150]

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[142] *See*, *e.g.*, Crawford Comments at 7 ("While there likely are a few listeners that continue to listen to skywave signals of class A stations, that listening comes at the expense of huge numbers of listeners that are excluded from the night interference-free contours of class B and class D stations that must reduce power, employ deeply-nulled directional patterns or go off the air altogether to protect those class A skywave contours. Eliminating class A skywave service protection would have the potential to eliminate the daytime-only status of many AM stations, allowing those stations to provide 24-hour service to their communities.")

[143] *See* Fybush Comments at 18.

[144] *See*, *e.g.*, Jeff May, "New Orleans' Radio Carries Through Stormy Times," *Houston Chronicle*, Sept. 5, 2005, available at http://www.chron.com/news/hurricanes/article/New-Orleans-radio-carries-through-stormy-times-1671510.php.

[145] *See*, *e.g.*, Bryan Comments at 2; Crawford Comments at 7; DAIJ Comments at 7.

[146] *Id*. *See also*, *e.g.*, WGTO Comments at 11; Dybas Comments; DLR Comments at 6; Missouri Comments at 6. *See also* NABOB November *ex parte* at 1.

[147] DLR Comments at 5-6; PRBA Comments at 4-5.

[148] Porter County Comments at 4. Other proponents include MBA Comments at 6 (protect to the 1 mV/m groundwave contour daytime, 0.5 mV/m groundwave contour night), RAMS Comments at 3 (protect to the daytime 0.5 mV/m contour and nighttime 2.0 mV/m contour), Brown Comments at 9 (eliminate skywave protection, only protect to nighttime 1.0 mV/m groundwave contour), DAIJ Comments at 7 (change nighttime protection to the 0.5 mV/m groundwave contour), Todd Comments at 2 (protect to double the Class A station's daytime coverage radius at night), Dybas Comments (limit Class A stations to 10 kW power at night), and H&D Comments at 4-5 (protect to the 1.0 or 2.0 mV/m groundwave contour, determined by RSS calculations). *See also* CTI Comments at 5 (protect to 2.0 mV/m groundwave contour at night for both co-channel and first adjacent-channel stations).

[149] *See* DLR Comments at 5-6; NAAMB Comments at 13-15; Word Power Reply at 1. H&D and Sellmeyer recommend modification of the skywave field strength formulas used to determine the required Class A critical hours protection. H&D Comments at 5-6; Sellmeyer Comments at 11. On the other hand, Burrow and Gehman

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53. Opposition to these commenter proposals comes chiefly from IHM, which states that Class A stations are among the only AM stations that garner substantial listenership.[151] It produces an analysis indicating that Class A AM stations would lose from eight to 90 percent of their daytime audience reach – an average of 46 percent – if the daytime protection for such stations was changed from the 0.1 mV/m to the 0.5 mV/m contour.[152] IHM subsequently stated that an analysis of Nielsen rating data indicated that approximately 600,000 existing listeners of Class A AM stations in the continental United States, representing over three million listening hours per week, would lose protected service if Class A AM station protection were reduced to the same level as that for Class B AM station.[153] IHM also argues that reducing the nighttime protection from the 0.5 mV/m-50 percent skywave contour to the 0.5 mV/m groundwave contour would have an impact on listeners in rural areas, where noise floors are low.[154] It further contends that reductions in protection would result in "beat frequency" phenomena, which cause perceived lower volume, and concomitant losses in listenership and increased listener complaints.[155] Opponents also include Fybush, who not only advocates retaining protection to Class A stations but asks us to investigate authorizing 100 kW stations;[156] and Pavlica, who urges us to consider allowing certain Class A stations to become "megastations" authorized at up to one megawatt in power.[157]

54. *Discussion*. IHM, licensee of 18 Class A stations, urges caution in taking any steps to reduce protection standards and thus diminish the extensive coverage area afforded the Class A stations both daytime and nighttime. Other commenters are adamant that the availability of many media voices in most areas of the United States has rendered the large protected Class A station coverage unnecessary, and that such protection decreases the availability of local broadcast voices. The tradeoff appears to be whether we should take steps that would deprive Class A stations of listeners far outside of their primary service areas, if those steps would allow substantial numbers of other stations to improve their service, both day and night, to their communities of license and adjacent areas.

55. While the wide-area service of Class A stations has historically proved to be beneficial, the Commission has seen fit in the past to reduce protection to their skywave service.[158] In the *1980 Clear*

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suggest elimination of Class A station protection during critical hours. Burrow Comments at 4; Gehman Comments at 14.

[150] H&D and Sellmeyer advocate eliminating Alaskan Class A status, stating that Alaskan stations should be protected to their 1 or 2 mV/m groundwave contour based on RSS rather than a single signal. *See* H&D Comments at 5; Sellmeyer Comments at 9. Burrow, on the other hand, suggests we "increase and standardize" the Alaskan protected skywave contour. Burrow Comments at 2.

[151] IHM Comments at 16-17.

[152] IHM Reply at 12-14 and Attachment 1.

[153] Letter to Marlene Dortch, Secretary, from Marissa G. Repp, Esq., counsel for IHM, at 1 (May 13, 2015) ("IHM May *Ex Parte* Letter") (accessible at http://appsint.fcc.gov/ecfs/comment/view?id=60001031543).

[154] *Id*. at 13-14.

[155] IHM Comments at 17. IHM states that these phenomena occur when stations occasionally neglect to reduce power at sunset to protect existing Class A stations. *See also* IHM May *Ex Parte* Letter at 2.

[156] Fybush Comments at 18. Fybush argues that there are still substantial areas of the U.S. with no AM nighttime service and spotty FM service, making Class A skywave service important. While conceding that most Class A stations derive little or no economic benefit from their skywave service, he advises moving cautiously on eliminating protections to such service. *Id*. *See also* Todd Comments at 2 (Class A stations should be protected only to double their daytime service radius at night, but should not eliminate all skywave protection).

[157] Pavlica Comments at 5. *See also* NAAMB Comments at 12 (while proposing reductions in protection to Class A stations, also proposes increasing Class A power up to 100 kW day and 50 kW night).

[158] *Clear Channel Broadcasting in the AM Broadcast Band*, Report and Order, 78 F.C.C.2d 1345, 1364 (1980) ("*1980 Clear Channel Order*").

Channel Order, the Commission noted that increasing spectrum demands required that protection of such stations (then designated Class I-A stations) beyond the nighttime 0.5 mV/m-50 percent contour, as well as certain restrictions on adjacent-channel stations, be abolished.[159] In this proceeding, spectrum scarcity is not the problem as much as is the need for existing AM stations to overcome an increasing noise floor that inhibits local service, both day and night. While reducing protection to a Class A AM station may, in fact, reduce the coverage of that station, the areas of reduced coverage would be located at great distances from the transmitter and from the metropolitan area that constitutes the station's primary service area. At the same time, the reduction in protection may well allow power increases for other stations, enabling them better to serve their communities and, in the case of some stations, allowing for the first-ever fulltime AM service to those communities. Our goal of localism suggests that service from a local news and information source should be preferred over better reception of a more distant signal.

56. We tentatively conclude, therefore, that (1) all Class A stations should be protected, both day and night, to their 0.1 mV/m groundwave contour, from co-channel stations; (2) all Class A stations should continue to be protected to the 0.5 mV/m groundwave contour, both day and night, from first adjacent channel stations; and (3) the critical hours protection of Class A stations should be eliminated completely. We seek comment on these proposals. Specifically, we seek comment on the populations that would lose service from Class A stations under this proposal and, to the extent ascertainable, whether such populations currently avail themselves of the service that would be lost. We also seek data on areas and populations in the United States, if any, that receive service only from Class A AM stations, whether day or night. Conversely, we request specific comment as to the numbers of stations that would be able to increase power, daytime and nighttime, under our proposal and what populations would gain service from those power increases.

57. Also, we would appreciate technical comment concerning the net effect on listeners that could result from the combination of reduced protection to Class A stations and power increases by co- and adjacent-channel stations that this proposal would allow. Would, in fact, such power increases cause more loss of service to listeners of Class A stations than gains in such service to listeners of upgrading stations?[160] Would current listeners of Class A skywave service, not located near stations able to avail themselves of power increases due to this proposal, nevertheless experience a reduction in skywave service from Class A stations? Would the proposed changes disproportionately affect listeners in rural and/or tribal areas? What effects, if any, would changes in protection to Class A stations have on EAS Primary Entry Point stations during emergencies?[161] Alternatively, should we consider another level of protection to Class A stations, whether greater or less than that proposed and, if so, what should that protection be? We seek comment also on whether critical hours protection, if not eliminated, should alternatively be modified? Finally, we seek comment on any costs that are likely to result from adoption of these proposals or from any alternatives proposed by commenters.

2. Change Nighttime RSS Calculation Methodology

58. *Background*. Several commenters also proposed changes to the methodology used to predict nighttime root-sum-square ("RSS") values of both interfering field strengths from other AM stations, and nighttime interference-free coverage. Specifically, these commenters ask that we return to the RSS prediction method in existence before the Commission's 1991 rule changes, in the same proceeding in which the Ratchet Rule was introduced.[162]

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[159] *Id*. at 1364, 1372.

[160] *See*, *e.g*., Letter to Marlene Dortch, Secretary, from Marissa G. Repp, Esq., counsel for IHM, at 2 (Oct. 1, 2015) ("IHM October *Ex Parte* Letter") (accessible at http://appsint.fcc.gov/ecfs/comment/view?id=60001303908).

[161] *Id*.

[162] *See Review of the Technical Assignment Criteria for the AM Broadcast Service*, Report and Order, 6 FCC Rcd 6273 (1991) ("*Technical Assignment Criteria*").

59. Prior to *Technical Assignment Criteria*, nighttime RSS values of interfering field strengths and nighttime interference-free coverage were based on calculating the RSS of all interfering signals using the 50 percent exclusion method.[163] Only co-channel interfering signals were considered. In *Technical Assignment Criteria*, the Commission changed our method of calculation to include adjacent-channel signals, and to use a tiered system of RSS calculations. Specifically, the approach distinguishes among high interferers – those that contribute to another station's RSS (50 percent exclusion), medium interferers that contribute to the RSS (25 percent exclusion) but not the RSS (50 percent exclusion), and low interferers that are no greater than the RSS (25 percent exclusion).[164] The high interferers were made subject to the Ratchet Rule and could not make facility changes without reducing their RSS contribution by ten percent or more; the medium interferers were allowed to make facility changes only if no increase in radiation were created; and the low interferers could increase radiation as long as the RSS (25 percent) threshold was not exceeded.

60. As was the case with the Ratchet Rule, commenters state that, despite the Commission's intentions in *Technical Assignment Criteria*, which were to decrease station-to-station interference in the AM service, in practice the effect was to stifle facility improvements, resulting in very little in the way of decreased interference. For example, commenter DLR argues that the 25 percent exclusion provisions were introduced primarily to facilitate the Ratchet Rule and would be unnecessary should that rule be repealed.[165] DLR also states that the 25 percent exclusion method complicates nighttime allocation calculations and protection requirements and reduces flexibility for AM station improvement and relocation.[166] Additionally, DLR contends that consideration of adjacent-channel stations in making interference calculations is unnecessary, claiming that the Commission instituted this rule in anticipation of wide-band AM receivers that never made it to market.[167] Other commenters concurred in the opinion that a return to the 50 percent exclusion method used prior to 1991, considering only the skywave contributions to RSS calculations of co-channel stations, would enable AM broadcasters to improve their facilities and signals and, thus, overcome the increasing noise floor.[168]

61. *Discussion*. We agree with the commenters addressing this issue that, just as with the Ratchet Rule, the 1991 nighttime skywave interference regulations were well-intentioned but, in retrospect, did not achieve their intended goals and have resulted in unintended adverse consequences. When the current approach was adopted in 1991, the Commission anticipated that the inclusion of first-adjacent channel stations in these calculations would restrict the creation of new interference and reduce

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[163] *See generally* 47 C.F.R. § 73.182. *See also Technical Assignment Criteria*, 6 FCC Rcd at 6293 n.32 ("The RSS is a mathematical procedure which involves taking the square-root of the sum of the squares of interfering signals. This is often referred to as the E_u for the subject station and represents the usable field strength for the station in the presence of interference from other stations. It is used for both interference and coverage purposes. The FCC rules require that the normally protected contour, E_{nom}, or the E_u be protected from interference, whichever is greater.") The RSS 50% exclusion method consists of considering all of the nighttime interfering signals in decreasing order of magnitude, and calculating the RSS of the interfering signals, i.e., the running RSS. When the next contributor is less than 50 percent of the running RSS, it and all lesser interferers are excluded from the sum and the calculation process stops.

[164] *Id*. at 6295-96.

[165] DLR Comments at 9.

[166] *Id*.

[167] *Id*. at 11.

[168] Commenters in favor of eliminating first-adjacent channel contributions to RSS calculations also include NAAMB Comments at 8; PRBA Comments at 7; WGTO Comments at 11; and Potter comments at 7. Those in favor of returning to the 50 percent exclusion method include AFFCE Comments at 5; CDE Comments at 8; DLR Comments at 9; H&D Comments at 4-5; Khanna Comments at 4-5; DAIJ Comments at 6-7 (also proposing that no station entering the RSS limit with 2.5 mV/m or less should be considered for allocation purposes); NAAMB Comments at 8; PRBA Comments at 6; Sellmeyer Comments at 9.

existing interference without severely limiting an existing AM station's ability to relocate and/or modify its facilities. Instead, the rules have impeded facility improvements that are more necessary now than 24 years ago, because the noise floor has increased as much as or more than station-to-station interference, and increasing signal strength to a station's primary service area has become more of a priority than maintenance of rules that offer a small return on interference reduction, compared to the burden they impose on signal improvement.

62. We therefore tentatively conclude that we should roll back the 1991 rule changes as they pertain to calculation of nighttime RSS values of interfering field strengths and nighttime interference-free service. We propose to amend Section 78.182(k) of the Rules to return to predicting the nighttime interference-free coverage area using only the interference contributions from co-channel stations and the 50 percent exclusion method. We seek comment on this proposal. Given that this issue was primarily addressed in the record to date by those commenters in favor of the change we propose, we invite in particular comment from parties with differing views, or who have technical evidence demonstrating the effects on inter-station interference of a return to the pre-1991 rules for calculating nighttime skywave interference. In addition, we seek comment on any costs that commenters believe would result from this proposal.

3. Change Daytime Protection to Class B, C, and D Stations

63. *Background*. Commenters also proposed several changes to the rules providing daytime protection to AM stations. The current rule, Section 73.37(a), specifies a 26 dB daytime desired to undesired ("D/U") protection ratio for co-channel stations, a 6 dB D/U daytime protection ratio for first adjacent channel stations, and a 0 dB daytime D/U protection ratio for second and third adjacent channel stations.[169] Commenters propose that we return to the pre-1991 0 dB daytime 1:1 protection ratio for first adjacent channels;[170] change second adjacent channel groundwave protection;[171] and eliminate third adjacent channel groundwave protection.[172] Additionally, several commenters suggest that we change the daytime protected contours for Class B, C, and D stations.[173]

64. *Discussion*. We believe that the three proposed changes listed above have merit, and we tentatively conclude that they should be adopted. The proposed 0 dB daytime 1:1 first adjacent channel protection ratio was the standard prior to 1991, and it does not appear that the post-1991 protection ratio allows for sufficient signal strength to overcome current levels of environmental noise. Likewise, given that third adjacent channel interference is relatively insignificant compared to environmental sources of interference, it appears prudent to eliminate third adjacent channel groundwave protection and change

[169] 47 C.F.R. § 73.37(a).

[170] *See* DLR Comments at 7-9; H&D Comments at 4; PRBA Comments at 6; Sellmeyer Comments at 7-9; CTJ Comments at 6; Sawyer Comments at 7; Bono Comments at 6; NAAMB Comments at 8 (conditional on elimination of hybrid IBOC); Gehman Comments at 14.

[171] *See* CTJ Comments at 6 (change second-adjacent channel protection criteria to current third-adjacent channel prohibition on 25 mV/m contour overlap); Arsenault Comments at 4 (reduce second-adjacent channel protection); Bittner Comments at 1-2 (adjust second adjacent protection should be the 5.0 mV/m to 25.0 mV/m contours).

[172] *See* PRBA Comments at 6; Arsenault Comments at 4; Sawyer Comments at 8; H&D Comments at 4; DLR Comments at 9; NAAMB Comments at 8 (largely concurs with DLR, but believes eliminating third-adjacent groundwave protection should occur only if hybrid IBOC is eliminated).

[173] Some commenters addressing this issue suggest protecting these stations to their 2 mV/m daytime groundwave contour. *See* CTI Comments at 5; H&D Comments at 4; Gehman Comments at 14 (suggests a 5 mV/m daytime primary service area, and a 2 mV/m daytime secondary service area). Others suggest either or both of the 1 mV/m or 2 mV/m groundwave contours for daytime protected service. *See* NAAMB Comments at 7 (1 mV/m for areas with population density of 1,000 per square kilometer, 2 mV/m for less densely populated areas); Sellmeyer Comments at 7 (1 or 2 mV/m groundwave contour); NAB Reply at 3 (1 mV/m rather than 2 mV/m). *But see* Mt. Wilson Comments at 3 (should preserve daytime protection at 0.5 mV/m contour).

second adjacent channel groundwave protection to match the current levels for third adjacent channel protection. These changes are designed to allow AM stations to increase power to overcome increased level of environmental noise. Changing the daytime primary service contour for Class B, C, and D stations to the 2 mV/m contour harmonizes the protection with the definition of service area that was adopted in the *Rural Radio* proceeding.[174] There, the Commission reasoned that, although the primary service area for less populous (and therefore less noisy) areas could be considered the 0.5 mV/m contour, all areas of whatever population enjoyed primary service within the 2 mV/m daytime groundwave contour.[175] Again, reducing protection to all stations to the 2 mV/m contour allows AM broadcasters greater flexibility to make station modifications designed to increase signal strength to their primary service areas.

65. We therefore propose to revise Section 73.37(a) of the Rules to reflect the aforementioned changes to daytime protected contours for Class B, C, and D AM stations. We seek comment on this proposal. Would the proposed reductions in protection result, as we believe, in greater flexibility for AM stations to improve their signals, or would they merely increase inter-station interference? Would the net effect be beneficial or harmful to AM broadcasters and listeners? To the extent possible, commenters should provide technical data in support of their arguments. In addition, commenters should discuss and, if possible, quantify any costs they believe our proposal would entail.

B. REVISE RULE ON SITING OF FM CROSS-SERVICE FILL-IN TRANSLATORS

66. *Background*. Several commenters to the *NPRM* request that we reconsider the rules established in the *2009 Translator Order* for locating cross-service fill-in FM translators.[176] Currently, such translators must be located such that the 60 dBμ contour of any such FM translator station must be contained within the lesser of (a) the 2 millivolts per meter (mV/m) daytime contour of the AM station, or (b) a 25-mile radius centered at the AM transmitter site.[177]

67. As was the case in the proceeding leading up to the *2009 Translator Order*, commenters in this proceeding argue that the current rule is too restrictive. Some commenters maintain that the 25-mile limitation is arbitrary, or that it unfairly penalizes stations located far from cities due to land costs or those that have deep nulls in their directional patterns.[178] Others advocate eliminating the 25-mile restriction and would have us allow the translator to be sited anywhere within the 2 mV/m contour.[179] Others suggest even more flexibility: Cavell asks us to seek comment on what restrictions would enable an AM station using an FM translator to achieve "signal parity" with an FM translator rebroadcasting an FM full-power station (but not beyond the AM station's 0.5 mV/m contour),[180] while NPR suggests "modest flexibility" in cross-service translator siting, in the event that the AM station were to make a

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[174] *Policies to Promote Rural Radio Service and to Streamline Allotment and Assignment Procedures*, Second Order on Reconsideration, 27 FCC Rcd 12829, 12838 (2012).

[175] *Id*.

[176] *2009 Translator Order*, 24 FCC Rcd at 9658.

[177] *Amendment of Service and Eligibility Rules for FM Broadcast Translator Stations*, Report and Order, 24 FCC Rcd 9642, 9642 (2009) ("*2009 Translator Order*"). *See* 47 C.F.R. § 74.1201(g).

[178] *See, e.g.*, National Translator Ass'n ("NTA") Comments at 2-3; Kyle Magrill Reply at 6; CTJ Reply at 3; IHM Comments at 5-6; Anderson Reply at 1; Cohen, Dippell & Everist ("CDE") Comments at 5-6; Fitzgerald Reply at 2; NAB Reply at 8; DeLaHunt Comments at 2; H&D Comments at 2 (anywhere w/in 25 miles regardless of daytime coverage); Kidd Comments at 2.

[179] *See, e.g.*, Wright Comments at 2-3; Curtis Media Group (Curtis) Comments at 2; DAIJ Comments at 3; MBA Comments at 4; K&G Comments at 3.

[180] Cavell Comments at 2.

subsequent technical change, based on rule changes adopted in this proceeding, that would put the translator station out of compliance with the site restrictions.[181]

68. *Discussion*. In the *2009 Translator Order*, the Commission adopted the current limits on siting of cross-service translators re-broadcasting AM stations, reaffirming that FM translators re-broadcasting AM stations were intended to fill service voids rather than to expand service, and that the adopted limits were to "ensure that fill-in cross-service translators are used in the AM station's core market area, rather than in a fringe area that may be part of or near another radio market."[182] However, we agree that some additional degree of flexibility is appropriate, especially given the factual situations (e.g., highly directional antenna patterns with deep signal nulls) described by some commenters. We do, however, continue to desire to limit cross-service translator use to an AM station's core market. We therefore propose to modify Section 74.1201(g) of the Rules[183] to provide that the coverage contour (1 mV/m) of an FM translator rebroadcasting an AM radio broadcast station as its primary station must be contained within the greater of either the 2 mV/m daytime contour of the AM station or a 25-mile (40 km) radius centered at the AM transmitter site, but that in no event may the translator's 1 mV/m coverage contour extend beyond a 40-mile (64 km) radius centered at the AM transmitter site. We believe that this rule provides sufficient flexibility to provide useful signal coverage, while not allowing a cross-service fill-in translator to extend the station's coverage beyond its core service area. We invite further comment on this proposal, including comment on any costs that commenters believe are likely to arise from the proposal.

C. MODIFY PARTIAL PROOF OF PERFORMANCE RULES

69. *Background*. Partial proof of performance measurements are required for AM stations using directional antennas whenever the licensee has reason to believe that the radiated fields may be exceeding the limits for which the station is authorized, and whenever minor directional antenna system repairs are made that result in certain changes to the station's licensed operating parameters. Some commenters request that Section 73.154 of the Rules,[184] the current rule governing partial proof of performance field strength measurements for AM directional antenna arrays, be modified to require measurements only on radials containing a monitoring point. Currently, the rule requires field strength measurements on all radials with a monitoring point, as well as on radials from the latest complete field strength proof of performance that are adjacent to the monitored radials, if the array has fewer than four monitored radials.[185] Proponents claim that eliminating the requirement to take measurements on non-monitored radials will reduce the cost to maintain AM directional antenna systems in working order.[186]

70. *Discussion*. We agree that the proposed reduction in measured radials would result in a cost savings for directional antenna system maintenance for AM broadcasters, and we do not believe that the proposed reduction in measured radials would result in more AM directional antenna systems being out of adjustment. We therefore tentatively conclude, and propose, that Section 73.154(a) be modified accordingly. We seek comment on this proposal, including comment on whether and to what extent the proposed rule modification would reduce costs to AM broadcasters employing directional antenna systems.

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[181] NPR Comments at 4.

[182] *2009 Translator Order*, 24 FCC Rcd at 9658-59.

[183] 47 C.F.R. § 74.1201(g).

[184] 47 C.F.R. § 73.154.

[185] *Id*., § 154(a).

[186] *See*, *e.g*., DLR Comments at 16-17; NAAMB Comments at 9; PRBA Comments at 9.

D. MODIFY RULES FOR METHOD OF MOMENTS PROOFS

71. *Background*. In 2008, the Commission adopted rules permitting use of Method of Moments ("MoM") computer modeling to verify the performance of AM station directional antenna systems. Since then, over 220 MoM directional antenna proofs of performance have been prepared by AM station licensees and their engineers and submitted to the Commission in support of AM station applications for license.

72. Based on their experience gained in the seven years since the adoption of the MoM proof rules, several technical commenters propose the following changes to the AM MoM proof rules:

- Eliminate or modify the recertification measurements requirements and removal of base sampling devices for periodic testing in Section 73.155 of the Rules.[187]
- Eliminate the requirement for reference field strength measurements (Section 73.151(c)(3) of the Rules).[188]
- Eliminate the requirement for surveying existing directional antenna arrays as long as tower geometry is not being modified and no new towers are being added to the array.[189]
- Clarify that Section 73.151(c)(1)(viii) of the Rules applies only when total capacitance used to model base region effects exceeds 250 pF and modify same to apply only when base current sampling is used.[190]
- Permit use of MoM modeling for skirt-fed towers.[191]
- Change MoM rules with regard to re-proofing when antennas are added to towers.[192]
- Eliminate requirement for current distribution measurements for top-loaded or other unusual antenna configurations when MoM or other numerical analysis method is used to determine antenna characteristics.[193]

73. *Discussion*. Based on the Commission's experience with MoM proofs over the past seven years, we believe that, except as noted below, the changes listed above are well-founded, would improve the quality of the MoM proofs submitted to the Commission, would not result in inferior adjustments of AM directional antenna arrays, and would eliminate some unnecessary expenses for directional antenna array maintenance by AM station licensees. We therefore tentatively conclude that the above-listed procedural and rule changes, with the exception of the elimination of reference field strength measurements, should be adopted, and invite comment on these changes, particularly from AM broadcasters operating with directional antenna arrays.

74. Rather than eliminate reference field strength measurements, which provide the only external verification that the array is operating properly, we tentatively conclude and propose that Section 73.151(c)(3) be modified to require reference field strength measurements when the initial license application is submitted for a directional antenna system based on computer modeling and sample system

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[187] 47 C.F.R. § 73.155. *See*, *e.g*., DLR Comments at 19-20; H&D Comments at 8-9; NAAMB Comments at 9.

[188] 47 C.F.R. § 73.151(c)(3). *See* H&D Comments at 8-9.

[189] *See*, *e.g*., DLR Comments at 20-21; H&D Comments at 8-9; Sellmeyer Comments at 13. *But see* NAAMB Comments at 10 (favoring retention of surveying requirements).

[190] 47 C.F.R. § 73.151(c)(1)(viii). *See*, *e.g*., DLR Comments at 21-22; H&D Comments at 8-9; NAAMB Comments at 10; Sellmeyer Comments at13.

[191] *See* H&D Comments at 8-9; Sellmeyer Comments at 12.

[192] *See* DLR Comments at 22; NAAMB Comments at 10.

[193] *See* H&D Comments at 8.

verification. Subsequent licenses for the same directional antenna system and physical facilities will not require submission of new reference field strength measurements. We seek comment on whether, instead of eliminating recertification measurements, we should modify the rules to require them within a specific time period near, but prior to, the submission of the station's license renewal application, or at some other time interval. What constraints should we impose on the physical model of a skirt-fed antenna element in the MoM computer program? Due to the complexity of modeling a skirt-fed tower, should we require use of specific MoM software to model them? What requirements should we specify for sampling systems for skirt-fed antenna elements? What costs, if any, are likely to arise as a result of any of the foregoing proposals?

E. REQUIRE SURRENDER OF LICENSES BY DUAL EXPANDED BAND / STANDARD BAND LICENSEES

75. *Background*. In the proceeding that included *Technical Assignment Criteria*, the Commission adopted rules and procedures for initial licensing of stations in the 1605-1705 kHz AM band ("Expanded Band"). In opening up the Expanded Band, the Commission's intent was to selectively open the ten Expanded Band frequencies to those existing AM stations that most significantly contributed to congestion and interference in the standard AM band, removing interference from the standard band and providing those stations with more robust, interference-free service in the Expanded Band.[194] To ease the financial uncertainty of migrating to the then-new and untested Expanded Band, the Commission established a five-year transition period, during which migrating stations would hold licenses in both the Expanded Band and standard AM band, and could simulcast programming over both.[195] After the five-year transition period, each dual-station licensee would be required to surrender either its standard band or its Expanded Band license.[196]

76. The Commission has never abandoned the requirement that the dual standard/Expanded band stations relinquish one of their authorizations,[197] and many such stations have done so.[198] The 25 remaining such station pairs, listed in Appendix F, negate the intent of *Technical Assignment Criteria* to reduce interference in the standard AM band, and their retention of both authorizations disserves the other licensees who complied with the relinquishment requirement. Moreover, as seen below in the *Notice of Inquiry*, we are seeking comment as to whether and how to open the Expanded Band to more AM broadcasters.

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[194] *Technical Assignment Criteria*, 6 FCC Rcd at 6276, 6310.

[195] *Id*. at 6319-20. The five-year period was set forth in a condition to each Expanded Band license, and began to run as of the date of initial licensing in the Expanded Band.

[196] *Id*. at 6320.

[197] *Id*. There have been isolated exceptions to this policy in unique factual situations. For example, the Media Bureau approved the assignment of Expanded Band KYHN, Ft. Smith, Arkansas, from Capstar TX LLC (also licensee of standard band KWHN, Ft. Smith, Arkansas) to MMTC Broadcasting LLC. File No. BAL-20100706JZM; *see Capstar TX LLC and MMTC Broadcasting LLC*, Letter, Ref. No. 1800B3-TSN (MB Oct. 21, 2010). In that case, KYHN was silent and had sustained flood-related damage, and the Bureau reasoned that Capstar's donation of the facility to MMTC, which planned to use KYHN to train women and minority group members in broadcasting and broadcast management, advanced the diversity goals set forth in the pending proceeding *Promoting Diversification of Ownership in the Broadcasting Services*, Report and Order and Third Notice of Proposed Rule Making, 23 FCC Rcd 5922, 5952-54 (2008) ("*Diversity Order*").

[198] A total of 88 Expanded Band channels were originally allotted. There were 67 applications filed for Expanded Band allotments, of which 66 construction permits were granted, with one application still pending. Licenses were granted to 54 stations that migrated from the standard AM band to the Expanded Band. Of those, 22 unconditionally surrendered their standard band licenses and remained in the Expanded Band; three conditionally surrendered their standard band licenses, and four standard band licenses were canceled by the Commission. The Commission also received one unconditional surrender of an Expanded Band authorization and one conditional surrender, and it canceled one Expanded Band license.

77. *Discussion*. Given our consideration of further utilization of the Expanded Band, along with our general concern for revitalization of the AM service, we see no justification for allowing licensee retention of high-interfering standard band stations along with the Expanded Band stations meant to replace them. We therefore tentatively conclude that any licensee with dual standard/Expanded Band authorizations, listed in Appendix F, should be required to surrender one of the two authorizations within one year of release of a future *Report and Order* in this proceeding adopting this proposal. We tentatively conclude that the required election should be made by the station licensee in writing, by letter delivered to the Office of the Secretary, with copy to the Media Bureau, Audio Division, not later than twelve months following release of a future *Report and Order* adopting this proposal, or such other date as is established in the *Report and Order* and/or in any notice delivered to the licensee by the Media Bureau. We further tentatively conclude that, should a station not make the election regarding which of the two authorizations it wishes to retain within the required time period, we should cancel their standard band authorization and require them to operate only as authorized in the Expanded Band.[199] We seek comment on these proposals, including any comments in favor of licensee retention of dual authorizations, comments on whether we should adopt a shorter or longer deadline for the required election, comments regarding the effect of such retention of dual authorizations on the AM service generally and the Expanded Band specifically, and comments on any costs associated with surrender of these authorizations.

V. NOTICE OF INQUIRY

A. UTILIZATION OF AM EXPANDED BAND

78. *Background*. In *Technical Assignment Criteria*,[200] as discussed above, the Commission established rules and policies for stations initially licensed in the Expanded Band, including technical rules.[201] For example, it decided to administer channels in the Expanded Band on an allotment basis based on fixed technical parameters, similar to allotments in the FM broadcast band, rather than on an assignment basis as in the standard band, in which the technical facilities of each station are uniquely designed to avoid interference to other stations on the band.[202]

79. A total of 88 Expanded Band channels were originally allotted, and licenses were granted to 54 stations that migrated from the standard AM band to the Expanded Band. We have already proposed above to require the remaining 25 dual standard-Expanded Band station pairs to surrender one authorization each. Now that we have some experience with actual, operating Expanded Band AM stations, we now inquire whether to open up the Expanded Band to additional stations, and under what conditions.

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[199] A number of the stations still holding dual standard band/Expanded Band authorizations have filed requests for waiver of the surrender condition and prohibition against sale of one of the authorizations found in *Technical Assignment Criteria*, 6 FCC Rcd at 6320. These include: (1) Request for Waiver of Rules Requiring Return of AM Licenses, MM Docket No. 87-267, filed jointly by AMFM Radio Licenses, LLC; Capstar TX Limited Partnership; CC Licenses, LLC; Clear Channel Broadcasting Licenses, Inc.; Entercom Kansas City License, LLC; Chisholm Trail Broadcasting Co.; Fife Communications Co., LLC; Hundley Batts, Sr. and Virginia Caples; Mid-West Management, Inc.; Mortenson Broadcasting Co. of Texas, Inc.; Multicultural Radio Broadcasting Licensee, LLC; Way Broadcasting Licensee, LLC; Starboard Media Foundation; Waitt Omaha, LLC; Independent Spanish Broadcasters Association; MMTC; National Association of Black Owned Broadcasters; Office of Communication of the United Church of Christ, Inc.; and United Broadcasting Co. ("Joint Petitioners") (Mar. 27, 2006); (2) Petition for Stay of Effective Dates, MM Docket No. 87-267, filed by Joint Petitioners (Mar. 27, 2006); (3) Request for Relief from Condition or, in the Alternative, Request for Waiver, filed by IHR Educational Broadcasting (Aug. 18, 2006); and (4) Request for Relief from License Condition, filed by Salem Media of Colorado, Inc. (Jan. 9, 2006).

[200] *See supra* note 162, 6 FCC Rcd at 6302-6323.

[201] *See generally id*. at 6311-14, 6321-23.

[202] *Id*. at 6311-14. *See* 47 C.F.R. § 73.30.

80. Several commenters remark that the Expanded Band is underutilized and should be opened up to more stations.[203] Some prefer, as before, that the Expanded Band be used for stations migrating from the standard band;[204] others believe that preference should first be given to applicants for new AM stations,[205] licensed daytime AM stations,[206] or licensed or new AM stations proposing all-digital operation.[207] Most who address the Expanded Band state that we should assign stations in that band in the same way they are assigned in the standard AM band, rather than continuing the allotment procedures currently used in the Expanded Band.[208] Commenters also urge that a station migrating from the standard band to the Expanded Band relinquish its standard band license shortly after initiating Expanded Band service.[209]

81. Although many commenters address the use of the Expanded Band in helping to revitalize the AM service, there are a number of procedural and practical decisions to be made before proposing rules for further utilization of that band. We believe that a more complete record is needed before proposing rules regarding further expansion of the 1605-1705 kHz band.

82. *Discussion*. As a threshold matter, we ask commenters whether they believe that opening the Expanded Band to further development would be beneficial to revitalization of the AM service. Assuming agreement with that premise, who should be allowed to receive authorizations in the Expanded Band? Should preference be given to new stations, to migrators from the standard band, to stations planning all-digital operation, or should some other criterion be established? If we were to open the Expanded Band to new stations, an auction filing window would need to be opened, and mutually exclusive applications would be subject to all competitive bidding procedures, including threshold Section 307(b) comparisons and possible auctions. Additionally, if we were to open the band to major modifications, any mutually exclusive groups including major modification applications would have the opportunity for settlements or technical resolutions.[210] If we were to reserve the Expanded Band for migrators from the standard AM band, should we open a window, waive the major change rule, and allow migrators to apply as minor modifications on a first-come, first-served basis, or use some other mechanism (as, for example, the initial assignment of stations to the Expanded Band by prioritizing major interferers).[211] With regard to migrating stations, we tentatively agree with those commenters who have suggested that, in the event we allow such migration, a "flash cut" from the standard band authorization to the Expanded Band operation should take place, that is, the standard band authorization would be relinquished upon commencing Expanded Band transmissions. We seek other views on this matter, however.

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[203] *See*, *e.g.*, Heller Comments at 3; RAFTT Comments at 11; Fybush Comments at 10. Additionally, some commenters suggest that we allow AM stations on 530 kHz, and establish further expanded bands. See, e.g., Sellmeyer Comments at 10; Bittner Reply at 5; BWWG Comments at 5; H&D Comments at 5 (all advocating use of 530 kHz); NAAMB Comments at 9 (use 530 kHz for digital-only stations). *See also* Heller Comments at 4 (open 1705-1800 kHz as additional AM band); NAAMB Comments at 9 (open 520 kHz and 1710-1790 kHz); Joshua Lehan Comments (1710-1800 kHz); Gilstrap Comments at 9 (expand AM broadcast band into 90- and 120-meter shortwave bands).

[204] *See*, *e.g.*, Heller Comments at 3.

[205] *See*, *e.g.*, Sawyer Comments at 6;

[206] *See*, *e.g.*, Meuser Comments at 6-7.

[207] *See* Kintronic Reply at 20-21.

[208] *See*, *e.g.*, H&D Comments at 5; DLR Comments at 16; CTJ Reply at 3-4.

[209] *See*, *e.g.*, RAFTT Comments at 13; Mullaney Reply at 2.

[210] 47 C.F.R. § 73.5002(d)(1), (2).

[211] *See Technical Assignment Criteria*, 6 FCC Rcd at 6277.

83. With regard to Expanded Band technical facilities, currently stations in the Expanded Band are allotted on a minimum distance separation standard similar to FM stations, rather than the contour-protection procedures used for standard band AM stations. As noted in *Technical Assignment Criteria*, assigning channels based on contour protection maximizes the number of stations on each channel, whereas allotting stations based on spacing was believed to promote a higher-quality technical service in the Expanded Band.[212] Commenters favoring opening up the Expanded Band overwhelmingly prefer instituting contour protection standards. We seek comment on the relative merits of each method of channel assignment or allotment. Additionally, to the extent commenters favor contour protection, they should also address whether compliance with contour protection standards should be limited to use of M3 ground conductivity for contour prediction, or should we allow use of measured ground conductivities in predicting contours?

84. We also seek comment on whether to allow other classes and powers of stations (except for Class D stations, which are no longer authorized), to the extent permitted by our international agreements, or whether we should authorize the same power (e.g., 10 kW day / 1 kW night) for all new Expanded Band stations. A related question would be whether to allow complex directional patterns in the Expanded Band or limit applications to non-directional and simple directional (i.e., no more than three-tower array) stations. If commenters were to favor limiting the Expanded Band to all-digital stations, we would seek comment as to the contour protections and allocation standards for all-digital operation. We note that, at the moment, testing is continuing with regard to all-digital (as opposed to hybrid digital) AM operations, and the record is not yet established on the technical standards needed to establish interference protection for digital-to-digital stations, much less digital-to-analog or digital-to-hybrid. The absence of a technical record leads us to believe that it may be premature to discuss limiting the Expanded Band to all-digital operation; however we welcome comments that include technical data that would further inform us on this issue.

B. RELAXED MAIN STUDIO REQUIREMENTS

85. *Background*. Section 73.1125(a) provides, in pertinent part, that "each AM, FM, and TV broadcast station shall maintain a main studio" at a location complying with paragraphs (a)(1) – (a)(3) of that section.[213] Moreover, the Commission has long held that a station must, at a minimum, maintain full-time managerial and full-time staff personnel at its main studio.[214]

86. Commenters Blount Masscom, Inc., *et al*., note that the Commission often grants waivers of the main studio requirement to NCE stations, allowing them to co-locate a station's main studio at the studio of another station licensed to the same licensee that may be outside the locations allowed by Section 73.1125(a).[215] Blount further observes that the language of Section 73.1125(d)(2) contemplates the filing of such waivers by commercial stations, although such waivers are seldom if ever granted.[216] Stating that waivers allowing AM stations to co-locate studios with co-owned stations could provide an "immediate financial shot in the arm" to AM stations under financial stress, Blount proposes that AM station owners be allowed to request such waivers, or at a minimum that certain classes of AM stations,

[212] *Id.* at 6311-12.

[213] 47 C.F.R. § 73.1125(a). The acceptable locations of a main studio are: (1) within the station's community of license; (2) at any location within the principal community contour of any AM, FM, or TV broadcast station licensed to the station's community of license; or (3) within 25 miles from the reference coordinates of the center of the station's community of license as described in 47 C.F.R. § 73.208(a)(1).

[214] *Jones Eastern of the Outer Banks, Inc.*, Memorandum Opinion and Order, 6 FCC Rcd 3615, 3616 (1991).

[215] Blount Masscom, Inc., K.W. Dolmar Broadcasting Co., Inc., Blount Communications of NH, Inc., and Blount Communications, Inc. ("Blount") Comments at 2.

[216] *Id*. at 3.

notably Class D stations, be allowed to do so.[217] Blount further proposes that AM stations without co-owned main studios available should be allowed to adopt relaxed staffing requirements, such as requiring staffing only during part of the day or week, or allowing the use of technology to permit members of the public to contact station personnel who are not physically present at the main studio.[218] It argues that the cost savings would justify such relaxed requirements, as the loss of an AM voice in the community would be more detrimental to the public than having a main studio that is not fully staffed.[219] Three other commenters support Blount's proposals.[220]

87. *Discussion*. The Commission has historically considered a station's main studio to constitute the location from which the station can adequately meet its function of serving the needs and interests of the residents of the station's community of license.[221] This includes being adequately equipped to transmit programming, having a meaningful management and staff presence, and serving as a location for the station's public file.[222] As discussed in the *First Report and Order*, we continue to emphasize a station's function of meeting the needs and interests of its community. At the same time, however, we are aware of the financial strain on many AM broadcasters. Moreover, as Blount points out, advances in technology can enable members of the community to contact station personnel without having to physically visit the main studio. These include e-mail, mobile telephones, and the Internet. In fact, we have recently proposed requiring AM and FM broadcast stations to post their public files to the Commission's online database, which would make them accessible without the need for visiting a station's offices or main studio.[223]

88. Despite these advances in accessibility to broadcast stations and their personnel, we are reluctant to eliminate main studio requirements entirely, because of the aforementioned importance of the main studio to the goal of ensuring station compliance with local service obligations. We therefore seek comment on whether, and how, to modify the main studio rule in light of our goal in this proceeding to revitalize the AM service. Should we continue to address waivers of the main studio rule on a case-by-case basis, but be more open to such requests by commercial stations that can co-locate in studio facilities used by co-owned stations in a given market? Assuming that we allow relaxation of the requirement that each station maintain a separate main studio, is there a maximum number of co-located stations that we should allow under one roof? If we were to allow co-location of two or more stations, should we further relax the requirements by allowing one or more of the stations to be located outside of the area dictated by Sections 73.1125(a)(1) through (a)(3)? If one or more co-located stations are allowed to locate outside the rule requirements, should there be an absolute restriction on the distance a co-locating station may move its studio from its community of license? Moreover, should we, as Blount suggests, relax the staffing requirement of full-time management and staff presence for AM stations that do not have co-owned stations with which to co-locate studio facilities? Should any such relaxation of staffing requirements necessarily be limited to such "stand alone" AM stations? If we were to relax staffing

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[217] *Id*.

[218] *Id*.

[219] *Id*.

[220] *See* NRB Comments at 3; Osenkowsky Comments at 2; Salem Reply at 4. *See also* Bono Comments at 2 (allow main studio to be located anywhere within 40 miles of community of license); Word Power Reply at 2-3 (no broadcaster with fewer than seven stations should be subject to any rules, including main studio rules, other than technical rules).

[221] *Amendment of Sections 73.1125 and 73.1130 of the Commission's Rules, the Main Studio and Program Origination Rules for Radio and Television Broadcast Stations*, Memorandum Opinion and Order, 3 FCC Rcd 5024, 5026 (1988).

[222] *Id*.

[223] *Expansion of Online Public File Obligations*, Notice of Proposed Rule Making, 29 FCC Rcd 15943 (2014).

requirements, what if any conditions should be put in place to ensure that members of the public could contact station personnel and receive timely responses? Should we require that local mobile phone numbers for station management and staff be posted or otherwise publicized? Should any relaxation of main studio or staffing rules be linked to a station's posting of its public file to the Commission online database? We seek comment addressing these and any other matters pertaining to AM stations' maintenance of fully staffed local main studios. In particular, we invite comment on the cost reductions that may result from modification of the main studio rule.

VI. PROCEDURAL MATTERS

A. First Report and Order

1. Final Regulatory Flexibility Analysis

89. As required by the Regulatory Flexibility Act of 1980 ("RFA"),[224] the Commission has prepared a Final Regulatory Flexibility Analysis ("FRFA") relating to this *First R&O*. The FRFA is set forth in Appendix B.

2. Final Paperwork Reduction Act of 1995 Analysis

90. This *First R&O* adopts new or revised information collection requirements, subject to the Paperwork Reduction Act of 1995 ("PRA").[225] These information collection requirements will be submitted to the Office of Management and Budget ("OMB") for review under Section 3507(d) of the PRA. The Commission will publish a separate notice in the Federal Register inviting comment on the new or revised information collection requirement(s) adopted in this document. The requirement(s) will not go into effect until OMB has approved it and the Commission has published a notice announcing the effective date of the information collection requirement(s). In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we previously sought specific comment on how the Commission might "further reduce the information collection burden for small business concerns with fewer than 25 employees."[226]

91. *Further Information.* For additional information concerning the information collection requirements contained in this *First Report and Order*, contact Cathy Williams at 202-418-2918, or via the Internet to Cathy.Williams@fcc.gov.

3. Congressional Review Act

92. The Commission will send a copy of this *First Report and Order* in a report to be sent to Congress and the Government Accountability Office, pursuant to the Congressional Review Act.[227]

B. Further Notice of Proposed Rule Making

1. Filing Requirements.

93. *Ex Parte Rules*. The proceeding this *FNPRM* initiates shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the

[224] *See* 5 U.S.C. § 604. The RFA, *see* 5 U.S.C. § 601 *et. seq*., has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 ("SBREFA"), Pub. L. No. 104-121, Title II, 110 Stat. 847 (1996). The SBREFA was enacted as Title II of the Contract With America Advancement Act of 1996 ("CWAAA").

[225] The Paperwork Reduction Act of 1995 ("PRA"), Pub. L. No. 104-13, 109 Stat 163 (1995) (codified in 44 U.S.C. §§ 3501-3520).

[226] *Rural NPRM*, 24 FCC Rcd at 5261; 74 Fed. Reg. 22498, 22505 (May 13, 2009).

[227] *See* 5 U.S.C. § 801(a)(1)(A).

Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with Section 1.1206(b) of the rules.[228] In proceedings governed by Section 1.49(f) of the rules or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

94. *Comments and Reply Comments*. Pursuant to Sections 1.415 and 1.419 of the rules,[229] interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System ("ECFS").[230]

95. *Electronic Filers.* Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.

96. *Paper Filers.* Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

97. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th Street, SW, Room TW-A325, Washington, D.C. 20554. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority Mail must be addressed to 445 12th Street, SW, Washington, D.C. 20554.

98. *People with Disabilities*. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov, or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

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[228] 47 C.F.R. § 1.1206(b).

[229] 47 C.F.R. §§ 1.415, 1.419.

[230] *See Electronic Filing of Documents in Rulemaking Proceedings*, Memorandum Opinion and Order, 63 Fed. Reg. 24121 (1998).

99. *Additional Information*. For additional information on this proceeding, contact Thomas S. Nessinger, Thomas.Nessinger@fcc.gov, of the Media Bureau, Audio Division, (202) 418-2700.

C. Initial Regulatory Flexibility Analysis.

100. The Regulatory Flexibility Act of 1980, as amended ("RFA"), requires that a regulatory flexibility analysis be prepared for notice and comment rule making proceedings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities." The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration ("SBA").

101. With respect to this *Further Notice of Proposed Rule Making* ("*FNPRM*"), an Initial Regulatory Flexibility Analysis ("IRFA") under the Regulatory Flexibility Act[231] is contained in Appendix D. Written public comments are requested in the IFRA, and must be filed in accordance with the same filing deadlines as comments on the *FNPRM*, with a distinct heading designating them as responses to the IRFA. The Commission will send a copy of this *FNPRM*, including the IRFA, in a report to Congress pursuant to the Congressional Review Act. In addition, a copy of this *FNPRM* and the IRFA will be sent to the Chief Counsel for Advocacy of the SBA, and will be published in the *Federal Register*.

D. Paperwork Reduction Act Analysis.

102. This document contains proposed new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget ("OMB") to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995 ("PRA"), Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. § 3506(c)(4), we seek specific comment on how we might "further reduce the information collection burden for small business concerns with fewer than 25 employees." Written comments on possible new and modified information collections must be submitted on or before 60 days after date of publication in the *Federal Register*. In addition to filing comments with the Secretary, a copy of any Paperwork Reduction Act comments on the information collection(s) contained herein should be submitted to Cathy Williams, Federal Communications Commission, via the Internet to Cathy.Williams@fcc.gov, and to Nicholas Fraser, OMB Desk Officer, via the Internet to Nicholas_A._Fraser@omb.eop.gov or by fax to 202-395-5167.

103. For additional information concerning the information collection(s) contained in this document, contact Cathy Williams at 202-418-2918, or via the Internet at Cathy.Williams@fcc.gov.

VII. ORDERING CLAUSES

104. Accordingly, IT IS ORDERED that pursuant to the authority contained in Sections 1, 2, 4(i), 303, 307, and 309(j) of the Communications Act of 1934, 47 U.S.C. §§ 151, 152, 154(i), 303, 307, and 309(j), that this *First Report and Order* IS ADOPTED.

105. IT IS FURTHER ORDERED that, pursuant to sections 4(i), 301, 303(r), 316, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 301, 303(r), 316, 403, this *Further Notice of Proposed Rule Making* IS ADOPTED.

[231] *See* 5 U.S.C. § 603.

106. IT IS FURTHER ORDERED that, pursuant to the authority found in Sections 1, 2, 4(i), 303, 307, and 309(j) of the Communications Act of 1934, 47 U.S.C. §§ 151, 152, 154(i), 303, 307, and 309(j), the Commission's Rules ARE HEREBY AMENDED as set forth in Appendix A.

107. IT IS FURTHER ORDERED that the rules adopted herein WILL BECOME EFFECTIVE 30 days after the date of publication in the *Federal Register*, except for Section 73.1560, which contains new or modified information collection requirements that require approval by the Office of Management and Budget ("OMB") under the Paperwork Reduction Act (PRA), and which WILL BECOME EFFECTIVE after the Commission publishes a notice in the *Federal Register* announcing such approval and the relevant effective date.

108. IT IS FURTHER ORDERED that the Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Further Notice of Proposed Rulemaking*, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration, and shall cause it to be published in the Federal Register.

109. IT IS FURTHER ORDERED, pursuant to Sections 1, 303(g), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 303(g), and 403, and Section 1.430 of the Commission's rules, 47 C.F.R. § 1.430, that this *Notice of Inquiry* IS ADOPTED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Final Rule Changes

Part 73 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

1. The authority citation for part 73 continues to read as follows:

   Authority: 47 U.S.C. 154, 303, 334, 336, and 339.

2. Add the following definition to Section 73.14:

   § 73.14 AM broadcast definitions.

   * * * * *

   Modulation dependent carrier level (MDCL) control technologies. Transmitter control techniques that vary either the carrier power level or both the carrier and sideband power levels as a function of the modulation level.

   * * * * *

3. Revise paragraphs (a)(2) and (a)(3) of § 73.21 to read as follows:

   § 73.21 Classes of AM broadcast channels and stations.

   (a) * * * * *

   (2) * * * Class B stations are authorized to operate with a minimum power of 0.25 kW (or, if less than 0.25 kW, an equivalent RMS antenna field of at least 107.5 mV/m at 1 kilometer) and a maximum power of 50 kW, or 10 kW for stations that are authorized to operate in the 1605-1705 kHz band.

   (3) * * * A Class D station operates either daytime, limited time or unlimited time with nighttime power less than 0.25 kW and an equivalent RMS antenna field of less than 107.5 mV/m at 1 kilometer. * * *

   * * * * *

4. Revise paragraph (i) of § 73.24 to read as follows:

   § 73.24 Broadcast facilities; showing required.

   * * * * *

   (i) That, for all proposals for new stations, applications to modify a construction permit for an unlicensed station, and all applications to change a station's community of license, the daytime 5 mV/m contour encompasses the entire principal community to be served. That, for all other applications for modification of licensed stations, the daytime 5 mV/m contour encompasses either 50 percent of the area, or 50 percent of the population, of the principal community to be served. That, for all proposals for new stations in the 535-1605 kHz band, applications to modify a construction permit for an unlicensed station, or applications to change a station's community of license, either 50 percent of the area, or 50 percent of the population of the principal community is encompassed by the nighttime 5 mV/m contour or the nighttime interference-free contour, whichever value is higher. That, for stations in the 1605-1705 kHz band, 50 percent of the principal community is encompassed by the nighttime 5 mV/m contour or the nighttime interference-free contour, whichever value is higher. That Class D stations with nighttime authorizations need not demonstrate such coverage during nighttime operation.

* * * * *

5. Revise paragraphs (a)(1)(ii), (a)(4), (m), and Note (2) to paragraph (m) of § 73.182; remove Footnote 1 to paragraph (q) of § 73.182, and re-number the remaining footnotes to paragraph (q), to read as follows:

§ 73.182 Engineering standards of allocation.

(a) * * * * *

(ii) Class A stations in Alaska operate on the channels allocated by § 73.25 with a minimum power of 10 kW, a maximum power of 50 kW and an antenna efficiency of 215 mV/m/kW at 1 kilometer. * * *

* * * * *

(4) Class D stations operate on clear and regional channels with daytime powers of not less than 0.25 kW (or equivalent RMS field of 107.5 mV/m at 1 kilometer if less than 0.25 kW) and not more than 50 kW. Class D stations that have previously received nighttime authority to operate with powers of less 0.25 kW (or equivalent RMS fields of less than 107.5 mV/m at 1 kilometer) are not required to provide nighttime coverage in accordance with § 73.24(i) and are not protected from interference during nighttime hours. * * *

* * * * *

(m) * * * Certain approximations, based on the curve or other appropriate theory, may be made when other than such antennas and ground systems are employed, but in any event the effective field to be employed shall not be less than the following:

Class of station	Effective field (at 1 km)
All Class A (except Alaskan) ……	275 mV/m.
Class A (Alaskan), B and D ……..	215 mV/m.
Class C ……..	180 mV/m.

* * *

Note (2): For Class B stations in Alaska, Hawaii, Puerto Rico, and the U.S. Virgin Islands, 180 mV/m shall be used.

* * * * *

(q) Normally protected service contours and permissible interference signals for broadcast stations are as follows (for Class A stations, see also paragraph (a) of this section):

Class of station	Class of channel used	Signal strength contour of area protected from objectionable interference [remove footnote reference] (μV/m)		Permissible interfering signal (μV/m)	
		Day[1]	Night	Day[1]	Night[2]
A …….	Clear …….	SC 100 AC 500	SC 500 50% SW AC 500 GW	SC 5 AC 250	SC 25 AC 250
A (Alaskan) ……	……do …….	SC 100 AC 500	SC 100 50% SW AC 500 GW	SC 5 AC 250	SC 5 AC 250
B …….	Clear ……. Regional ……	500	2000[1]	25 AC 250	25 250
C …….	Local …….	500	No presc.[3]	SC 25	Not presc.
D …….	Clear …….. Regional ……	500	Not presc.	SC 25 AC 250	Not presc.

[Remove current footnote 1]

[1] Groundwave.

[2] Skywave field strength for 10 percent or more of the time.

[3] During nighttime hours, Class C stations in the contiguous 48 States may treat all Class B stations assigned to 1230, 1240, 1340, 1400, 1450, and 1490 kHz in Alaska, Hawaii, Puerto Rico, and the U.S. Virgin Islands as if they were Class C stations.

Note: SC = Same channel; AC = Adjacent channel; SW = Skywave; GW = Groundwave

* * * * *

6. Revise paragraph (b)(2) of § 73.189 to read as follows:

§ 73.189 Minimum antenna heights or field strength requirements.

* * * * *

(b) * * *

(2) These minimum actual physical vertical heights of antennas permitted to be installed are shown by curves A, B, and C of Figure 7 of § 73.190 as follows:

(i) Class C stations, and stations in Alaska, Hawaii, Puerto Rico and the U.S. Virgin Islands on 1230, 1240, 1340, 1400, 1450 and 1490 kHz that were formerly Class C and were redesignated as Class B pursuant to § 73.26(b), 45 meters or a minimum effective field strength of 180 mV/m for 1 kW at 1 kilometer (90 mV/m for 0.25 kW at 1 kilometer). (This height applies to a Class C station on a local channel only. Curve A shall apply to any Class C stations in the 48 conterminous States that are assigned to Regional channels.)

(ii) Class A (Alaska), Class B and Class D stations other than those covered in § 73.189(b)(2)(i), a minimum effective field strength of 215 mV/m for 1 kW at 1 kilometer.

(iii) Class A stations, a minimum effective field strength of 275 mV/m for 1 kW at 1 kilometer.

* * * * *

5. Revise paragraph (a)(1) of § 73.1560 to read as follows:

§ 73.1560 Operating power and mode tolerances.

(a) *AM Stations*. (1) Except for AM stations using modulation dependent carrier level (MDCL) control technology, or as provided for in paragraph (d) of this section, the antenna input power of an AM station, as determined by the procedures specified in § 73.51, must be maintained as near as practicable to the authorized antenna input power and may not be less than 90 percent nor greater than 105 percent of the authorized power. AM stations may, without prior Commission authority, commence MDCL control technology use, provided that within 10 days after commencing such operation, the licensee submits an electronic notification of commencement of MDCL control operation using FCC Form 338. The transmitter of an AM station operating using MDCL control technology, regardless of the MDCL control technology employed, must achieve full licensed power at some audio input level or when the MDCL control technology is disabled. MDCL control operation must be disabled before field strength measurements on the station are taken.

* * * * *

APPENDIX B

Proposed Rule Changes

Part 73 of Chapter 1 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

1. The authority citation for part 73 continues to read as follows:

   Authority: 47 U.S.C. 154, 303, 334, 336, and 339.

2. Revise paragraph (a) of Section 73.21 to read as follows:

   § 73.21 Classes of AM broadcast channels and stations.

   (a) * * * These stations are protected from objectionable interference within their primary service areas. Stations operating on these channels are classified as follows:

   (1) * * * A Class A station is an unlimited time station that operates on a clear channel and is designed to render primary service over an extended area at relatively long distances from its transmitter. Its primary service area is protected from objectionable interference from other stations on the same and adjacent channels. * * *

   * * * * *

3. Remove paragraph (h) of Section 73.24 and redesignate paragraphs (i) and (j) as paragraphs (h) and (i), respectively, to read as follows:

   § 73.24 Broadcast facilities; showing required.

   * * * * *

   (h) [Remove]

   (i) [Redesignate as (h)]

   * * * * *

   (j) [Redesignate as (i)]

   * * * * *

4. Revise paragraph (a) of Section 73.37 to read as follows:

   § 73.37 Applications for broadcast facilities, showing required.

   (a) * * *

Frequency Separation (kHz)	Contour of proposed station (classes B, C and D) (mV/m)	Contour of any other station (mV/m)
0	0.005 0.100 2.0	0.100 (Class A) 2.0 (Other classes) 0.100 (Other classes)
10	0.500 2.0	0.500 (Class A) 2.0 (Other classes)
20	25.0	25.0 (All classes)

* * * * *

5. Revise paragraph (c) of Section 73.151 to read as follows:

§ 73.151 Field strength measurements to establish performance of directional antennas.

* * * * *

(c) When the application for an initial license for a directional antenna system is submitted that is based on computer modeling and sample system verification, reference field strength measurement locations shall be established in the directions of pattern minima and maxima. On each radial corresponding to a pattern minimum or maximum, there shall be at least three measurement locations. The field strength shall be measured at each reference location at the time of the proof of performance. The license application shall include the measured field strength values at each reference point, along with a description of each measurement location, including GPS coordinates and datum reference. New reference field strength measurements are not required for subsequent license applications for the same directional antenna system and physical facilities.

* * * * *

6. Revise paragraph (a) of Section 73.154 to read as follows:

§ 73.154 AM directional antenna partial proof of performance measurements.

(a) A partial proof of performance consists of at least 8 field strength measurements made on each of the radials that includes a monitoring point.

(b) * * * * *

* * * * *

7. Remove Section 73.155.

§ 73.155 Periodic directional antenna performance recertification. [Removed]

8. Revise paragraphs (a), (c), (d), (k), (l), (o), (q), and (r) of Section 73.182; remove paragraphs (a)(1)(i)(A), (a)(1)(i)(B), the Note to paragraph (a)(1), paragraphs (g), (h), (k)(2), (k)(3), and the Note following paragraph (k)(8); and redesignate paragraphs (i) through (t) as (g) through (r), and paragraphs (k)(4) through (k)(8) as (k)(2) through (k)(6), to read as follows:

§ 73.182 Engineering standards of allocation.

(a) * * *

(1) Class A stations operate on clear channels with powers between 10 kW and 50 kW. These stations are designed to render primary service over a large area protected from objectionable interference from other stations on the same and adjacent channels. Class A stations may be divided into two groups: those located in any of the conterminous United States and those located in Alaska.

(i) Class A stations in the conterminous United States operate on the channels assigned by §73.25 with minimum power of 10 kW, maximum power of 50 kW, and minimum antenna efficiency of 275 mV/m/kW at 1 kilometer. The Class A stations in this group are afforded protection, both daytime and nighttime, to the 0.1 mV/m groundwave contour from other stations

on the same channel, and are afforded both daytime and nighttime protection to the 0.5 mV/m groundwave contour from other stations on first adjacent channels.

(A) [Remove]

(B) [Remove]

(ii) Class A stations in Alaska operate on the channels assigned by §73.25 with minimum power of 10 kW, maximum power of 50 kW, and minimum antenna efficiency of 215 mV/m/kW at 1 kilometer. The Class A stations in this group are afforded protection, both daytime and nighttime, to the 0.1 mV/m groundwave contour from other stations on the same channel and to the 0.5 mV/m groundwave contour from other stations on first adjacent channels.

Note: [Remove]

(2) Class B stations are stations which operate on clear and regional channels with powers not less than 0.25 kW or greater than 50 kW. These stations render primary service, the area of which depends on their geographic location, power, and frequency. It is recommended that Class B stations be located so that the interference received from other stations will not limit the service area to a groundwave contour value greater than 2.0 mV/m groundwave contour both daytime and nighttime, which are the values for the mutual protection between this class of stations and other stations of the same class.

* * *

(3) Class C stations operate on local channels, normally rendering primary service to a community and the suburban or rural areas immediately contiguous thereto, with powers not less than 0.25 kW or greater than 1 kW, except as provided in §73.21(c)(1). Such stations are normally protected to the daytime 2.0 mV/m contour. On local channels the separation required for the daytime protection shall also determine the nighttime separation. Where directional antennas are employed daytime by Class C stations operating with power equal to or greater than 0.25 kW, the separations required shall in no case be less than those necessary to afford protection assuming nondirectional operation with power of 0.25 kW. In no case will nighttime power of 0.25 kW or greater be authorized to a station unable to operate nondirectionally with power of 0.25 kW during daytime hours. The actual nighttime limitation will be calculated. For nighttime protection purposes, Class C stations in the 48 conterminous United States may assume that stations in Alaska, Hawaii, Puerto Rico, and the U.S. Virgin Islands operating on 1230, 1240, 1340, 1400, 1450, and 1490 kHz are Class C stations.

* * * * *

(b) * * * * *

(c) All classes of AM broadcast stations have in general three types of service areas, *i.e.,* primary, secondary and intermittent. (See §73.14 for the definitions of primary, secondary and intermittent service areas.) All classes of AM stations render service to a primary area but the secondary and intermittent service areas may be materially limited or destroyed due to interference from other stations, depending on the station assignments involved.

(d) The groundwave signal strength required to render primary service is 2 mV/m for communities with populations of 2,500 or more and 0.5 mV/m for communities with populations of less than 2,500. Because only Class A stations have protected primary service extending beyond the 2 mV/m contour, the groundwave signal strength constituting primary service for Class A stations is that set forth in paragraphs (a)(1)(i) and (a)(1)(ii) of this section. See §73.184 for curves showing distance to various groundwave field strength contours for different frequencies and ground conductivities, and also see §73.183, "Groundwave signals."

(e) * * * * *

(f) * * * * *

(g) [Remove]

(h) [Remove]

(i) [Redesignate as (g)]

* * * * *

(j) [Redesignate as (h)]

* * * * *

(k) [Redesignate as (i)] Objectionable nighttime interference from a broadcast station occurs when, at a specified field strength contour with respect to the desired station, the field strength of an undesired co-channel station exceeds for 10% or more of the time the values set forth in these standards. The value derived from the root-sum-square of all interference contributions represents the extent of a station's interference-free coverage.

(1) With respect to the root-sum-square (RSS) values of interfering field strengths referred to in this section, calculation of nighttime interference-free service is accomplished by considering co-channel signals in order of decreasing magnitude, adding the squares of the values and extracting the square root of the sum, excluding those signals which are less than 50% of the RSS values of the higher signals already included. This is known as the "50% Exclusion Method."

(2) [Remove]

(3) [Remove]

(4) [Redesignate as (2)]

* * * * *

(5) [Redesignate as (3)] It is recognized that application of the 50% Exclusion Method for calculating the RSS interference may result in some cases in anomalies wherein the addition of a new interfering signal or the increase in value of an existing interfering signal will cause the exclusion of a previously included signal and may cause a decrease in the calculated RSS value of interference. * * *

(6) [Redesignate as (4)] In cases where it is proposed to add a new interfering signal which is not less than 50% of the RSS value of interference from existing stations or which is greater than the smallest signal already included to obtain this RSS value, the RSS limitation after addition of the new signal shall be calculated without excluding any signal previously included. * * *

(7) [Redesignate as (5)] If the new or increased signal proposed in such cases is ultimately authorized, the RSS values of interference to other stations affected will thereafter be calculated by the 50% Exclusion Method without regard to this alternate method of calculation.

(8) [Redesignate as (6)]

* * * * *

Note: [Remove]

(l) [Redesignate as (j)] Objectionable nighttime interference from a station shall be considered to exist to a station when, at the field strength contour specified in paragraph (o) of this section with respect to the class to which the station belongs, the field strength of an interfering station operating on the same channel exceeds for 10% or more of the time the value of the permissible interfering signal set forth opposite such class in paragraph (o) of this section.

(m) [Redesignate as (k)]

* * * * *

(n) [Redesignate as (l)]

* * * * *

(o) [Redesignate as (m)] *Computation of skywave field strength values*:—(1) *Fifty percent skywave field strength values*. To compute fifty percent skywave field strength values, Formula 1 of § 73.190, entitled "Skywave field strength, 50% of the time (at SS+6)" shall be used.

* * * * *

(p) [Redesignate as (n)]

* * * * *

(q) [Redesignate as (o)] * * *

Class of station	Class of channel used	Signal strength contour of area protected from objectionable interference (μV/m)		Permissible interfering signal (μV/m)	
		Day[1]	Night[1]	Day[1]	Night
A	Clear	SC 100 AC 500	SC 100 AC 500	SC 5 AC 500	SC 5[1] AC 500[1]
B	Clear Regional	2000	2000	SC 100 AC 2000	25[2] Not presc.
C	Local	2000	Not presc.[3]	SC 2000	Not presc.
D	Clear Regional	2000	Not presc.	SC 100 AC 2000	Not presc. Not presc.

* * *

(r) [Redesignate as (p)] * * *

Frequency separation of desired to undesired signals (kHz)	**Desired Groundwave to:**	
	Undesired groundwave (dB)	**Undesired 10% Skywave (dB)**
0	26	26
10	0	0

* * *

(s) [Redesignate as (q)]

* * * * *

(t) [Redesignate as (r)]

* * * * *

9. Remove Section 73.187.

§ 73.187 Limitation on daytime radiation. [Removed]

Part 74 of Chapter 1 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

1. The authority citation for part 74 continues to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, 307, 309, 336 and 554.

2. Revise paragraph (g) of Section 74.1201 to read as follows:

§ 74.1201 Definitions.

* * * * *

(g) * * * The coverage contour of an FM translator rebroadcasting an AM radio broadcast station as its primary station must be contained within the greater of either the 2 mV/m daytime contour of the AM station or a 25-mile (40 km) radius centered at the AM transmitter site, but the translator's 1 mV/m coverage contour may not extend beyond a 40-mile (64 km) radius centered at the AM transmitter site. The protected contour for an FM translator station is its predicted 1 mV/m contour.

* * * * *

APPENDIX C

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended ("RFA")[1] an Initial Regulatory Flexibility Analysis ("IRFA") was incorporated in the *Notice of Proposed Rule Making* ("*NPRM*") to this proceeding.[2] The Commission sought written public comment on the proposals in the *NPRM*, including comment on the IRFA. The Commission received no comments on the IRFA. This Final Regulatory Flexibility Analysis ("FRFA") conforms to the RFA.[3]

A. Need For, and Objectives of, the First Report and Order

2. This *First Report and Order* ("*First R&O*") adopts changes to certain technical rules and processes relating to the AM broadcast radio service. In the *First R&O*, the Commission modifies daytime and nighttime community coverage requirements for certain AM stations; eliminates the so-called AM Ratchet Rule; adopts a new form notification procedure for stations implementing Modulation Dependent Carrier Level Control Technologies; and modifies the rules relating to AM antenna system efficiency.

3. In the *First R&O*, the Commission addressed issues raised in the *NPRM*. The Commission, in the NPRM, explained that it had not done a comprehensive review of the AM service in almost 25 years. Moreover, in the years since the last comprehensive review of the AM service, listenership had declined due to several factors, including: the introduction of new media with higher audio fidelity, such as CDs, digital media players, and FM digital radio; increased interference among AM stations; and increased interference from non-broadcast sources, such as computers, LED light bulbs, power supplies, and utility lines. Based in part on separate pleadings and petitions for rule making filed by stakeholders, the Commission in the *NPRM* outlined six proposals designed to offer assistance to AM broadcasters in light of the various difficulties surrounding the AM service.

4. After considering the comments filed in response to the *NPRM*, the Commission determined that there were issues that did not support the immediate opening of a filing window limited to AM licensees and permittees wishing to obtain FM translator stations, including the time it would take to open such a window, and the wide availability of FM translator stations including the number expected to be authorized in the near future. It concluded that the correct approach, to offer near-term relief to AM broadcasters, was to open two windows allowing the modification and/or relocation of FM translators to rebroadcast AM stations. These windows would be preceded by a three-month period of outreach by the Media Bureau to AM stations with limited power and/or no protected nighttime service (Class C and D stations). Following this period of outreach, the Media Bureau will open a six-month window in which an AM station seeking to rebroadcast on an FM translator may, on a first-come, first-served basis, apply to acquire and relocate one and only one authorized non-reserved band FM translator station up to 250 miles, and specify any rule-compliant non-reserved band FM channel, as a minor modification application notwithstanding Section 74.1233(a)(1) of the Rules, which defines major and minor modifications of FM translators.[4] This first modification window will be available only to applications to modify and/or relocate an FM translator station rebroadcasting a Class C or D AM station, on a one translator per AM station basis. The first modification window will be followed by a second, three-month modification window, open for applications to modify and/or relocate an FM translator rebroadcasting any AM station

[1] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 ("SBREFA"), Pub. L. No. 104-121, Title II, 110 Stat. 847 (1996). The SBREFA was enacted as Title II of the Contract With America Advancement Act of 1996 ("CWAAA").

[2] 24 FCC Rcd 5239 (2009).

[3] *See* 5 U.S.C. § 604.

[4] 47 C.F.R. § 74.1233(a)(1).

of any class, including a Class C or D station that did not participate (i.e., file an application) in the initial modification window, also on a one translator per AM station basis. FM translator stations modified and/or relocated during these modification windows will be subject to the same four-year operating condition currently attached to FM translators relocated using Mattoon waivers.

5. To further promote the long-term viability of the AM service, the Commission also directed the Media Bureau and Wireless Telecommunications Bureau ("Bureaus") to open, in 2017 after completion of the Incentive Auction, Auction 1000, two auction windows for new FM translator stations to rebroadcast AM stations, open to AM licensees and permittees that did not file applications in either of the modification windows. As with the modification windows, the first new FM translator auction window will be limited to applications filed by licensees or permittees of Class C and D AM stations, on a one translator per station basis, that did not file applications in the modification windows. After close of the first new FM translator auction window, and after applicants in that window have had the opportunity to resolve mutual exclusivity through settlement or technical resolution, the Bureaus will open a second new FM translator auction window, which will be open to all AM licensees and permittees, of any class, that did not participate in either of the modification windows or the first auction window. The new FM translator auction windows will otherwise follow the proposal in the *NPRM*: participation will be limited to AM licensees and permittees, each applicant may apply for one and only one translator station that must comply with our siting rules for FM fill-in translators rebroadcasting AM stations, and any translator acquired through the FM translator auction windows will be permanently linked to the AM primary station acquiring it. Both new FM translator auction windows will include opportunities for mutually exclusive applicants to resolve their mutual exclusivity through settlements or technical resolutions.

6. In the *NPRM*, the Commission also proposed to change the daytime and nighttime community coverage requirements for AM stations. It noted that the Multicultural Media, Telecom, and Internet Council ("MMTC")[5] had filed a 2009 petition for rule making, which it styled a "Radio Rescue Petition," in which among other things it sought some flexibility in transmitter siting for AM stations. MMTC's reasoning was that some existing stations were unable to comply with the requirements that an AM station place a 5 mV/m daytime signal over at least 80 percent of its community of license, and that at least 80 percent of the community of license be encompassed by either a 5 mV/m nighttime signal or a nighttime interference-free ("NIF") signal (except in the case of Class D stations, which have no protected nighttime service). MMTC argued that, as communities grow and boundaries expand farther from an AM transmitter site, it becomes impossible for the station to comply with the community coverage rules, and further argued that scarcity of land suitable for AM transmission systems makes it difficult or impossible for such stations to find rule-compliant transmitter sites. MMTC thus suggested, and the Commission proposed, that the rule be changed to allow an existing AM station to cover only 50 percent of either the population or the area of its community of license with a 5 mV/m signal during the day, and to eliminate the community of license coverage requirement at night. Additionally, the Commission proposed to allow a new AM station or one changing its community of license to encompass only 50 percent of either the population or area of the community of license within its nighttime 5 mV/m contour or its NIF contour, whichever value is higher. Based on substantially favorable commenter support, the Commission adopted these proposals, adding the proviso that any request to utilize the new community coverage standards within the first four years of on-air operations, exclusive of any periods of reduced operation or silence, would be met with increased scrutiny and granted only upon a compelling showing.

7. The Commission also proposed, in the *NPRM*, to eliminate the so-called "ratchet rule." This rule required a Class A or B AM station proposing signal modifications to demonstrate an overall reduction in the amount of skywave interference it caused to other AM stations; in other words, the modifying station was required to "ratchet back" radiation in the direction of certain other AM stations. Two engineering firms filed a 2009 petition for rule making to eliminate the ratchet rule, claiming that the rule's practical effect was not, as intended, to reduce nighttime skywave interference, but rather to

[5] Formerly the Minority Media and Telecommunications Council.

discourage station improvements and NIF service by the modifying station. The Commission adopted this proposal after near-universal approval by commenters. Likewise, there was little opposition in the comments to the *NPRM* proposal to allow AM stations to initiate Modulation Dependent Carrier Level ("MDCL") control technologies by simply notifying the Commission, rather than seeking authorization to do so, as had been the procedure. MDCL control technologies vary a station's radiated power with carrier modulation, enabling power savings. The Commission adopted this proposal.

8. The last of the proposals set forth in the *NPRM* was to modify the AM antenna efficiency standards set forth in the Commission's Rules. MMTC had, in its 2009 Radio Rescue Petition, argued that the Commission's long-standing rules mandating minimum lengths for AM radiators and ground systems, to assure efficient transmission, were outdated and limited AM stations' flexibility in choosing transmission system sites in an era of diminished property availability for such sites. MMTC suggested replacing the minimum efficiency standards with a "minimum radiation" standard, its contention being that a station should be allowed to choose to operate a less efficient, less space-intensive transmission system, making up for the lack of system efficiency by using more input power to the system to yield the same amount of radiated power. The Commission questioned some of the assumptions underlying MMTC's proposal, but agreed that some reduction in the antenna efficiency standards might provide some relief to AM broadcasters. Accordingly, the Commission proposed a 25 percent reduction in the antenna efficiency standards, and requested comment on the technical underpinnings to any further reduction in, or elimination of, those standards.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

9. There were no comments filed that specifically addressed the rules and policies proposed in the IRFA.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

10. The RFA directs the Commission to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the rules adopted herein.[6] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," small organization," and "small government jurisdiction."[7] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[8] A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[9]

11. The subject rules and policies potentially will apply to all AM radio broadcasting licensees and potential licensees. A radio broadcasting station is an establishment primarily engaged in broadcasting aural programs by radio to the public.[10] Included in this industry are commercial, religious, educational, and other radio stations.[11] Radio broadcasting stations which primarily are engaged in radio

[6] 5 U.S.C. § 603(b)(3).

[7] *Id*. § 601(6).

[8] *Id*. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

[9] 15 U.S.C. § 632.

[10] *Id*.

[11] *Id.*

broadcasting and which produce radio program materials are similarly included.[12] However, radio stations that are separate establishments and are primarily engaged in producing radio program material are classified under another NAICS number.[13] The SBA has established a small business size standard for this category, which is: firms having $38.5 million or less in annual receipts.[14] According to the BIA/Kelsey, MEDIA Access Pro Database on October 15, 2015, 4,691 (99.94%) of 4,694 AM radio stations have revenue of $38.5 million or less. Therefore, the majority of such entities are small entities. We note, however, that, in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations[15] must be included. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies.

12. The proposed policies could affect licensees of FM translator stations, as well as potential licensees in this radio service. The same SBA definition that applies to radio broadcast licensees would apply to these stations. The SBA defines a radio broadcast station as a small business if such station has no more than $38.5 million in annual receipts.[16] Currently, there are approximately 6,422 licensed FM translator and booster stations.[17] In addition, there are approximately 225 applicants with pending applications filed in the 2003 translator filing window. Given the nature of these services, we will presume that all of these licensees and applicants qualify as small entities under the SBA definition.

D. Description of Projected Reporting, Record Keeping and Other Compliance Requirements

13. As described, certain rules and procedures will change, although the changes will not result in substantial increases in burdens on applicants. The Commission has added a new form, FCC Form 338, which an AM station may use to notify the Commission that it is initiating operation using MDCL control technologies. Use of FCC Form 338, however, replaces the current procedure whereby an AM station makes a request to use MDCL control technologies. Use of the form is not only less burdensome than the previous request process, but enables the applicant to initiate MDCL operation immediately, rather than waiting for Commission approval. The remaining rule changes adopted in the *First R&O* are substantive and do not involve application changes, reporting requirements, or record keeping requirements beyond what is already required. For example, currently applicants for AM construction permits or modifications are required only to certify that they comply with the community coverage requirements of Section 73.24(i) of the Rules.[18] Such applicants will continue to do so, but under a less stringent rule standard in some cases.

E. Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered

14. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account

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[12] *Id.*

[13] *Id.*

[14] 13 C.F.R. § 121.201, NAICS code 515112 (updated for inflation in 2008).

[15] "[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has to power to control both." 13 C.F.R. § 121.103(a)(1).

[16] *Id*.

[17] *See Broadcast Station Totals as of September 30, 2015*, News Release (rel. Oct. 9, 2015) (http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db1009/DOC-335798A1.pdf).

[18] 47 C.F.R. § 73.24(i). *See* FCC Form 301, Section III, Certification 8.

the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.[19]

15. With regard to the proposals in the *NPRM*, the Commission received many comments proposing different plans for an FM translator window limited to applicants that hold AM station authorizations. Most of these comments centered around whether the window could be limited to certain AM broadcasters, and to whom it should be limited. Ultimately, while recognizing that an exclusive window limited to some or all AM station licensees and permittees would assist those entities, the Commission concluded that immediately opening such a window would be impractical, and could disrupt the robust secondary market in FM translators. It decided instead to implement, first, a period of outreach to Class C and D AM station licensees and permittees, which have lower power and/or no protected nighttime service, to assist them in locating existing translators that could meet their needs. Immediately following a three-month outreach period, the Commission will open two windows in which applicants may propose to relocate an existing FM translator up to 250 miles, and/or modify a translator to specify any rule-compliant non-reserved FM channel. This procedure is expected to lower prices for FM fill-in translators for AM stations by opening up the available market, thus benefiting AM station owners, and would also benefit small businesses owning FM translator stations. The first, six-month modification window would be open only to applicants proposing to modify FM translators rebroadcasting Class C and D AM stations, followed by a second, three-month window open to applicants to modify translators to rebroadcast any class of AM station, including for Class C and D stations for which there were no applications in the first window. All modification applications filed in the windows will be on a one translator-per-AM station basis, and any translator stations modified pursuant to modification window applications will be subject to the same four-year operating condition currently attached to translators modified pursuant to Mattoon waivers. The modification windows will provide short-term relief to AM broadcasters. They will be followed, upon completion of the Commission's Incentive Auction proceeding, by two auction windows for AM licensees and permittees seeking to obtain new FM translator stations. The two new FM translator auction windows will follow a similar pattern to the modification windows: the first will be open only to Class C and D AM licensees and permittees whose stations were not participants in either modification window, while the second will be open to all AM licensees and permittees whose stations were not participants in either modification window or the first auction window. The new FM translator auction windows will otherwise be subject to the same conditions set forth in the *NPRM*, including the limitation of one and only one application per applicant, for an FM translator station that must comply with our siting rules for FM fill-in translators rebroadcasting AM stations, which will be permanently linked to the AM primary station acquiring it. Both new FM translator auction windows will include opportunities for mutually exclusive applicants to resolve their mutual exclusivity through settlements or technical resolutions. In adopting this process of modification windows followed by new translator auction windows, the Commission intends to provide immediate relief through a modified secondary translator market for AM broadcasters that are small businesses, while providing some of those businesses an opportunity to acquire a new fill-in FM translator at a later time, if that better comports with their situation.

16. With regard to the other, more technical proposals in the *NPRM*, the Commission's proposals were in most cases supported by a majority of commenters, giving little reason to consider alternatives. The proposals to reduce community coverage requirements for existing AM broadcasters were grounded in the idea that such broadcasters, small businesses that in some cases had occupied their transmitter sites for decades, could not easily change transmitter sites because their communities of license had grown, and land had become increasingly expensive, thus making it difficult or impossible to locate new, rule-compliant sites. Relaxing the community coverage standards for existing AM stations

[19] 5 U.S.C. § 603(c)(1)-(c)(4)

reduces burdens on such businesses by relieving them of the obligation to locate other, more expensive transmitter sites or upgrading their equipment to meet those standards. Some commenters suggested that the Commission abandon community coverage rules altogether, or re-define community to mean something other than geographic boundaries. While such re-definitions would provide further relief to AM broadcasters, the Commission rejected them in part because Section 307(b) of the Communications Act requires that radio stations be assigned fairly and equitably among the several States and communities, and that any re-definition of "community" would run counter to Congressional intent in enacting the Communications Act. The principle of broadcast localism, which derives from Section 307(b), requires that there be certain minimum service requirements. Additionally, it is not necessarily a burden on radio stations to require that they cover as much population as possible, because increased listenership typically translates into increased advertising revenue. Thus, while the Commission considered these alternatives, it concluded that the proposals as adopted provided the most relief to AM broadcasters while still adhering to the requirements of the Communications Act.

17. As for the proposed repeal of the ratchet rule, the vast majority of commenters favored that repeal because of the burdens the rule placed on broadcasters seeking to improve their facilities and, thus, their signal coverage. There were no significant alternatives to consider other than leaving the rule in effect, which was only favored by a few commenters. Those favoring retention of the rule did so in order to retain the interference reduction benefits for which it was designed. The Commission, however, agreed with those commenters, including many broadcasters, who argued that the benefits of increased flexibility in facility improvement outweighed the minimal interference reduction resulting from the ratchet rule's application.

18. The Commission's proposal regarding notification procedures for MDCL control technology use by AM broadcasters did not involve a substantive change in the rules, merely a procedural change whereby AM broadcasters wishing to use such technologies would no longer have to seek leave to do so, but would notify the Commission of the fact. Those commenters opposed to the proposal did not oppose it as much as question the benefits of MDCL control technologies, observing that they are only available to stations with newer transmitters, that in some cases the power savings are minimal, and that the fluctuations in signal power could result in decreased listenability. These objections, however, do not go to the Commission's proposal, which merely makes it easier for those AM stations opting to use MDCL control technologies to do so. Although the proposal does introduce a new notification form, this form replaces the former system of requesting leave to use MDCL control technologies, and should result in an overall decrease in the burden on AM stations electing to use the technologies. The Commission thus decided that adoption of the proposal should be favored over retention of the prior procedure.

19. The Commission also received many comments on its proposal to relax, but not eliminate, AM antenna system efficiency rules. The Commission proposed a 25 percent reduction in the minimum standards for radiators and ground systems. The most significant alternative to this proposal, put forward by many commenters, was to eliminate the efficiency standards for AM transmission systems altogether, leaving it to the individual broadcaster to decide how much power to feed into the system in order to achieve the level of signal radiation needed to provide rule-compliant coverage. Such a proposal, while power-intensive, would allow AM broadcasters to install less-efficient transmission systems in smaller plots of land, using radiators (towers) short enough to avoid zoning or FAA strictures. In considering this alternative, however, the Commission was also informed by those commenters pointing out that inefficient AM transmission systems, with short towers and/or ground systems, tend to be unstable, and might also result in greater levels of high-angle skywave interference to other stations. The Commission seeks to reduce burdens on AM broadcasters, but must also protect the integrity of the service, including minimizing inter-station interference. After considering the alternatives, the Commission concluded that adopting its proposed 25 percent reduction of AM antenna system efficiency standards represented the best accommodation between those considerations. It also decided, however, that more real-world data on inefficient AM transmission systems was called for, and therefore indicated that it would be willing to allow the installation of alternative or inefficient systems on an experimental basis, upon a showing that such systems are stable and will not cause excessive interference to other AM

stations, and subject to the monitoring and reporting requirements in Part 5 of the Commission's Rules. Data gleaned from such experimental operations, it is hoped, will allow the Commission to consider, in the future, whether the AM antenna system efficiency rules could be relaxed further or eliminated.

F. Report to Congress

20. The Commission will send a copy of the *First R&O*, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996.[20] In addition, the Commission will send a copy of the *First R&O*, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *First R&O* and FRFA (or summaries thereof) will also be published in the Federal Register.[21]

[20] *See id*. § 801(a)(1)(A).

[21] *See id*. § 604(b).

APPENDIX D

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended ("RFA")[1] the Commission has prepared this Initial Regulatory Flexibility Analysis ("IRFA") of the possible significant economic impact on a substantial number of small entities by the policies proposed in the *Further Notice of Proposed Rulemaking* ("*FNPRM*"). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *FNPRM* provided in paragraph 75. The Commission will send a copy of this entire *FNPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration ("SBA").[2] In addition, the *FNPRM* and the IRFA (or summaries thereof) will be published in the Federal Register.[3]

A. Need For, and Objectives of, the Proposed Rules

2. This rulemaking proceeding is initiated to obtain further comments concerning certain proposals designed to revitalize the AM broadcast radio service. It is based in substantial part on proposals raised by commenters in this rulemaking proceeding, in response to the Commission's call in the original *NPRM* in this proceeding for further ideas and proposals.

3. Specifically, the Commission seeks comment on the following: (1) whether to change the nighttime and critical hours signal protection to Class A AM stations; (2) whether to change the methodology for calculating nighttime root sum square ("RSS") values; (3) whether to change daytime signal protection to Class B, C, and D stations; (4) whether to revise the rule on where an FM cross-service translator station, re-broadcasting an AM station's signal, may be located relative to the AM station's transmitter; (5) whether to modify the rules governing partial proofs of performance of directional AM antenna arrays; (6) whether to modify the rules for method of moments proofs for directional AM antenna arrays; and (7) whether to require licensees holding dual standard band-Expanded Band AM licenses to surrender one of the licenses within one year of release of the *Second Report and Order* in this proceeding.

B. Legal Basis

4. The authority for this proposed rulemaking is contained in Sections 1, 2, 4(i), 303, 307, and 309(j) of the *Communications* Act of 1934, 47 U.S.C §§ 151, 152, 154(i), 303, 307, and 309(j).

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

5. The RFA directs the Commission to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the proposed rules.[4] The RFA generally defines the term "small entity" as encompassing the terms "small business," "small organization," and "small governmental entity."[5] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[6] A small business concern is one which: (1) is

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[1] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[2] *See* 5 U.S.C. § 603(a).

[3] *See id*. § 603(a).

[4] *Id*. § 603(b)(3).

[5] *Id*. § 601(6).

independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration ("SBA").[7]

D. Radio Stations

6. The proposed rules and policies could apply to AM radio broadcast licensees, and potential licensees of the AM radio service. A radio broadcasting station is an establishment primarily engaged in broadcasting aural programs by radio to the public.[8] Included in this industry are commercial, religious, educational, and other radio stations.[9] Radio broadcasting stations which primarily are engaged in radio broadcasting and which produce radio program materials are similarly included.[10] However, radio stations that are separate establishments and are primarily engaged in producing radio program material are classified under another NAICS number.[11] The SBA has established a small business size standard for this category, which is: firms having $38.5 million or less in annual receipts.[12] According to the BIA/Kelsey, MEDIA Access Pro Database on October 15, 2015, 4,691 (99.94%) of 4,694 AM radio stations have revenues of $38.5 million or less. Therefore, the majority of such entities are small entities. We note, however, that, in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations[13] must be included. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies.

7. In addition, an element of the definition of "small business" is that the entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific radio station is dominant in its field of operation. Accordingly, the estimate of small businesses to which rules may apply do not exclude any radio station from the definition of a small business on this basis and therefore may be over-inclusive to that extent. Also as noted, an additional element of the definition of "small business" is that the entity must be independently owned and operated. We note that it is difficult at times to assess these criteria in the context of media entities and our estimates of small businesses to which they apply may be over-inclusive to this extent.

E. FM translator stations and low power FM stations

8. The proposed policies could affect licensees of FM translator stations, as well as potential licensees in this radio service. The same SBA definition that applies to radio broadcast licensees would apply to these stations. The SBA defines a radio broadcast station as a small business if such station has no more than $38.5 million in annual receipts.[14] Currently, there are approximately 6,422 licensed FM

(Continued from previous page)

[6] *Id*. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

[7] 15 U.S.C. § 632.

[8] *Id*.

[9] *Id.*

[10] *Id.*

[11] *Id.*

[12] 13 C.F.R. § 121.201, NAICS code 515112 (updated for inflation in 2008).

[13] "[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has to power to control both." 13 C.F.R. § 121.103(a)(1).

[14] *See* 13 C.F.R. § 121.201, NAICS Code 515112.

translator and booster stations.[15] In addition, there are approximately 225 applicants with pending applications filed in the 2003 translator filing window. Given the nature of these services, we will presume that all of these licensees and applicants qualify as small entities under the SBA definition.

F. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

9. The proposed rule and procedural changes may, in some cases, impose different reporting, recordkeeping, or other requirements on existing and potential AM radio licensees and permittees. In the case of proposed changes to the technical rules regarding calculation of daytime and nighttime interfering contours, and changes to daytime, nighttime, and critical hours protection to some stations, there would be changes in the calculation of inter-station interference and reporting of same. However, the information to be filed is already familiar to broadcasters, and the nature of the interference calculations would not change, only the values that are acceptable, so any additional burdens would be minimal. Likewise, the proposed revision to the rules on where an FM translator providing fill-in service for an AM station may be sited will not require any additional calculations on the part of the AM station proposing to locate or relocate the translator. The proposal merely relaxes the siting requirement and expands the area in which such a cross-service fill-in translator may be located. Thus, there should be no additional reporting or recordkeeping burdens, and compliance with the siting rules will be easier. The proposed modifications to the partial proof of performance and Method of Moments rules would not change any reporting or compliance requirements, insofar as AM licensees and applicants would not be required to submit such proofs or models more frequently than is now the case. The only changes would be to relax the requirements for making proofs of performance or method of moments models. Thus, the required submissions of such proofs and models would be less burdensome on AM broadcasters with directional antenna arrays required to submit such information. Finally, the proposal to require surrender of licenses held by broadcasters with paired standard band-Expanded Band AM stations will not change any reporting, recordkeeping, or other compliance requirements, and will in fact reduce such requirements for such licensees by 50 percent.

G. Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered

10. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.[16] In the *Further Notice of Proposed Rulemaking*, the Commission seeks to assist AM broadcasters by changing certain daytime, nighttime, and critical hours interference protection standards as they apply to certain classes of AM stations; proposes relaxing the rules on siting of FM translators providing fill-in service for AM broadcast stations; proposes to modify the measurement requirements for AM directional antenna system partial proofs of performance in order to make them less burdensome; and proposes to modify the rules for submitting method of moments models of proposed AM directional antenna systems, in order to make those rules less burdensome. The Commission also seeks either to reduce interference in the standard AM band or, alternatively, to create more spectrum in the Expanded AM Band, by requiring that the 25 remaining licensees holding paired authorizations in both bands surrender one of the paired licenses. Under the Commission's proposal, such a licensee would be given one year from adoption of this proposal in which to elect which authorization it would surrender. The

[15] *See Broadcast Station Totals as of September 30, 2015*, News Release (rel. Oct. 9, 2015) (http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db1009/DOC-335798A1.pdf).

[16] 5 U.S.C. § 603(b).

Commission seeks comment as to whether its goal of revitalizing the AM service could be effectively accomplished through these means. The Commission is open to consideration of alternatives to the proposals under consideration, as set forth herein, including but not limited to alternatives that will minimize the burden on AM broadcasters, most of which are small businesses. There may be unique circumstances these entities may face, and we will consider appropriate action for small broadcasters when preparing a *Second Report and Order* in this matter.

H. Federal Rules Which Duplicate, Overlap, or Conflict With, the Commission's Proposals

11. None.

APPENDIX E

List of Commenters and Reply Commenters

Commenters

Alan Hughes
AM Station Owners (Joint Comments)
Anthony V. Bono, Friendship Broadcasting LLC
Arthur Niederfringer
Association of Federal Communications Consulting Engineers
BDJ Radio Enterprises, LLC
Berkshire Broadcasting Corporation
Blount Masscom, Inc., K.W. Dolmar Broadcasting Co., Inc., Blount Communications of NH, Inc., and Blount Communications, Inc.
Bob Mark Allen Productions, Inc.
Brian J. Henry
Broadcast Maximization Committee
Broadcast Warning Working Group
Bryan Broadcasting
Burt Weiner
Butte Broadcasting
Calvin Johnson
Carl Como Tutera
Carl T. Jones Corporation
Carthage Broadcasting
Cavell, Mertz and Associates
Charles M. Anderson
Christopher Gay
City of Durand, Wisconsin
City of Mondovi, Wisconsin
Clear Channel Communications Inc. (now iHeart Media + Entertainment, Inc.)
Cohen, Dippel and Everist, P.C.
Common Frequency
Communications Technologies, Inc.
Crawford Broadcasting Company
Cris Allen
Cub Radio
Curtis W. Flick
Curtis Media Group
DAIJ Media
Dale Adkins
Dan Priestly
Dana Puopolo
Danny Ray Boyer
Dave Dunsmoor
David Caroccio
David Dybas
David L. Hershberger
David L. Poole
Dennis Cote
Doug Wilber

du Treil, Lundin & Rackley, Inc.
Ed Lachman
Edward C. DeHart
Edward Henson
Edward P. DeLaHunt – Bemidji Radio, Inc.
El Sol Broadcasting
Foothills Broadcasting
Frederick R. Vobbe
George Arroyo
George Molnar
Grant County Broadcasters
Hatfield & Dawson Consulting Engineers LLC
Henry B. Ruhwiedel
Ibiquity Digital Corporation
James Anderson Merrit
James B. Potter
Joseph E. Talbot
John Giannettino
John S. Gilstrap
John Pavlica, Jr.
John Wishon
Jonathan E. Hardis
Josh Blake Johnson
Joshua Lehan
Just Because, Inc.
Kevin Kidd
Khanna & Guill, Inc.
KNAB Inc.
Kulp-Wharton County Radio, Inc.
Kyle Magrill
Larry Croft
Les Rayburn
Lloyd Bankson Roach
Logan Darensburg
Malkan Interactive Communications
Marcus Spectrum Solutions LLC
Mariana Broadcasting, Inc. (two comments)
Mark D. Humphrey
Mark Heller
Mark D. Seehafer
Martha I. Whitman
Matt Krick
Missouri Broadcasters Association
Minority Media and Telecommunications Council (now Multicultural Media, Telecom, and Internet Council)
Monster Media, LLC
Mt. Wilson FM Broadcasters, Inc.
N. Al Sergi (Summit Media)
Named State Broadcasters Association
National Alliance of AM Broadcasters
National Association of Broadcasters
National Public Radio
National Religious Broadcasters

National Translator Association
New England Public Radio
Nickolaus Leggett (two comments)
North Carolina Central Broadcasters, Inc.
Pepin County Department of Human Services
Peter Blake
Peter E. Schartel
Porter County Broadcasting Holding Corporation
Puerto Rico Broadcasters Association
R. Morgan Burrow Jr.
RAFTT Corporation
Rama Communications, Inc.
RAMS
Randy D. Gehman
REC Networks
Richard F. Arsenault
Robert Atkinson
Robert E. Richer
Robert Greenlee
Robert Meuser
Roger Bouldin / Bristol Broadcasting, Inc. / Bouldin Engineering
Sam Brown
School District of Durand, Wisconsin
Scott Clifton
Scott Fybush
Scott Todd
Sean Scallon
Sellmeyer Engineering
Society of Broadcast Engineers, Inc.
Spring Arbor University
S-R Broadcasting
Stephen Masek
Steve O
Steven Chanin
Steven Karty
Steven Zetsche
Thomas Osenkowsky
Todd Roberts
Tuscarawas Broadcasting Company
TZ Sawyer Technical Consultants, LLC
University of Northwestern – St. Paul
Wayne Robey
WGTO
Wilfredo G. Blanco-Pi, P.E.
William Croghan
Word Power, Inc.
Worldwide Antenna
WRDN – 1430 AM
Wright Broadcasting

Reply Comments

Alphonso Gimenez-Porrata
Association of Federal Communications Consulting Engineers
Barry Magrill
Broadcast Maximization Committee
Bob Bittner
Burt Weiner
Butte Broadcasting Company, Inc.
Calvin Johnson
Carly Haynes (Commander Communications Corp.)
Carl T. Jones Corporation
Catholic Radio Association
Charles M. Anderson
Christian Broadcasting System, Ltd.
Chuck Harder
iHeart Media + Entertainment, Inc.
Cohen, Dippell & Everist, P.C.
Dan Priestly
David L. Hersberger
Dennis Rumsey
Digital Radio Mondiale
Don Schellhardt
Doug Wilber
du Treil, Lundin & Rackley, Inc.
Ed Henson
Edward De Hart
Edward Ford
Gregory Borgen
Hatfield & Dawson Consulting Engineers, LLC
Holston Valley Broadcasting Corp.
iBiquity
James Potter
John Nathan Anderson
Jonathan E. Hardis
Kevin Kidd
Kevin M. Fitzgerald
Khanna & Guill
Kintronic Laboratories, Inc.
KVSH Radio
Kyle Magrill
LPTV Spectrum Rights Coalition
Mt. Wilson FM Broadcasting
Mullaney Engineering
Nathan Goossen
National Association of Broadcasters
Nickolaus Leggett
National Public Radio
O.P. Holder
Potomac Radio LLC
Richard D. Bogner
Richard Bouchard
Rob McClure

Roger Bouldin
Salem Communications Corp.
Sellmeyer Engineering
T.Z. Sawyer Technical Consultants, LLC
Timothy Cutforth
Valcom Manufacturing Group, Inc.
Wilfredo G. Blanco-Pi, P.E.
William C. Walker
Word Power, Inc.

APPENDIX F

AM Stations With Dual Standard Band / Expanded Band Licenses

Call Sign	Community	Frequency	Facility ID
KSMH	West Sacramento, CA	1620 kHz	87036
KAHI	Auburn, CA	950 kHz	48341
KOZN	Bellevue, NE	1620 kHz	87182
KZOT	Bellevue, NE	1180 kHz	43237
WTAW	College Station, TX	1620 kHz	87145
KZNE	College Station, TX	1150 kHz	7632
KYIZ	Renton, WA	1620 kHz	86941
KRIZ	Renton, WA	1420 kHz	35549
WDND	South Bend, IN	1620 kHz	87112
WHLY	South Bend, IN	1580 kHz	67133
KKGM	Fort Worth, TX	1630 kHz	87147
KHVN	Fort Worth, TX	970 kHz	63780
KRND	Fox Farm, WY	1630 kHz	87155
KJUA	Cheyenne, WY	1380 kHz	54740
KDIA	Vallejo, CA	1640 kHz	87108
KDYA	Vallejo, CA	1190 kHz	54263
KZLS	Enid, OK	1640 kHz	87168
KCRC	Enid, OK	1390 kHz	10856
KBJA	Sandy, UT	1640 kHz	87119
KTKK	Sandy, UT	630 kHz	14890
KBJD	Denver, CO	1650 kHz	87151

KRKS	Denver, CO	990 kHz	58632

KCNZ	Cedar Falls, IA	1650 kHz	87158
KCFI	Cedar Falls, IA	1250 kHz	9726

KSVE	El Paso, TX	1650 kHz	87165
KHRO	El Paso, TX	1150 kHz	51705

WHKT	Portsmouth, VA	1650 kHz	87170
WPMH	Portsmouth, VA	1010 kHz	10759

WCNZ	Marco Island, FL	1660 kHz	86909
WVOI	Marco Island, FL	1480 kHz	13980

KWOD	Kansas City, KS	1660 kHz	87143
KYYS	Kansas City, KS	1250 kHz	73938

WWRU	Jersey City, NJ	1660 kHz	87123
WJDM	Elizabeth, NJ	1530 kHz	54563

WOZN	Madison, WI	1670 kHz	87154
WLMV	Madison, WI	1480 kHz	41901

KGED	Fresno, CA	1680 kHz	87176
KXEX	Fresno, CA	1550 kHz	54960

WOKB	Winter Garden, FL	1680 kHz	87164
WLAA	Winter Garden, FL	1600 kHz	55006

WTTM	Lindenwold, NJ	1680 kHz	87111
WHWH	Princeton, NJ	1350 kHz	47426

KNTS	Seattle, WA	1680 kHz	87153
KLFE	Seattle, WA	1590 kHz	12031

KFSG	Roseville, CA	1690 kHz	87177

KLIB	Roseville, CA	1110 kHz	57702

WEUP	Huntsville, AL	1700 kHz	87141
WHIY	Huntsville, AL	1600 kHz	28118

WJCC	Miami Springs, FL	1700 kHz	87169
WNMA	Miami Springs, FL	1210 kHz	61642

STATEMENT OF
CHAIRMAN TOM WHEELER

Re: *Revitalization of the AM Radio Service,* MB Docket No. 13-249

This past April, I expressed my commitment to adopt new rules to help AM radio flourish while also preserving the values of competition, diversity, and localism. Today, the Commission unanimously adopted an AM revitalization plan honoring that commitment.

This Order will ease regulatory burdens on AM broadcasters and address practical problems and interference-related issues that have long plagued AM stations. In particular, it includes multiple actions to expand access to FM translators, which are used to enhance the quality of AM signals.

First, the new rules allow a one-time waiver for stations to relocate existing FM translators up to 250 miles. Considering FM translators are often in one place when the AM broadcaster wants to use them in another, this provision will dramatically increase the usability of the 6,800 previously authorized translators on the market and should result in significantly lower prices. I'm pleased that the rules prioritize relief for those most in need with a 6-month exclusive modification window for the 4,500 smallest AM stations. This quick, targeted relief will help get translators in the hands of small stations by early next year.

Today's package also includes an exclusive opening of the FM translator window for AM licensees. While I have concerns about favoring one class of licensees with an exclusive spectrum opportunity, I welcomed the compromise proposal by Commissioner Clyburn for an AM-only auction window for small Class C and Class D stations after the Incentive Auction, with a second auction window for all classes to follow. The phased approach providing targeted relief for small stations first will help revitalize AM radio as a whole while supporting diversity in AM station ownership and content.

Today's Order would not have been possible without the tremendous leadership of Commissioner Clyburn. She initiated this proceeding during her time heading this agency, and when disagreements arose she was able to bridge the gaps and broker solutions. Thanks to Mignon Clyburn, AM radio just got a significant boost and broadcasters are better positioned to deliver diverse, localized content to the American people.

STATEMENT OF
COMMISSIONER MIGNON L. CLYBURN

Re: *Revitalization of the AM Radio Service,* MB Docket No. 13-249

Earlier this month I released a statement reaffirming my belief in the power, role and economic potential of the AM radio market. That is why I circulated the proposal to open an AM only window for FM translators during my tenure as interim Chair. As I noted in my earlier statement, we have seen positive benefits from the actions we took at that time, including the significant growth in the availability of FM translators. Despite that progress, many in the AM industry, particularly small Class C and D station owners, find themselves challenged in successfully finding and affording a translator.

That's why I am proud to lend my vote to support an Order that acknowledges the realities of the upcoming incentive auction and the need for immediate relief for AM stations. This Order will allow the smallest AM stations that face the largest challenges to be the first in line for relief, both for the modification application window that will take place early next year, and for the auction window that will happen in 2017. It also provides for outreach and assistance to those that are most resource-challenged. Giving preference to these Class C and D stations will revitalize AM radio, our broadcast service with the highest percentage of ownership diversity.

Though much of the back-and-forth on the best way to provide this relief played out in the press, instead of within the walls of the Commission, I am nevertheless pleased that we have achieved what I believe is an outstanding result. Today's order reflects the type of compromise that is necessary to achieve results in our democratic process.

STATEMENT OF
COMMISSIONER AJIT PAI

Re: *Revitalization of the AM Radio Service,* MB Docket No. 13-249

WRDN. KZPA. KDKA. WAGG. KBRW. KKOW. WDAY. These aren't random collections of letters. They and countless other call signs like them represent AM radio stations around this country that have informed and entertained listeners and created a sense of community—in some cases, for longer than the FCC itself has been around.

But the AM band is struggling. Signal quality is low. Listenership is down. Advertising revenue is declining. And for a generation, the FCC has been on the sidelines.

That's why, three years ago, I proposed that the Commission launch an initiative to revitalize AM radio. One year later, the FCC began its first comprehensive review of its AM radio rules in over two decades. And at long last, the Commission today is taking meaningful and concrete action to assist AM broadcasters across our country. This is a big victory for the American listening public.

In particular, we give AM broadcasters short-term relief in two different ways. First, we reform many of our technical rules pertaining to the AM band. The details of those changes are difficult for anyone who isn't an engineer to understand, but they will make a real difference to AM broadcasters. Eliminating the so-called "ratchet rule" will make it easier for AM broadcasters to improve their signal quality. Modifying our daytime and nighttime community coverage standards, along with minimum efficiency standards, will give AM broadcasters more flexibility when it comes to site location. And the use of Modulation Dependent Carrier Level control technologies will allow AM broadcasters to cut their operating costs.

Second, we afford AM broadcasters additional opportunities to acquire FM translators, including through two exclusive windows for AM stations to obtain new FM translators. Over the last two years, AM broadcasters from Kansas to Mississippi have told me about the importance of the FM translator window proposal. Translators have helped them boost listenership and advertising dollars in a major way. Now, translators are not the answer for the technical problems plaguing the AM band. But those problems are not going to be solved overnight. An FM translator can serve as a vital bridge to the future for an AM broadcaster as we work on fixing the AM band's long-term problems.

The approach to translators adopted by the Commission may not be perfect, but we made significant progress on the issue over the past few weeks, and it is an approach that I am pleased to support. First, we will open a window in which AM stations will have greater flexibility to move an FM translator purchased in the secondary market. I have long favored making it easier for AM stations to move FM translators, such as by supporting the Tell City waiver request. And then we will give those AM stations still without an FM translator a chance to apply for a new one. I'm hopeful that this two-prong plan will accomplish our goal of distributing FM translators to as many AM stations as want them.

Of course, our work on AM revitalization does not end today; we also tee up many ideas that stakeholders gave us in response to our Notice of Proposed Rulemaking. I look forward to reviewing the record to be compiled on those ideas and hope that we will move forward swiftly on those that have merit.

I would like to thank the dedicated staff of the Media Bureau's Audio Division for their hard work on this document. The Audio Division, ably led by Peter Doyle, often does not get the recognition that it deserves. But the many millions of Americans who regularly listen to terrestrial radio are the beneficiaries of their efforts and expertise.

And I would like to thank all of those who have supported this AM revitalization initiative. The broad support we've seen speaks to the enduring importance of AM radio in communities across the country. From formal comments submitted to the FCC to enthusiastic "attaboys" I've heard in the field, one thing is clear: When it comes to promoting localism, advancing diversity, and otherwise serving the

public interest, AM radio matters. I have seen that for myself in communities across the country, from Fort Yukon, Alaska to Pittsburgh, Pennsylvania, and from Fargo, North Dakota to Birmingham, Alabama. It's impossible to mention here all of the advocates who have helped us reach this point, but you should know that I deeply appreciate all you have done and will never forget it.

Thus we close one chapter in AM revitalization and begin another. As Paul Harvey—his distinctive voice *still* resonates in my memory from so many broadcasts I heard during my childhood on KLKC 1540 AM—might have said, that's the rest of the story. Good day!

STATEMENT OF
COMMISSIONER MICHAEL P. O'RIELLY

Re: *Revitalization of the AM Radio Service,* MB Docket No. 13-249

I commend Commissioner Pai for his leadership on the entire issue of AM revitalization. Having personally discussed the various options with AM radio broadcasters and read their comments, it is clear how important an FM translator auction window is to the overall effort. I must admit that it was disconcerting to see the turmoil necessary to get us to the end result, but all's well that ends well.

At the end of the day, however, Commission rule changes can only be so helpful. The American people will ultimately decide the fate of AM radio and its place in the American entertainment and information marketplace.