September 8, 2022

FCC FACT SHEET*

Amendment of Part 73 of the Commission's Rules to Update Television and Class A Television Broadcast Station Rules, and Rules Applicable to All Broadcast Stations

Notice of Proposed Rulemaking (*NPRM*)

Background: Two historic transitions in the TV band have necessitated a comprehensive review and update of the Commission's rules. Specifically, all full power television stations were statutorily-mandated to complete a nationwide digital television transition by June 12, 2009, and Class A stations transitioned by September 1, 2015. Also, the incentive auction closed on April 13, 2017 and the period for stations to transition off their pre-auction channel ended on July 13, 2020.

What the NPRM Seeks Comment On:

The *NPRM* seeks comment on updates to rules that reflect the digital transition, current technology, and/or Commission practices, including:

- Whether to eliminate entire rules or portions of rules that relate to analog operating requirements, and to similarly eliminate language in rules to remove references to digital television or DTV service, as that distinction is no longer necessary since there is now only one type of television service.
- Whether to delete outdated rules that are no longer valid given changes in Commission-adopted policy, such as the elimination of the comparative hearing process to award and renew broadcast licenses.
- Whether to update the Commission's rules to reference the current designation for form numbers and require electronic filing in the Commission's Licensing and Management System.
- Whether to restructure subpart E of Part 73 of the Commission's rules, which largely consists of the technical licensing, operating, and interference rules for full power stations. The proposed restructuring will make the rules more streamlined and easily understandable for licensees and the public.
- Whether to eliminate the Commission's rules that allowed analog full power, Class A, and low power television stations to offer a subscription television service "for a fee or charge" ("STV") given that this was an analog service.
- Whether to make other technical and miscellaneous updates to the Commission's rules.

* This document is being released as part of a "permit-but-disclose" proceeding. Any presentations or views on the subject expressed to the Commission or its staff, including by email, must be filed in MB Docket No. 22-227, which may be accessed via the Electronic Comment Filing System (https://www.fcc.gov/ecfs/). Before filing, participants should familiarize themselves with the Commission's *ex parte* rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission's meeting. *See* 47 CFR § 1.1200 *et seq*.

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

In the Matter of	)	
	)	
Amendment of Part 73 of the Commission's Rules to Update Television and Class A Television Broadcast Station Rules, and Rules Applicable to All Broadcast Stations	)	MB Docket No. 22-227
	)	

NOTICE OF PROPOSED RULEMAKING*

Adopted: [ ] **Released: [ ]**

Comment Date: [60 Days After Publication in the Federal Register]
Reply Comment Date: [75 Days After Publication in the Federal Register]

By the Commission:

TABLE OF CONTENTS

Heading Paragraph #

I. INTRODUCTION

1. The broadcast television industry has recently completed two significant transitions – the transition from analog to digital-only operations, and the post-incentive auction transition to a smaller television band with fewer channels. In this *Notice of Proposed Rulemaking* (*NPRM*), we propose and seek comment on comprehensively deleting, updating, or otherwise revising Commission rules for full power and Class A stations that no longer have any practical effect given these historic changes. We also propose and seek comment on a restructuring of subpart E of part 73 of the Commission's rules, which largely consists of the technical licensing, operating, and interference rules for full power television. The proposed restructuring will make the rules more streamlined and easily understandable for our licensees and the public.

II. BACKGROUND

2. On October 25, 2021, the Commission adopted a new Table of TV Allotments in part 73 of the Commission's rules for full power television stations, and amended part 74 to remove references to: (1) channels and frequency bands that were no longer in-core television spectrum, and (2) analog TV operations which are no longer permitted.[1] The Table of TV Allotments codified Commission actions taken over the past several years that modified the TV channel allotments reflected in section 73.622(i) of the Commission's rules (rules),[2] and were primarily related to the incentive auction and repacking process authorized by the Spectrum Act.[3] Some of the changes were also due to the Congressionally established deadline of June 12, 2009 for full power stations to complete a nationwide digital television (DTV) transition. All full power stations terminated analog operations on that date (with minor and temporary exceptions) and now broadcast solely on their allotted digital channel. Class A television stations did the

*This document has been circulated for tentative consideration by the Commission at its September 2022 open meeting. The issues referenced in this document and the Commission's ultimate resolutions of those issues remain under consideration and subject to change. This document does not constitute any official action by the Commission. However, the Chairwoman has determined that, in the interest of promoting the public's ability to understand the nature and scope of issues under consideration, the public interest would be served by making this document publicly available. The Commission's ex parte rules apply and presentations are subject to "permit-but-disclose" ex parte rules. *See, e.g.,* 47 CFR §§ 1.1206, 1.1200(a). Participants in this proceeding should familiarize themselves with the Commission's ex parte rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission's meeting. *See* 47 CFR §§ 1.1200(a), 1.1203.

[1] *See Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auction*, GN Docket No. 12-268, Order, FCC 21-111, para. 14 and n.48 (rel. Oct. 25, 2021) (*October 2021 Order*). The Table of TV Allotments, 47 CFR § 73.622(j), is found in part 73, subpart E – Television Broadcast Television Stations. The part 74 rules amended in the *October 2021 Order* are found in part 74, subpart G – Low Power TV and TV Translator Stations.

[2] 47 CFR § 73.622(i) (2018).

[3] Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, §§ 6402 (*codified at* 47 U.S.C. § 309(j)(8)(G)), 6403 (*codified at* 47 U.S.C. § 1452), 126 Stat. 156 (2012) (Spectrum Act). The incentive auction, repacking process, and post-auction transition process are described in the Background section of the *October 2021 Order* at paras. 3-7.

same by September 1, 2015.[4] As these transitions, which were mandated by Congress for full power stations and the Commission for Class A stations, were completed in phases over an extended period of time, the Commission was unable to simply replace pre-transition rules with post-transition requirements. Therefore, the rules are still interspersed with analog definitions and interference, technical, and other operating requirements.

3. On July 12, 2022, we adopted an Order and Sixth Notice of Proposed Rulemaking ("*Part 74 Order*" and "*Part 74 NPRM*").[5] In the *Part 74 Order*, we deleted or revised rules that no longer had any practical effect given the completion of the low power and television translator (LPTV/TV translator) digital transition, or were otherwise obsolete or irrelevant, and made other ministerial changes. In the *Part 74 NPRM*, we sought comment on additional amendments, including proposing to modify rules for digital operations that were previously applicable to analog operations, updating geographic coordinates, modifying station identification requirements, requiring LPTV stations to transmit with a virtual channel that avoids conflicts with other stations, updating the process for filing applications with the Commission, and making certain technical modifications.

4. The Commission explained in the *October 2021 Order* and the *Part 74 Order and NPRM* that it was taking action "[a]s part of its ongoing efforts to ensure that its rules are current" and that it would, "in a future proceeding, conduct a review of its rules to delete provisions relating to analog television and update other rules pertaining to television."[6] This *NPRM* is the next step in our ongoing efforts to delete rules relating to analog television and otherwise update or clarify rules pertaining to television.

III. NOTICE OF PROPOSED RULEMAKING

5. As described below and in Appendix A, we propose to adopt revisions to rules in part 0, part 27, subparts E, H, I, J, and L of part 73, and certain parts of parts 74 and 90 in light of the fact that all television services have ceased analog operations. As discussed below for each subpart, given the conversion from analog to digital television technology, we propose to eliminate entire rules and portions of rules that provide for analog-to-analog and analog-to-digital interference protection requirements and other analog operating requirements. We similarly propose to amend section headings and language in rules to remove references to DTV, digital, and analog television service, as these distinctions are no longer necessary. We also propose to delete outdated rules that are no longer valid given changes in Commission-adopted policy, such as the elimination of the comparative hearing process to award and renew broadcast licenses. We also propose to adopt other non-substantive, technical revisions as set forth in Appendix A and further described below, for example, to update previously-adopted station license periods and to delete obsolete rules governing the post-incentive auction transition period. We also propose to update our rules to reference the current designation for form numbers (*e.g.*, FCC Form 2100) and by requiring electronic filing in LMS. We also propose to make corrections or updates, *inter alia*, to section headings, spelling, contact information, and rule cross-references, or to language inadvertently omitted from a rule.

A. Deletion of Obsolete Rules and Language Recognizing the Full Power and Class A Digital Transition

6. Full power television stations were required to terminate all analog operations no later

[4] *See Amendment of Parts 73 and 74 of the Commission's Rules to Establish Rules for Digital Low Power Television, Television Translator, and Television Booster Stations and to Amend Rules for Digital Class A Television Stations*, MB Docket No. 03-185, Second Report and Order, 26 FCC Rcd 10732, 10735, para. 7 (2011).

[5] *Amendment of Parts 73 and 74 of the Commission's Rules to Establish Rules for Digital Low Power Television and Television Translator Stations*, *Update of Parts 74 of the Commission's Rules Related to Low Power Television and Television Translator Stations*, MB Docket Nos. 03-185 and 22-261, Order and Sixth Notice of Proposed Rulemaking, FCC 22-58 (rel. July 13, 2022) (*Part 74 Order* and *Part 74 NPRM*).

[6] *October 2021 Order* at para. 10, n.35 and *Part 74 Order* at para. 2.

than June 12, 2009 and Class A stations September 1, 2015.[7] Accordingly, we propose to eliminate entire rules, and portions of rules, that provide for analog-to-analog and analog-to-digital interference protection requirements and other analog operating requirements from subpart E (Television Broadcast Stations), subpart H (Rules Applicable to All Broadcast Stations), subpart I (Procedures for Competitive Bidding and for Applications for Noncommercial Educational Broadcast Stations on Non-Reserved Channels), and subpart J (Class A Televisions Broadcast Stations). The rules we propose to amend are related to analog operations (*i.e.,* rules that reference "NTSC,"[8] "analog,"[9] Grade A, Grade B, city grade contours, or F(50,50) curves[10]), with the corresponding digital contours defined in sections 73.625(a), 73.622(e), 73.6010, and/or 74.792.[11] We also propose to amend rules that reference peak power, visual or aural carriers, or carrier frequencies because these are technical engineering terms related to analog television and the rules are related to analog television operations[12] and digital TV signals do not have specific

---

[7] *See supra* para. 2.

[8] NTSC is an abbreviation for the National Television Standards Committee, an association of engineers and scientists interested in the development of television in the analog era, many of which were employees of companies engaged in the manufacturing of television equipment, that developed the black and white and subsequently color television systems used in the United States. *See generally Amendment of the Commission's Rules Governing Color Television Transmissions*, Docket No. 10637, Report and Order, 41 F.C.C. 658 (1953).

[9] *See* 47 CFR §§ 73.622(d)(1) (Digital television table of allotments) (removing text of this rule that refers to analog stations); 73.623(d) (removing analog technical references and reformatting remaining digital technical references into (d)(2)(i)-(iv) and (h) (DTV applications and changes to DTV allotments); 73.624(b) and (c)(3) (Digital television broadcast stations) (removing text of this rule that refers to analog stations); 73.683(d) (Field strength contours and presumptive determination of field strength at individual locations) (removing text of this rule that refers to analog stations); and 73.686(d) (Field strength measurements) (removing text of this rule that refers to analog stations). In addition, regarding 73.5000(a) (Services subject to competitive bidding), we propose to delete the word "analog" where it is appears in the rule because there is no need to differentiate between analog and digital television services.

[10] *See* 47 CFR §§ 73.683(a)-(b) (Field strength contours and presumptive determination of field strength at individual locations); 73.1675(a)(1)(iii) (Auxiliary antennas) (delete analog contour and replace with digital noise limited contour); 73.5007(b)(2)(iii) and (b)(3)(iv) (Designated entity provisions); 73.6000 (Definitions); and 73.6010(b) (Class A TV station protected contour). The one exception is 47 CFR § 73.626(f)(2)(i) (DTV distributed transmission systems), which states that the F(50,50) service contour of a DTS transmitter shall not extend beyond that of its reference facility, which will be retained. We separately propose to add text in 47 CFR § 73.683(a) (Field strength contours and presumptive determination of field strength at individual locations) to provide guidance for those reviewing the cross-reference to this section found in 47 CFR § 90.307(b) (Protection criteria).

[11] As part of our reorganization of subpart E, we note that we propose to relocate 47 CFR §§ 73.625(a) (Transmitter location) and 73.622(e) (DTV Service Areas) to new 47 CFR §§ 73.618 and 73.619(c), respectively. We are not proposing to move § 73.6010 or § 74.792 as part of the reorganization.

[12] *See* 47 CFR §§ 73.653 (Operation of TV aural and visual transmitters); 73.664(a)-(c) (Determining operating power); 73.665 (Use of TV aural baseband subcarriers); 73.667 (TV subsidiary communications services); 73.669 (TV stereophonic aural and multiplex subcarrier operation); 73.681 (Definitions) (we propose to delete the following definitions relating to analog operations: "Aural center frequency;" "Aural transmitter;" "Baseband;" "Frequency departure;" "Frequency deviation;" "Frequency swing;" "Main channel;" "Multiplex Transmission (Aural);" "Peak power;" "Visual transmitter power"); 73.682(c) (TV transmission standards); 73.687(a), (b), (c) introductory text, (c)(1), and (e)(2) (Transmission system requirements); 73.688(a) (Indicating instruments); 73.691 (Visual modulation monitoring); 73.699 (TV engineering charts) Figure 12 (Figure 12 is referenced only by 73.687(b), which we propose to delete); 73.1350(f)(3) (Transmission system operation); 73.1540(a) (Carrier frequency measurements); 73.1545(c), (e), and Note to (e) (Carrier frequency departure tolerances); 73.1560 (c)(1)-(2) (Operating power and mode tolerances); 73.1570 (updating section heading) and (b)(3) (Modulation levels: AM, FM, TV and Class A TV aural); 73.1635(a)(5) (Special temporary authorizations (STA)); and 73.6024(c) (Transmission standards and system requirements). We note that 47 CFR § 73.653 was raised in the "FM6" proceeding (*In the Matter of Amendments of Parts 73 and 74 of the Commission's Rules for Digital Low Power Television and Television Translator Stations*, MB Docket No. 03-185, Fifth Notice of Proposed Rulemaking (rel.

(continued….)

visual or aural carriers.[13] We similarly propose to amend rules and figures which reference the vertical blanking interval, stereophonic sound transmission, modulation, subcarriers of any kind, components of the picture such as chrominance or color, or the sound or picture itself beyond the lines of resolution. These references are technical engineering terms related analog television operations since they are related to the picture derived from an analog visual carrier or the sound derived from an analog aural carrier.[14] To the extent such analog rules are superseded by related requirements for digital operations, the digital rules are found in the digital broadcast television standard documents incorporated by reference in section 73.682(d).[15] In addition, a number of rules we propose to amend have a digital equivalent elsewhere in the rules.[16] For all of these cases, we propose to either modify the analog reference to specify a digital equivalent, or delete the analog-related rule entirely. We seek comment on these proposals.

June 7, 2022), and should dependence on this rule be required in that proceeding, we would intend to add a separate rule specific to FM6 stations rather than retaining this generally-applicable but clearly outdated rule.

[13] *See generally* 47 CFR § 73.682(d) (Digital broadcast television transmission standard); *see also* 47 CFR § 73.8000 (Incorporation by reference) (each of the several standards listed in the rule relate to DTV).

[14] *See* 47 CFR §§ 73.621(g) (Noncommercial educational TV stations – referencing Telecommunications Service on the Vertical Blanking Interval and in the Visual Signal); 73.646 (Telecommunications Service on the Vertical Blanking Interval and in the Visual Signal); 73.681 (Definitions) (proposing to delete definitions and the Note for "Amplitude modulation (AM);" "BTSC;" "Blanking level;" "Chrominance;" "Chrominance subcarrier;" "Color transmission;" "Field;" "Frame;" "Frequency modulation (FM);" "IRE standard scale;" "Luminance;" "Monochrome transmission;" "Multichannel Television Sound (MTS);" "Negative transmission;" "Percentage modulation;" "Pilot subcarrier;" "Program related data signal;" "Reference black level;" "Reference white level of the luminance signal;" "Scanning;" "Scanning line;" "Visual carrier frequency;" "Visual transmitter"); 73.699 (TV engineering charts) (Figures 5, 5(a), 6, 7, 8, 13, 14, 15, 16, and 17); 73.1207(b)(2) (Rebroadcasts – referencing multiplex subcarrier or telecommunications service on the vertical blanking interval); and 73.1590(a)(5) ("TV stereophonic or subcarrier transmission equipment"), (c)(1), and (c)(3) (Equipment performance measurements). Section 73.699, Figure 11 (Assumed Ideal Detector Output) is no longer referenced anywhere else in the rules, and appears to have been inadvertently overlooked during a 1984 rule modification which deleted the sole reference to it from section 73.687(a) (*see* 49 Fed. Reg. 48305, 48312 (Dec. 12, 1984)), and we thus propose to delete it. While 47 CFR § 73.621(h) (Noncommercial educational TV stations), which refers to the transmission of non-program related data service on "Line 21," does not specifically use the term "visual blanking interval," "Line 21" refers to part of the vertical blanking interval, and thus we propose to delete it.

[15] 47 CFR § 73.682(d).

[16] Section 73.613 (Protection of Class A TV stations) relates to analog because Class A protections for digital stations are in section 73.616(e), which we are proposing to move to section 73.620(d). Sections 73.682(a)(2)-(13) and (15)-(24) (TV transmission standards) are replaced by section 73.682(d). Section 73.684 (Prediction of coverage) is in section 73.625 (DTV coverage of principal community and antenna system), some of which we are proposing to move into other rule parts in the proposed reorganization of our rules; reference in section 73.681 updated accordingly. The digital equivalent of Section 73.685(a)-(c) (Transmitter location and antenna system) is found in section 73.625(a)(1)-(3). The digital equivalent of section 73.685(f) (Transmitter location and antenna system) is contained in 73.625(c)(3), which applies also to sections 73.1690(b)(3) and (c)(3) (Modification of transmission systems). The digital equivalent of section 73.687(e)(1) (Transmission system requirements) is replaced by section 73.622(h), which we are proposing to move to section 73.611. The digital equivalent of section 73.698 (Tables) is replaced by section 73.623(d)(2), which we are proposing to move to section 73.622(k). Section 73.3550(b) (Requests for new or modified call sign assignments) has a reference to section 74.783(d), but section 74.791(a) is the equivalent digital rule. Accordingly, we are proposing to replace the reference to 74.783(d) with 74.791(a). The digital equivalent of section 73.3572(a)(4) (Processing of TV broadcast, Class A TV broadcast, low power TV, TV translators, and TV booster applications) is replaced by section 74.787(a)(4). The digital equivalent of section 73.6012 (Protection of Class A TV, low power TV and TV translator stations) is found in sections 73.6017 and 73.6019. The digital equivalent of section 73.6013 (Protection of DTV stations) is found in section 73.6018 (Digital Class A TV station protection of DTV stations). The digital equivalent of section 73.6014 (Protection of digital Class A TV stations) is found in section 73.6017.

7. We also propose to amend rule section headings and rules in subpart E,[17] subpart H,[18] and subpart J,[19] to remove references to DTV and digital television service since all television services have transitioned from analog to digital operations and thus, there is no further need to differentiate between two separate kinds of service.[20] We also propose to eliminate provisions of rules and amend section headings and language that are obsolete due to the conversion from analog to digital television technology, including references to the analog television booster service in subpart E[21] and subpart H,[22] since these services were not carried over into digital operations.[23] We propose to amend section 73.6026 (Broadcast regulations applicable to Class A television stations) to remove references to analog-only rules applicable to Class A television stations, consistent with proposals above.[24] We seek comment on these proposals.

---

[17] 47 CFR §§ 73.616(a)-(e) and (g) (Post-transition DTV station interference protection); 73.621(j) (Noncommercial educational TV stations); 73.622(a) introductory text and (a)(2) (also delete reference to out-of-core-channels), (c)(1), (e)(1), (f)(6), (f)(7), (f)(8) (also delete references to out-of-core channels) (Digital television table of allotments); 73.623 (updating section heading), (a)-(f) and (h); (DTV applications and changes to DTV allotments); 73.624 (updating section heading), (a)-(c) and (g) (Digital television broadcast stations); 73.625 (updating section heading), (a)(1), (b)(1), (b)(3), (c)(4)(i)-(ii) (DTV coverage of principle community and antenna system); 73.626 (updating section heading), (a), (c)(1), (e), (f)(2), (f)(6) (DTV distributed transmission systems); 73.686(e) (Field strength measurements).

[18] 47 CFR § 73.1201(b)(1) (Station identification).

[19] 47 CFR §§ 73.6010(c) and (d) (Class A TV station protection contour); 73.6017 (Digital Class A TV station protection of Class A TV and digital Class A TV stations); 73.6018 (Digital Class A TV station protection of DTV stations); 73.6019 (Digital Class A TV protection of low power TV, TV translator, digital low power TV and digital TV translator stations); 73.6022(a) (Negotiated interference and relocations agreements); 73.6020 (Protection of stations in the land mobile radio service); 73.6023 (Distributed transmission systems); and 73.6024(d) (Transmission standards and system requirements). We also propose to amend section 73.6024(d) (Transmission standards and system requirements) to require stations in the Mexican border zone to specify a full-service emission mask in any modification applications requiring coordination. *See infra* para. 49.

[20] We also propose to remove from certain part 74 rules inadvertent references to DTV and digital television service, overlooked in the *Part 74 Order*, since, with rare exception, all part 74 television services have transitioned from analog to digital operations and thus, there is no further need to differentiate between two separate kinds of service. *See* 47 CFR §§ 74.792(b) (Low power TV and TV translator station protected contour); 74.793(e), (g)-(h) (Low power TV and TV translator station protection of broadcast stations); and 74.794 (section heading, paragraph (b) introductory text, (b)(1), and (b)(2) (Digital emissions). We also propose to delete the second sentence in 47 CFR § 74.793(b) (Low power TV and TV translator station protection of broadcast stations), given the fact that we propose to delete the analog threshold interference levels in 47 CFR § 73.623(c)(2) (DTV applications and changes to DTV allotments) and therefore there is no need to distinguish digital operations. We note that a small number of TV translator stations licensed to the State of Alaska (the Alaska translator stations) remain operating in analog pursuant to a Commission waiver of the analog termination date. *See State of Alaska - Request for Waiver of Section 74.731(m) of the Commission's Rules*, 36 FCC Rcd 10765 (2021); *see also* Letter to State of Alaska from Barbara A. Kreisman, Chief, Video Division (Jan. 26, 2022), a copy of which is available at LMS File Nos. 0000179529, 0000179531, 0000179528, 0000179535, 0000179536, 0000179527, 0000179526, 0000179534, and 0000179533; *see also* Letter to State of Alaska from Barbara A. Kreisman, Chief, Video Division (July 15, 2022), a copy of which is available at LMS File Nos. 0000194718, 0000194713, 0000194714, 0000194717, 0000194716, 0000194712, and 0000194715 (extending the tolling through October 3, 2022). We understand the licensee of these translator stations is actively transitioning and anticipates terminating analog service in the near future. In the event any of the Alaska translator stations have not completed their digital transition by the effective date of these rule changes discussed herein, we direct the Media Bureau to follow appropriate procedures to impose any necessary conditions on the station's authorization to continue analog operations.

[21] 47 CFR §§ 73.622(d)(1)-(2), Note to (e)(2), (e)(3), (f)(5), (f)(6), (f)(7), and (f)(8) (Digital television table of allotments); 73.623(a)-(b), (c)(2), (c)(3), (c)(5), (d), and (h) (DTV applications and changes to DTV allotments); 73.624(a), (b)(1)-(2), (d)-(f) (refer to pre-DTV transition procedures) (Digital television broadcast stations); and 73.626(c)(2) (DTV distributed transmission systems). Section 73.622(c)(2) states that an application may be filed

(continued….)

8. We also propose to remove references to an element of the Table of Allotments that has been previously updated. Applicants for full power digital broadcast stations may only apply to construct on channels designated in a codified Table of Allotments and only in the communities listed therein.[25] To accommodate the analog to digital television transition, the Commission adopted section 73.622(b) (DTV Table of Allotments) in 1997 to allot a paired DTV channel to each analog television licensee and permittee.[26] The Commission later deleted section 73.622(b), as well as the analog TV Table of Allotments previously found in section 73.606, when it adopted section 73.622(i) (Post-Transition Table of Allotment).[27] The rules, however, continue to refer to "Appendix B," which specified the service area that must be protected for each channel allotted in section 73.622(b) during most of the transition period, and set forth the maximum effective radiated power (ERP) and antenna height above average terrain (HAAT) for each allotment in the "initial" DTV table, *i.e.*, section 73.622(b). We therefore propose to remove references to "Appendix B"[28] in our rules. We seek comment on these proposals.

9. We propose to amend section 73.612 to remove references to distance separations, which outside of new allotment proceedings are not used in digital TV.[29] This rule is obsolete, as TV stations

---

for a channel or community not specified in the DTV Table of Allotments (formerly section 73.622(b)) if it is consistent with the rules and policies established in *Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules,* WT Docket No. 99-168, Third Report and Order, 16 FCC Rcd 2703, 2717-18, paras. 34-36 (2001) (stating that the Commission would allow stations on channels 59 through 69 to enter into voluntary agreements to temporarily relocate to channels 52 through 58). Because section 73.622(b) has been deleted and channels 52 through 58 reallocated for non-broadcast use, we propose to delete this section of the rule. Similarly, we propose to delete the last five sentences of section 73.622(c)(1), which discuss procedures for filing applications for channel changes made in the deleted subsection (b), DTV Table of Allotments, citing the *MO&O on Reconsideration of the Sixth R&O*, 13 FCC Rcd 7418, (1998), and analog channel swaps.

[22] 47 CFR §§ 73.1001(c) (Scope); 73.3521 (Mutually exclusive applications for low power television, television translators and television booster stations); 73.3525 (Note) (Agreements for removing application conflicts); 73.3533(a)(5) (Application for construction permit or modification of construction permit); 73.3584(a), (c) (Procedure for filing petitions to deny); 73.3572 (section heading, (a)(2), (c) and (f)-(g)) (Processing of TV broadcast, Class A TV broadcast, low power TV, TV translators, and TV booster applications); and 73.3598(a) introductory text (Period of construction).

[23] *See Part 74 Order* at para. 6 and n.24.

[24] 47 CFR §§ 73.6026 (delete reference to § 73.635 (Use of common antenna site); 73.646 (Telecommunications Service on the Vertical Blanking Interval and in the Visual Signal); 73.653 (Operation of TV aural and visual transmitters); 73.665 (Use of TV aural baseband subcarriers); 73.667 (TV subsidiary communications services); 73.669 (TV stereophonic aural and multiplex subcarrier operation); and 73.691 (Visual modulation monitoring). As discussed *infra*, we propose to delete the rules related to the Subscription Television Service as unnecessary and no longer in use, and amend 47 CFR § 73.664 (Determining operating power), to remove references to measurement techniques we believe no longer have any use in the processing of applications to determine interference to other stations or previously filed applications.

[25] 47 CFR § 73.622(c)(1).

[26] 47 CFR § 73.622(b) (2018) (DTV Table of Allotments); *Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, MM Docket No. 87-268, Sixth Report and Order, 12 FCC Rcd 14588 (1997) (*Sixth Report and Order*), Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order, 13 FCC Rcd 7418 (1998) (*MO&O on Reconsideration of the Sixth R&O*).

[27] 47 CFR § 73.622(i); *Amendment of Parts 27, 54, 73, 74, and 76 of the Commission's Rules to Delete Rules Made Obsolete by the Digital Television Transition*, MB Docket No. 17-105, Order, 33 FCC Rcd 863 (2018).

[28] Appendix B, and a description of its use and contents, is in the *Sixth Report and Order*, 12 FCC Rcd at 14693-754. Corrections were made to Table 2 of Appendix B in the *MO&O on Reconsideration*. We note that section 73.622(f)(3)(i) and (ii) both refer to policies specific to Appendix B, and thus propose to delete them.

[29] 47 CFR § 73.612(a)-(b) and Note (Protection from interference).

are now protected using OET Bulletin No. 69.[30] We propose to delete section 73.615 because the Commission staff's current practice provides additional precision beyond what the text of the current rule requires since the staff now issues authorizations based on the more precise kW value as opposed to dBk and does not round HAAT values as described in this rule.[31] For the same reason, we propose to remove the dBk reference in section 73.614(a).[32] We propose to delete section 73.622(g)(2), which pertains to protection of analog TV signals by an upper-adjacent digital signal.[33] We propose to delete section 73.1620(f) (Program tests) since it refers to a policy of allowing 1000 watt UHF translators on vacant allotments, a policy which was ended prior to 1984,[34] and to delete from section 73.6024(b) (Transmission standards and system requirements) a reference to section 74.736, as that section was recently eliminated by the Commission in the *Part 74 Order*.[35] We also propose to delete sections 73.685(g) (Transmitter location and antenna system) and 73.6025(b) (Antenna system and station location) because these rules were adopted many decades ago for the analog era and are not relevant to or used in the digital environment.[36] We seek comment on these proposals.

B. Updates and Corrections to the Full Power and Class A Rules

10. We also propose to make other updates and corrections to the full power and Class A rules. We propose to update the reference to the 2000 census population data found in section 73.616(d)(1)[37] to reflect a reference to the most recent official decennial U.S. Census population data, which conforms paragraph (d)(1) to the language in section 73.616(e)(1).[38] We propose to amend references to the "Table of Allotments" in section 73.622(j) to the "Table of TV Allotments" in all places

---

[30] 47 CFR § 73.616(d) (Post-transition DTV station interference protection).

[31] 73.615 (Administrative changes in authorizations). For example, a station authorized at 30 dBk (decibels above 1 kW) would operate at 1000 kW, while a station at 29.9 dBk consistent with the current rule would operate at approximately 977 kW. The Bureau, however, authorizes stations today based on kW, allowing a station to be authorized at an intermediate value such as 990 kW. The Bureau's current practice therefore provides more precision.

[32] 47 CFR § 73.614(a) (Power and antenna height requirements).

[33] *See Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, MM Docket No. 87-268, Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order, 13 FCC Rcd 7418, 7467, para. 120 (1998).

[34] *Low Power Television and Television Translator Service,* MM Docket No. 83-1350, Report and Order, 102 F.C.C.2d 295, 311 (1984) (indicating that section 73.3516(c) should have been modified at the time when LPTV rules were adopted, which is the rule part that 73.1620(f) refers to).

[35] *See Part 74 Order*.

[36] *See* 28 Fed. Reg. 13572, 13678-79 (rel. Dec. 14, 1963) (section 73.685 (1963)).

[37] As part of our reorganization, we propose to relocate section 73.616(d) (Post-transition DTV station interference protection) into a new section 73.620. *See infra*.

[38] 47 CFR § 73.616(d)(1) (Post-transition DTV station interference protection). This language was inadvertently not included in subsection (d)(1). *See Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard*, GN Docket No. 16-142, Notice of Proposed Rulemaking, 32 FCC Rcd 1670, 1696-97, para. 59 (2017) (in proposing to adopt section 73.616(e)(1), the Commission stated that "[w]e propose to update the Commission's rules regarding acceptable levels for interference resulting from a broadcaster's application for new or modified facilities"); *Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard*, GN Docket No. 16-142, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 9930, 9986-88, para. 114 (2017) (in adopting the rule, the Commission stated that "[a]fter the repacking process is complete, any broadcast television service or interference calculations will be based on the 2010 U.S. Census statistics, until after 2020, when the next U.S. Census statistics are scheduled to become available and the Media Bureau subsequently announces the date of application of such data"). We also propose to make a similar revision in 47 CFR § 73.686(c)(1)(i) to conform the rule to 47 CFR § 73.616.

where it is referenced in subpart E[39] and in subpart H, for continuity.[40] We propose to amend section 73.622(j) to reflect a channel substitution previously adopted upon notice and comment rulemaking that was adopted shortly before the current version of the Table of TV Allotments was adopted.[41] We propose to amend certain rules in subpart E to add common abbreviations used elsewhere in the Commission's rules and forms.[42] We propose to amend certain rules in subpart H and subpart I to provide full power and Class A licensees and permittees with accurate information about current Commission forms and filing procedures, including the removal of obsolete forms.[43] We propose to update section 73.1030 to

---

[39] 47 CFR § 73.622 (section heading and (a)) (Digital television table of allotments); 73.623(d), (f), and (h) (DTV applications and changes to DTV allotments).

[40] 47 CFR § 73.1015 (Truthful written statements and responses to Commission inquiries and correspondence). We also propose to update the reference to FM Table of Allotments to "Table of FM Allotments" in 47 CFR § 73.1015 to reflect the name of the table in 47 CFR § 73.202(b).

[41] On June 12, 2021, the Media Bureau issued a Notice of Proposed Rulemaking in response to a petition filed by KTUL Licensee, LLC, the licensee of KTUL, Tulsa, Oklahoma, requesting the substitution of channel 14 for channel 10 at Tulsa in section 73.622(i), the DTV Table of Allotments. *Amendment of Section 73.622(i), Post-Transition Table of DTV Allotments, Television Broadcast Stations (Tulsa, Oklahoma)*, MB Docket No. 21-9, Notice of Proposed Rulemaking, 36 FCC Rcd 157 (Vid. Div. 2021) (*Tulsa NPRM*). In the *Tulsa NPRM*, the Bureau noted that the Commission had completed the incentive auction and broadcast television spectrum repacking authorized by the Spectrum Act and that the Bureau would amend the rules to reflect all new full power channel assignments in a revised Table of Allotments. Because the Table had not yet been amended, however, the Bureau continued to refer to section 73.622(i) for the purpose of the Tulsa proceeding. *Id.* at 157, n.1. The Bureau adopted a Report and Order amending section 73.622(i) to substitute channel 14 at Tulsa, *Amendment of Section 73.622(i), Post-Transition Table of DTV Allotments, Television Broadcast Stations (Tulsa, Oklahoma)*, MB Docket No. 21-9, Report and Order, DA 21-1161 (rel. Sept. 16, 2021), and shortly thereafter the Commission adopted the Table of TV Allotments, which superseded section 73.622(i). *October 2021 Order* at para. 8. The amendment to section 73.622(j) reflects this channel substitution.

[42] *See, e.g.*, 47 CFR §§ 73.614(a) (adding abbreviations for "ERP" and "HAAT") (Power and antenna height requirements); and 73.625(a)(1) (adding abbreviations for "ERP" and "HAAT") (DTV coverage of principal community and antenna system).

[43] 47 CFR §§ 73.1250(e) (Broadcasting emergency information); 73.1350(h) (Transmission system operation); 73.1560(a)(1) and (d) (Operating power and mode tolerances); 73.1615(c) (Operation during modification of facilities); 73.1620(a)(1)-(3) (Program tests); 73.1635(a)(2)-(3) (Special temporary authorizations (STA)); 73.1675(b) (Auxiliary antennas); 73.1690(b) and (c)(3) (Modification of transmission systems); 73.1740(a)(4) (Minimum operating schedule); 73.1750 (Discontinuance of operation); 73.2080(c)(6) and (f) (deleting the references to obsolete Form 397 and updated the names of forms) (Equal employment opportunities (EEO)); 73.3500 (Application and report forms); 73.3533(a)(1) and (a)(4)-(a)(7) (Application for construction permit or modification of construction permit); 73.3536(b)-(c) (Application for license to cover construction permit); 73.3540(c)-(f) (Application for voluntary assignment or transfer of control); 73.3541(b) (Application for involuntary assignment of license or transfer of control); 73.3544(b)-(c) (Application to obtain a modified station license); 73.3578(b) (Amendments to applications for renewal, assignment or transfer of control); 73.3587 (Procedure for filing informal objections); 73.3549 (Requests for extension of time to operate without required monitors, indicating instruments, and EAS encoders and decoders); 73.3550(a) and (j) (also adding "-DT" suffix in (a), (f), (k), and (m) (Requests for new or modified call sign assignments). The Commission has acknowledged the use of the "-DT" suffix in prior rulemakings. In 2004, the Commission permitted stations simulcasting their analog programming on their digital channel to make station identification announcements simultaneously for both stations as long as the identification included both call signs "(*e.g.*, "WXXX-TV and WXXX-DT")." *See Second Periodic Review of the Commission's Rules and Polices Affecting the Conversion to Digital Television*, MB Docket No. 03-15, Report and Order, 19 FCC Rcd 18279, 18355, para. 173 (2004) (subsequent citations omitted) (*Second Periodic Review*); *see also Digital Transition Call Sign Procedures*, Public Notice, 24 FCC Rcd 7617 (MB 2009). We also propose to update 47 CFR §§ 73.3598(c) (Period of construction); 73.5005(a) (Filing of long-form applications); and 73.5006(b) (Filing of petitions to deny against long-form applications). We note that the numbering of our forms has changed with the transition of the Commission's broadcast licensing database from the Consolidated Database System (CDBS) to the Licensing and Management System (LMS).

reflect updated contact information for the National Radio Astronomy Observatory site and the Radio Frequency Management Coordinator.[44] We propose to delete section 73.682(a)(1) as duplicative of section 73.624(a) and thus, unnecessary.[45] We seek comment on these proposals.

11. We also propose to make amendments to correct typographical errors in words and cross-references that contain incorrect rule citations.[46] We propose to delete repetitive language within a rule.[47] We also propose to revise section 73.682(d) to break the existing paragraph into subsections, without altering its content, in order to make the paragraph more accessible to licensees and the public.[48] In addition, we propose to eliminate notes to rules and shift the language into the text of the relevant rule to conform to the publishing conventions of the National Archives and Records Administration's Office of the Federal Register.[49] We seek comment on these proposals.

12. We propose to delete section 73.685(e) (Transmitter location and antenna system) because it is redundant with section 73.625(c)(2) (antenna system), and contains certain requirements regarding directional antennas which are no longer in use. We propose to delete section 73.622(f)(2) as obsolete, since all applications are now evaluated for interference using OET Bulletin No. 69.[50] We also propose to delete section 73.6027 as duplicative and unnecessary. That rule provides that Class A television station must comply with section 73.1030 of the rules.[51] Section 73.1030, however, is already

[44] 47 CFR § 73.1030(a)(1) and (b)(2) (Notifications concerning interference to radio astronomy, research and receiving installations).

[45] 47 CFR § 73.682(a)(1) (TV transmission standards) and 47 CFR § 73.624(a) (Digital television broadcast stations) (both noting the width of a television channel is 6 MHz).

[46] 47 CFR §§ 73.616(e)(1) (Post-transition DTV station interference protection); 73.622(c)(1) (Digital television table of allotments); 73.623(c)(5)(iii), (d)(1), (d)(4) (DTV applications and changes to DTV allotments); 73.624(g) (Digital television broadcast stations); 73.625(c)(5) (cites to 73.622(f)(4) which is irrelevant to electrical beam tilt) (DTV coverage of principal community and antenna system); 73.626(c)(2) (DTV distributed transmission systems); 73.681 (definition for "Antenna height above average terrain" corrected to update rule cross-reference) (Definitions); 73.682(d) (TV transmission standards); 73.683(c)(3) (Field strength contours and presumptive determination of field strength at individual locations); 73.1217 (Broadcast hoaxes); 73.1250 (Broadcasting emergency information); 73.1615(b)(3) (Operation during modification of facilities); 73.1690(b)(3) and (c)(3) (Modification of transmission systems); 73.3550(b) and (i) (Requests for new or modified call sign assignments); 73.5007(b)(3)(v) (Designated entity provisions); 73.3578(b) (Amendments to applications for renewal, assignment or transfer of control); 73.6018 (Digital Class A TV station protection of DTV stations); 74.793(g) (Low power TV and TV translator station protection of broadcast stations); and 73.4060(a) (Citizens agreements).

[47] 47 CFR § 73.623(e) (DTV applications and changes to DTV allotments).

[48] *See* proposed 47 CFR § 73.682(d)(1)-(4) (TV transmission standards). We also propose to remove citations to sections of the Communications Act in proposed section 73.682(d)(3)(ii) relating to the organization and functions of the Commission that we believe were inadvertently included in the rule, as well as the physical address of ATSC in favor of solely providing an updated web address (https://www.atsc.org/documents/atsc-1-0-standards/). We also propose to remove the physical address of ATSC in 47 CFR § 73.8000 (Incorporation by reference).

[49] *See* 47 CFR §§ 73.682 (TV transmission standards); 73.1216 (Licensee-conducted contests); 73.1217 (Broadcast hoaxes); and 73.3525 (Agreements for removing application conflicts).

[50] 47 CFR § 73.622(f)(2) (Digital television table of allotments). *See also* 47 CFR § 73.616(d) (Post-transition DTV station interference protection), which requires applications to pass an analysis with OET Bulletin No. 69.

[51] 47 CFR § 73.6027 (Class A TV notifications concerning interference to radio astronomy, research and receiving installations).

applicable to Class A stations.[52] We also propose to place a reference to section 73.1030 in section 73.6026 (Broadcast regulations applicable to Class A television stations), which lists rules that apply to Class A by reference. We similarly propose to delete the last sentence of 73.6020 (Protection of stations in the land mobile radio service) with respect to land mobile radio service (LMRS) operations on channel 16 in New York, as it is duplicative of the reference to section 74.709 in the first sentence of 73.6020, since section 74.709 requires protection of channel 16 in New York. We also propose to streamline section 73.6000 by amending the rule, after deleting the analog content, to simplify and shorten the language without further altering the meaning or content.[53] We seek comment on these proposals.

13. We also seek to add an explanatory note to section 73.623 to reference and explain the existence of a granted waiver with respect to the community of Los Angeles, California.[54] Section 73.623 requires television stations to protect certain channels for use by LMRS in thirteen U.S. cities listed in the rule. In 2008, the Commission's Public Safety and Homeland Security Bureau (PSHSB) granted a waiver pursuant to section 337(c) of the Communications Act, as amended,[55] allowing the County of Los Angeles to use channel 15 in Los Angeles for public safety communications.[56] Because this channel is adjacent to two channels contained in section 73.623, we believe the public interest is served by including a note explaining the existence of the 2008 waiver. We seek comment on these proposals.

C. Post-Incentive Auction Licensing and Operation (Section 73.3700)

14. Section 73.3700(a)(2) includes licensing and procedural rules for television stations during the post-incentive auction transition. The incentive auction closed on April 13, 2017,[57] and thus, we propose to amend section 73.3700(a)(2) to add the citation to the *Channel Reassignment Public Notice* that was released by the Commission's Media and Wireless Telecommunications Bureaus and Incentive Auction Task Force announcing the completion of the auction and deadlines for stations assigned new channels through the repacking process to terminate operations on pre-auction channels.[58] We also propose to delete as obsolete certain definitions that relate to the bid options that were available to full power and Class A television broadcasters eligible to participate in the incentive auction that closed on April 13, 2017.[59] We also propose to delete as obsolete procedural rules that governed the post-incentive auction period for stations to transition off their pre-auction channel, which ended on July 13, 2020, including the portions of the rule pertaining to the special post-incentive auction displacement filing

---

[52] 47 CFR § 73.1030 (Notifications concerning interference to radio astronomy, research and receiving installations). Class A licensees are required to comply with all part 73 regulations except for those that cannot apply for technical or other reasons. *Establishment of a Class A Television Service*, MM Docket No. 00-10, Report and Order, 15 FCC Rcd 6355, 6365, para. 23 (2000) (*Class A Report and Order).*

[53] 47 CFR § 73.6000 (Definitions – because we propose to delete subsection (1) in *supra* n.10, we propose to delete the number (2), but retain the text).

[54] 47 CFR § 73.623 (DTV applications and changes to DTV allotments). A similar explanatory note was added to section 74.709 in the Commission's *Part 74 Order* at para. 8.

[55] 47 U.S.C. § 337(c).

[56] *See Request for Waiver of the Commission's Rules to Authorize Public Safety Communications in the 476-482 MHz Band (County of Los Angeles, California)*, Order, 23 FCC Rcd 18389 (PSHSB 2008).

[57] *Incentive Auction Closing and Channel Reassignment Public Notice: The Broadcast Television Incentive Auction Closes; Reverse Auction and Forward Auction Results Announced; Final Television Band Channel Assignments Announced; Post-Auction Deadlines Announced*, GN Docket No. 12-268, Public Notice, 32 FCC Rcd 2786 (WTB/MB 2017) (*Channel Reassignment Public Notice*).

[58] 47 CFR § 73.3700(a) (Definitions), and (a)(2) (Channel reassignment public notice).

[59] 47 CFR §§ 73.3700(a) (Definitions), (6) (High-VHF-to-Low-VHF station), (7) (License relinquishment station), and (17) (UHF-to-VHF station).

window which closed on June 1, 2018 and applied to low power television and television translator stations displaced by the auction.[60] We retain those portions of the rule pertaining to the small number of stations that are still engaged in constructing final facilities on their post-auction channel assignments and to the TV Broadcaster Relocation Fund.[61] We seek comment on these proposals.

D. Updates to Listing of FCC Policies

15. Section 73.4000 *et seq* provides certain FCC policies and citations related to all broadcast stations for the purpose of reference and convenience. Section 73.4000 addresses the fact that the present listing of FCC policies and citations contained in 73.4000 *et seq* may not be an all-inclusive list.[62] We propose to also include cautionary language in the rule to note that subsequent decisions or actions may exist. We seek comment on this proposal. We also propose to amend a number of rules in section 73.4000 *et seq* that are now obsolete or otherwise require updates. For instance, the Commission no longer uses comparative hearings to award commercial broadcast licenses so section 73.4082 related to such proceedings is obsolete.[63] We propose to remove or update rules that implicate audio services that are obsolete or require updates.[64] And we propose to update rules to reflect the availability of newer versions of procedures and Commission orders.[65] We also propose to update certain rules to reflect the

---

[60] 47 CFR §§ 73.3700(b) (Post-auction licensing), (c) (Consumer education for transitioning stations), (d) (Notice to MVPDs), and (g) (Low Power TV and TV translator stations).

[61] *See* 47 U.S.C. § 1452(j)(1)(A)-(B); *see also Incentive Auction Task Force and Media Bureau Report on the Status of the Post-Incentive Auction Transition and Reimbursement Program; Announce a Further Allocation from the Relocation Fund; and Announce Procedures for Eligible Entities to Close Out Accounts in the Fund*, Public Notice, 34 FCC Rcd 304, 312, para. 26 (2019); *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC Rcd 6567, 6825-26, paras. 632-36 (2014).

[62] 47 CFR § 73.4000 (Listing of FCC policies).

[63] *See* 47 CFR § 73.4082 (Comparative broadcast hearings – specialized programming formats). The Commission no longer resolves mutually exclusive broadcast applications through comparative hearings but rather now uses competitive bidding procedures. *See* 47 CFR § 73.5000 *et seq* (procedures for competitive bidding); *Implementation of Section 309(j) of the Communications Act; Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service*, MM Docket No. 97-234, First Report and Order, 13 FCC Rcd 15920 (1998) (subsequent citations omitted) (*Competitive Bidding First R&O*).

[64] Section 73.4017 is proposed to be removed because these policies have been replaced by competitive bidding procedures in sections 73.5000-73.5009. *See* 47 CFR § 73.4017 (Application processing: Commercial FM stations); 47 CFR §§ 73.5000-73.5009; *Competitive Bidding First R&O*, at 15972, para. 137 (1998). Section 73.4100 and Section 73.4101 are proposed to be retained and amended to add a more recent policy pronouncement from 1981 and 1987. *See* 47 CFR §§ 73.4100 (Financial qualifications; new AM and FM stations) and 73.4101 (Financial qualifications, TV stations); *Revision of Application for Construction Permit for Commercial Broadcast Station (FCC Form 301)*, Memorandum Opinion and Order, 50 R.R.2d 381, para. 6 (1981) and *Certification of Financial Qualification by Applicants for Broadcast Station Construction Permits*, Public Notice, 2 FCC Rcd 2122 (1987). Section 73.4107 is proposed to be eliminated as the cited documents refer to a completed proceeding. All of the cited documents concern the rollout and implementation of Docket 80-90 and the 689 FM allotments adopted therein. The allotments have been established, the proceeding is terminated, and we believe there is no public interest served by listing the cited documents in the policy statement. *See* 47 CFR § 73.4107 (FM broadcast assignments, increasing availability of). We also propose to eliminate section 73.4108 because this requirement was eliminated for FM stations. *See* 47 CFR § 73.4108 (FM transmitter site map submissions); *1998 Biennial Regulatory Review – Streamlining of Mass Media Applications, Rules, and Processes*, MM Docket Nos. 98-43 and 94-149, Report and Order, 13 FCC Rcd 23056, 23082, para. 60 (1998) (rejecting the suggestion that the Commission continue to require the filing of site maps, finding it to be an "unnecessary expense for applicants" "in most instances").

[65] *See* 47 CFR §§ 73.4210 (Procedure Manual: "The Public and Broadcasting") (The rule is tentatively updated to reflect a newer version of the procedure manual, which is available at: https://www.fcc.gov/media/radio/public-and-broadcasting); 73.4267 (Time brokerage) (The revisions to the rule propose to remove outdated citations and add

(continued….)

subsequent passage of legislation and the later Commission revision of the relevant policy.[66] We seek comment on these proposals.

E. Deletion of Obsolete Language Due to Passage of Time and Changes in Commission Policy

16. The Class A television service was authorized by passage of the Community Broadcasters Protection Act of 1999 (CBPA), pursuant to which eligible LPTV stations could obtain partial qualified primary status.[67] The CBPA was enacted on December 31, 1999, and in implementing the Act in 2000,[68] the Commission gave eligible stations until May 1, 2000, to file an application for a Class A license. Stations that were authorized or applications that were no longer subject to the filing of competing applications prior to passage of the CBPA were not required to protect analog LPTV stations that became Class A stations with passage of the CBPA on November 29, 1999. All of the LPTV stations that became analog Class A stations and are still operating are now digital Class A stations. Accordingly, this note to section 73.613(a) is now obsolete and we propose to delete it.[69] Section 73.6018 provides, in part, that Class A television stations were required to protect any pre-transition DTV applications filed before December 31, 1999, or between December 31, 1999 and May 1, 2000. Because the time for filing such pre-transition DTV applications is long past and none remain pending, we tentatively conclude that we should delete this language.[70] In addition, now that May 1, 2000 is past, the final sentence in 73.623(c)(5) is rendered obsolete through the passage of time and we propose to delete it.[71] We seek comment on these proposals.

17. Section 73.6019 provides, in part, that Class A stations that were reassigned a new channel in connection with the incentive auction were not required to protect low power television or TV translator stations in the applications they filed for a construction permit for the channel specified in the April 13, 2017 *Channel Reassignment Public Notice*.[72] Those applications were required to be filed by July 12, 2017, absent a waiver.[73] Such waiver requests were required to be submitted no later than June 12, 2017 and all such requests have been disposed of in decisions that are now final.[74] Thus, we propose to delete that portion of the rule as obsolete. We seek comment on this proposal.

---

citations to reflect current policy). *See Review of the Commission's Regulations Governing Attribution of Broadcast and Cable/MDS Interests*, MM Docket Nos. 94-150, 92-51, 87-154, Report and Order, 14 FCC Rcd 12559 (1999). *See also* 47 CFR § 73.3555, Note 2(j).

[66] *See* 47 CFR § 73.4055 (Cigarette advertising) (tentatively updated to reflect that in 1986, Congress extended the ban to include advertisements for smokeless tobacco products. *See* 15 U.S.C. § 4402(c)).

[67] Community Broadcasters Protection Act of 1999, Pub. L. No. 106-113, 113 Stat. Appendix I at pp. 1501A-594 – 1501A-598 (1999), *codified at* 47 U.S.C. § 336(f) (CBPA).

[68] *Class A Report and Order*; Memorandum Opinion and Order on Reconsideration, 16 FCC Rcd 8244 (2001).

[69] 47 CFR § 73.613 (Note to 73.613(a)) (Protection of Class A TV Stations).

[70] 47 CFR § 73.6018 (Digital Class A TV protection of DTV stations). We also propose to delete references to digital and DTV.

[71] 47 CFR § 73.623(c)(5) (DTV applications and changes to DTV allotments). We believe this deletion is further supported by the fact that the Commission previously stated "Section 73.623 is amended by revising paragraph (a) as follows and *deleting paragraphs (c)* and (g)." (emphasis added). This was also reflected in the Federal Register publication, 86 Fed. Reg. 66193 (Nov. 22, 2021), which states "Section 73.623 is amended by revising paragraph (a) and *by removing and reserving paragraphs (c)* and (g)." (emphasis added). 86 Fed. Reg. 66193, 66209 (Nov. 22, 2021). While references to the section were deleted, the subsection remains in the rules.

[72] 47 CFR § 73.6019 (Digital Class A TV station protection of low power TV, TV translator, digital low power TV and digital TV translator stations), citing § 73.3700(b)(1).

[73] *Channel Reassignment Public Notice*, 32 FCC Rcd at 2809, para. 70.

[74] *Id.*

18. Section 73.6022 provides that Class A stations displaced by channel allotment changes by a DTV station could negotiate to exchange channels with the DTV station, subject to certain conditions.[75] Class A stations were subject to displacement only as the result of "engineering solutions" by full power television stations to resolve "technical problems" in replicating or maximizing the full power television station's digital service area during the digital transition.[76] Because the digital transition is complete, any such displacements were necessarily already identified and resolved. Accordingly, we tentatively conclude that we should delete subsection (b) of the rule as obsolete. We seek comment on that tentative conclusion.

19. We also propose to amend section 73.1020(a) to delete dates in the past and include the applicable dates for future license renewal cycles. Section 73.1020(a) provides, in part, the default time of expiration for initial and renewal broadcast licenses by state.[77] Specifically, the default time of expiration for such licenses will be 3 a.m., local time, on certain enumerated dates and thereafter at 8-year intervals for radio and TV broadcast stations depending on location. Because the dates specified in the current rule for filing such renewal applications are now in the past, we propose to amend the rule to update the license expiration dates for the next renewal cycle. We seek comment on that proposal. In addition, we propose to remove as obsolete language from section 73.1020(b) that refers to the cutoff date for the filing of applications mutually exclusive with renewal applications that are filed on or before May 1, 1995 and no such applications are on file.[78] We seek comment on this proposal.

20. Similarly, we propose to remove as obsolete due to the passage of time section 73.3598(b)(3), which provides that the period of construction for an original construction permit will toll for certain reasons of international coordination during the DTV transition, which is now complete.[79] We propose to delete language in proposed section 73.682(d)(1) that specifies that digital standards incorporated by reference into the Commission rules became effective October 11, 2011, as the specific start date is now obsolete.[80] We also propose to remove as obsolete the portion of section 73.3572(a)(3) that provided a window that expired October 1, 2000 for certain proposed minor change applications.[81] We also propose to delete provisions that reference the comparative hearing process, which no longer

[75] 47 CFR § 73.6022 (section heading and (b)) (Negotiated interference and relocation agreements).

[76] *Freeze on the Filing of Applications for Digital Replacement Translator Stations and Displacement Applications*, Public Notice, 29 FCC Rcd 6063 (2014), citing *Class A Report and Order*, 15 FCC Rcd at 6380-81, paras. 61-64 (subsequent citations omitted).

[77] 47 CFR § 73.1020(a) (Station license period).

[78] 47 CFR § 73.1020(b) (Station license period). *See also Reading Broadcasting, Inc., for Renewal of License of Station WTVE(TV), Channel 51 Reading, Pennsylvania and Adams Communications Corporation, for Construction Permit for a New Television Station to Operate on Channel 51, Reading, Pennsylvania*, MM Docket No. 99-153, 17 FCC Rcd 14001, para. 1 (2002) (In this decision, the Commission explained that it was "dispos[ing] of the last remaining "comparative renewal" proceeding, in which an incumbent licensee faces a comparative challenge from a construction permit applicant for the same facilities. Congress, by Act of February 8, 1996, Pub. Law 104-104, 110 Stat. 56, codified as 47 C.F.R. § 309(k)(4), prohibited the comparative consideration of renewal applicants filed after May 1, 1995.").

[79] 47 CFR § 73.3598(b)(3) (Period of construction).

[80] *See* proposed section 73.682(d)(1) (TV transmission standards). We also delete references to DTV and digital.

[81] 47 CFR § 73.3572(a)(3) (Processing of TV broadcast, Class A TV broadcast, low power TV, TV translators, and TV booster applications).

exists.[82] We also propose to delete section 73.3523,[83] the first sentence of section 73.3516(e),[84] and the second sentence of section 73.3516(e)(1),[85] which deal with obsolete procedures regarding mutually exclusive proceedings for renewal applications filed prior to May 1, 1995. In addition, we propose to delete the second sentence of section 73.3533(b), which discusses an obsolete procedure for filing construction permit extension applications.[86] Specifically, that rule refers to section 73.3534, which specified three factors that could justify an extension of a construction permits.[87] That section, however, was deleted in 2004.[88] We seek comment on these proposals.

21. We propose to delete obsolete language in section 73.664(c)(3)(iii) concerning the certification of equipment. The FCC no longer "type accepts" equipment, having overhauled the process to allow private parties to verify such equipment meets FCC requirements, and the results of such verifications do not need to be submitted to the FCC.[89] We also propose to modify text throughout section 73.664 in order to remove references to analog operations such as references to the visual transmitter and to peak power.[90] We propose to retain the remainder of this section that continues to provide important information for measuring transmitter operating power even in the post-transition context. We similarly propose to retain section 73.688 while removing similar references to the visual transmitter. We seek comment on these proposals.

22. We propose to delete sections 27.60 (TV/DTV interference protection criteria) and 27.1310 (Protection of Broadcast Television Service in the 600 MHz band from wireless operations), which concern the protection of TV stations on certain channels by wireless services.[91] All of these protections are for channels above channel 37, and thus are no longer relevant because the completion of

---

[82] 47 CFR §§ 73.1620 (Program tests) (g)(1)-(3) (Reports required); 73.3519(a) (Repetitious applications) (the last sentence of subsection (a) that applicants whose applications have been denied in a comparative hearing may apply immediately for another available facility); and 73.4082 (Comparative broadcast hearings – specialized programming formats).

[83] 47 CFR § 73.3523 (Dismissal of applications in renewal proceedings). We also propose to delete the first clause of 47 CFR § 73.3525(a) (Agreements for removing application conflicts), which cross-references section 73.3523.

[84] 47 CFR § 73.3516(e) (Specification of facilities).

[85] 47 CFR § 73.3516(e)(1) (Specification of facilities).

[86] 47 CFR § 73.3533(b) (Application for construction permit or modification of construction permit).

[87] 47 CFR § 73.3534. *See also Application of Mansfield Christian School*, 10 FCC Rcd 12589, 12590, para. 5 (1995).

[88] 69 Fed. Reg. 72043 (Dec. 10, 2004).

[89] 47 CFR § 73.664(c)(3)(iii) (Determining operating power). Currently, there are two procedures used for RF device equipment authorization: SDoC and Certification. *See* 47 CFR §§ 2.906 (Supplier's Declaration of Conformity) and 2.907 (Certification); *see also* Office of Engineering & Technology (OET), Equipment Authorization, https://www.fcc.gov/engineering-technology/laboratory-division/general/equipment-authorization (last visited Aug. 9, 2022). On July 14, 2017, the Commission amended its radiofrequency equipment authorization rules. *Amendment of Parts 0, 1, 2, 15, and 18 of the Commission's Rules Regarding Authorization of Radiofrequency Equipment*, ET Docket No. 15-170, First Report and Order, 32 FCC Rcd 8746 (2017) (*SDoC Order*). The adopted rules phased out the Verification and Declaration of Conformity equipment authorization procedures and replaced them with a new equipment authorization procedure, the SDoC. Federal Communications Commission, Authorization of Radiofrequency Equipment, 82 Fed. Reg. 50820 (Nov. 2, 2017). A device authorized under previously accepted procedures remains authorized and may be marketed or used if it continues to meet the requirements attendant to that authorization.

[90] *See supra* n.12.

[91] 47 CFR §§ 27.60 (TV/DTV interference protection criteria) and 27.1310 (Protection of Broadcast Television Service in the 600 MHz band from wireless operations).

the digital TV transition and the incentive auction and repacking process reassigned channels in that range for wireless use. We seek comment on this proposal.

F. Reorganization of Subpart E – Television Broadcast Stations

23. Full power television began to transition to digital with the passage of the Telecommunications Act of 1996,[92] and ended on June 12, 2009, when full power television stations commenced digital-only operations. During the transition, the Commission was required to adopt a number of rules dealing with, *inter alia*, special relaxed digital to digital interference standards necessary to take into account that most stations were operating both an analog and digital channel during the transition, digital construction deadlines, minimum digital operating schedules, analog to digital and digital to analog interference rules, and digital to digital interference rules post-transition.[93] Many of these rules were temporary and meant to be effective only during the DTV transition.[94] Others, however, had more long term application to digital operations. Because the more long term rules were adopted at the same time as temporary rules, the long term rules are currently not organized in a straight forward or user-friendly manner. For example, section 73.623(d) (Minimum geographic spacing requirements for new TV allotments) is in the rule section dealing with TV applications and changes to TV allotments. This subsection, however, deals with new allotments, and might more logically belong in section 73.622 (Table of TV Allotments). In addition, there are instances where the rules are duplicative.[95]

24. To make the organization of the rules more practical and the rules easier to find, we propose to reorganize subpart E, while also offering some minor clarifications and amendments to some of the rules. First, we propose to create a new section 73.611 (Emission levels and mask filters) which would relocate, verbatim, the language from section 73.622(h)(1) and (2) which is currently part of the Table of TV Allotments section. These rules involve the permissible level of emissions outside the authorized channel of operation and how attenuation of emission levels is to be measured at the output

---

[92] *See Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, MM Docket No. 87-268, 12 FCC Rcd 12809 (1997) (Implementing television broadcast portions of the Telecommunications Act of 1996) (subsequent citations omitted); *see* Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996)).

[93] For an overview of the numerous rulemaking proceedings, see *Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, MB Docket No. 00-39, Report and Order and Further Notice of Proposed Rulemaking, 16 FCC Rcd 5946 (2001) (subsequent citations omitted); *Second Periodic Review*, 19 FCC Rcd 18279 (2004); *Third Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, MB Docket No. 07-91, Report and Order, 23 FCC Rcd 2994 (2007) (subsequent citations omitted).

[94] For example, section 73.623(c)(2) (Minimum technical criteria for modification of DTV allotments included in the initial DTV Table of Allotments and for applications filed pursuant to this section) allowed petitioners and applicants to specify facilities that would result in an increase of up to an additional 2 percent of the population served by another station, provided that the station would not receive more than 10 percent interference in the aggregate. Post-transition, however, the level of permissible interference dropped to 0.5%, the rounding tolerance for zero. *See* 47 CFR § 73.616(d).

[95] For example, 47 CFR §§ 73.616(d) and (e) (Post-transition DTV station interference protection) and 73.623(c)(2)-(5) (DTV applications and changes to DTV allotments) both require the use of OET Bulletin No. 69. Some of the specific parameters in section 73.623(c) are outdated (such as those that refer to the 2 percent and 10 percent aggregate pre-transition interference standard), but most of the remaining rule text is directly duplicative of section 73.616(d) and (e) (for example, both discuss how to determine DTV to DTV interference using OET Bulletin 69, that the minimum adjacent channel technical criteria does not apply to channels 4 and 5, 6 and 7, and 13 and 14, because of unique spacing between these channel, and how to determine interference to Class A television stations). Thus, as stated above, we propose deleting subsection 73.623(c)(2)-(5). In addition, there are cases where an analog rule and a digital rule are both found in the rules with similar text, such as sections 73.625 (DTV coverage of principal community and antenna system) and 73.685 (Transmitter location and antenna system).

terminals of the transmitter, including any filters that may be employed.[96] We believe this change will improve the organization of the rules because this technical rule has little direct relationship to the Table of TV Allotments. We seek comment on moving this language to a separate stand-alone rule for easier reference.

25. We propose to remove the analog power limits from section 73.614(b) (Power and antenna height requirements) and replace them with the digital power limits currently found in section 73.622(f)(5)-(8) (Table of TV allotments), and we propose to clarify that all applications for new full power television stations, applications for changes in authorized full power television stations, and petitions for changes to the Table of TV Allotments must comply with these requirements.[97] The portions of the rule in section 73.622(f)(5)-(8) focus on power and antenna height requirements.[98] While these power and antenna height requirements are sometimes referred to in Table of Allotment proceedings, they are also frequently considered in processing applications, and so we believe including these provisions in a separate subsection will make them easier to reference regardless of whether an allotment or an application is being considered. We also propose to clarify in the newly placed section 73.614(b)(6), that the largest station in the market provision only allows a station to exceed the maximum height for a given channel and zone, and not the maximum power for that channel and zone. This addition to the rule is consistent with a clarification adopted by the Commission in 2001.[99] We also propose to delete section 73.614(b)(7) (Power and antenna height requirements) as duplicative of section 73.625(c)(1) (DTV coverage of principal community and antenna system).[100] We further propose to retain for digital operations a requirement that existed for analog operations that applications will not be accepted for filing if they specify less than a minimum effective radiated power of 100 watts because the Media Bureau staff already applies this minimum level in routine processing and we do not believe it is in the public interest for full power television stations to operate with what is essentially a low power facility.[101] Finally, we propose that for stations requesting DTS operation pursuant to section 73.626 (DTV distributed transmission systems) that this requirement apply to at least one site in the DTS. We seek comment on these proposals.

26. We also propose to collect provisions on related matters that are currently spread over various rules and group them together. First, we propose to create a new section 73.617 (Interference protection of other services) which collects provisions from sections 73.623(e) (Protection of land mobile

[96] *See Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, MM Docket No. 87-268, Sixth Report and Order, 12 FCC Rcd 14588, 14676-77, para. 195 (1997).

[97] 47 CFR § 73.614(b) (Power and antenna height requirements). This would make section 73.622(f)(4) redundant, as section 73.622(f)(8) also contains a 1000 kW limit for UHF stations, and we thus propose to delete section 73.622(f)(4).

[98] Sections 73.622(f)(6)-(8) set forth the digital power limits and (f)(5) sets forth an exception which is commonly referred to as the "largest station in the market rule."

[99] *See Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television,* MM Docket No. 00-39, Report and Order and Further Notice of Proposed Rulemaking, 16 FCC Rcd 5946 (2001) (subsequent history omitted). Specifically, the Commission clarified that under section 73.622(f)(5), "the maximum ERP limits . . . may not be exceeded." *Id.* at 5974, para. 74. Instead, "[t]he 'largest station' provision applies only where the rules normally require a reduction in the maximum power because a specified antenna HAAT is exceeded. That is, it does not allow power higher than the maximum ERP to compensate for an antenna HAAT that is lower than the value specified in the rule." *Id.*

[100] 47 CFR §§ 73.614(b)(7) and 73.625(c)(1).

[101] 47 CFR § 73.614(a) (Minimum power).

operations on channels 14-20),[102] 73.687(e)(3)-(4),[103] 73.623(f),[104] and 73.685(d).[105] Most of these rules are used for both licensing and allotments and we believe they will be easier to identify and use if gathered into one section rather than scattered among various rules. We seek comment on this proposed restructuring. We also propose to include a new paragraph 73.617(e) to codify a long standing Commission practice to place a condition on all television broadcast station authorizations that result in a change in coverage area, and all authorizations for new stations, which requires TV broadcasters to identify and notify hospital and other health care facilities within the station's coverage area to avoid interference to medical telemetry devices.[106] This condition is consistent with a current practice agreed to between the Commission and the Food and Drug Administration in 1998 and we believe codifying this practice in our rules will ensure that all licensees are aware of this requirement to avoid interference to medical telemetry devices.[107] We seek comment on this proposal.

27. We propose to create a new section 73.618 (Antenna location and principal community coverage), which would relocate, verbatim, the language from 73.625(a) (DTV coverage of principal community and antenna system). We also propose to centralize multiple existing rules into one rule that would include instructions on how to determine the protected facilities of a television allotment,[108] the noise-limited contour level of a television station,[109] how the noise-limited contour is determined,[110] and the purposes for which field strength contours are used.[111] We therefore propose to include these existing requirements in a new section 73.619 (Contour and service areas), and update the section heading of section 73.683 to "Presumptive determination of field strength at individual locations," in order to remove reference to portions of the rule that are relocated to the new section 73.619. Similarly, we propose to create a new section 73.620 (Interference calculation and protection of TV broadcast services) that will include the requirements currently spread throughout multiple rules in section 73.623(c)[112] and sections

[102] 47 CFR § 73.623(e). We propose to amend the rule to add a note to reference and explain the existence of a granted waiver with respect to the community of Los Angeles, California allowing the County of Los Angeles to use channel 15 in Los Angeles for public safety communications, and propose to update the city center coordinates at *supra* para. 13.

[103] 47 CFR § 73.687(e)(3)-(4) (Transmission system requirements). This section requires stations operating on channel 14 to take special precautions to avoid adjacent LMRS facilities and sets forth various steps stations should take to identify and resolve potential interference. *See also Resolution of Interference Between UHF Channels 14 and 69 and Adjacent-Channel Land Mobile Operations*, MM Docket No. 87-465, Report and Order, 6 FCC Rcd 5148 (1991).

[104] 47 CFR § 73.623(f) (DTV applications and changes to DTV allotments) ("Parties requesting new allotments on channel 6 be added to DTV Table must submit an engineering study demonstrating that no interference would be caused to existing FM radio stations on FM channels 200-220.").

[105] 47 CFR § 73.685(d) (Transmitter location and antenna system). We also propose to change "blanket area" to "blanketing," which reflects the updated term now used by stakeholders.

[106] Such devices are authorized under 47 CFR § 15.242 (Operation in the bands 174-216 MHz and 470-668 MHz) and 47 CFR Part 95 subpart H.

[107] *See Joint Statement of the Federal Communications Commission and the Food and Drug Administration Regarding Avoidance of Interference Between Digital Television and Medical Telemetry Devices*, https://transition.fcc.gov/Bureaus/Engineering_Technology/News_Releases/1998/nret8003.html (Mar. 25, 1998).

[108] 47 CFR § 73.616(c) (Post-transition DTV station interference protection), as amended.

[109] 47 CFR § 73.622(e) (Digital television table of allotments), as amended *supra* para. 6 and n.11.

[110] 47 CFR § 73.625(b) (DTV coverage of principal community and antenna system), as amended *infra* paras. 33-38.

[111] 47 CFR § 73.683(c) (Field strength contours and presumptive determination of field strength at individual locations).

[112] 47 CFR § 73.623(c) (describes the minimum technical criteria for modification of DTV allotments included in the initial DTV Table of Allotments and for applications filed pursuant to this section), as amended *supra*.

73.616(d) and (e) (merged into a new section 73.620(a)-(d)).[113] Additionally, we propose to move the rule from section 73.616(g) to a new section 73.620(f).[114] We believe that this revised organization of these requirements will make the rules easier to identify and use, and eliminate duplicate versions of some of these rules. We seek comment on these proposals.

28. We propose to modify sections 73.622 (Television table of allotments) and 73.623 (TV application processing) to separate out rules specific to the Table of TV Allotments and application processing procedures into separate sections. In section 73.622(a), we propose to modify the language to clarify the rule sections specific to petitions to modify the Table of TV Allotments.[115] We also propose to remove (a)(1) and (a)(2) as redundant with the content of section 73.603 (Numerical designation of television channels).[116] We propose to redesignate the language in section 73.622(d)(2) as section 73.622(d), clarify the rule text to indicate this subsection applies to all allotments, and clarify that the "reference coordinates" for each allotment are those of the authorized facility, or for new allotments, the coordinates given in the order amending the Table of TV Allotments.[117] Finally, we propose to relocate the text from section 73.623(d), relating to the minimum distance separations for new TV allotments, to a new section 73.622(k). In section 73.623(a), we propose to modify the language to clarify the rule sections specific to application processing and remove discussion of modifications to the Table of TV Allotments. We propose to relocate the text from section 73.622(c), regarding the availability of channels for application, into section 73.623(b). Finally, we propose to update cross-references found in section 73.623(h) and update the section heading to "TV application processing priorities" in order to clarify its purpose. We seek comment on these proposals.

29. We propose to reorganize section 73.624(b) (Television broadcast stations) for clarity by splitting some of the text in subpart (b) into a new subpart (b)(1) (requiring stations broadcasting in ATSC 1.0 to transmit an over the air signal at no direct charge to viewers).[118] We propose to relocate section 73.685(h) (Transmitter location and antenna system), pertaining to AM stations, to become new section 73.625(c)(4)(iii) (TV coverage of principal community and antenna system). We also propose to relocate section 73.682(a)(14) (TV transmission standards), regarding the use of elliptically- and circularly-polarized antennas, to become a new section 73.625(d) (TV coverage of principal community and antenna system).[119] While the rest of section 73.682(a) related specifically to analog station operations, we believe this specific subpart of (a)(14) applies to all stations and note that its content is consistent with the functions in LMS applicable to applications. Thus, we tentatively conclude it should be relocated to make it easier to identify by users of our rules. We seek comment on these proposals.

30. While the current rule structure has become disjointed over the years, and is only exacerbated by the deletion of obsolete portions of the rules, we understand that the structure is also familiar to many users and we recognize that many licensees, counsel, and other users of our rules may have concerns about a reorganization to our rules that have been in the same location or under the same section number for many years. We propose to mitigate that concern by updating cross-references to the rules reorganized as described herein, as well as providing cross-references to the new location of a rule

[113] 47 CFR § 73.616 (Post-transition DTV station interference protection) as amended *supra*.

[114] *See* 47 CFR § 73.616(g) (relating to interference protection of ATSC 3.0 stations).

[115] Due to this change, section 73.616(a) (TV station interference protection) becomes largely duplicative of this proposed section 73.622(a) and we thus propose to delete section 73.616(a).

[116] 47 CFR §§ 73.622(a)(1)-(2) (Digital television table of Allotments) and 73.603 (Numerical designation of television channels).

[117] Section 73.616(b) is duplicative of this proposed section 73.622(d) and we thus propose to delete section 73.616(b). We also propose editorial changes for clarity in section 73.622(d).

[118] We note that nothing in this proposal alters the application of this rule to ATSC 3.0.

[119] *See* proposed 73.625(d) (DTV coverage of principal community and antenna system).

that has been relocated in the location it was previously found.[120] We believe that providing these cross-references would make it easier for users to become accustomed to the new structure. We seek comment on this proposal.

G. Protection of Land Mobile Radio Service

31. Section 73.623(e) of the rules[121] requires full power and Class A television stations to protect certain channels for use by LMRS in thirteen U.S. cities. For television stations that use or would use channels 14 through 20, the rule specifies a distance of 250 kilometers from the city center of a co-channel land mobile operation, or 176 kilometers from the city center of an adjacent channel land mobile operation. The set of coordinates for the city centers were calculated based on the 1927 North American Datum ("NAD 27"). As a result of improvements in technology and measuring capabilities, NAD 27 has been superseded by the 1983 North American Datum ("NAD 83"). The Commission's Office of Engineering and Technology and Office of the Managing Director have previously explained that "[g]eodetic datum is a set of constants specifying the coordinate system used for calculating the coordinates of points on the Earth. NAD 83 was developed based on satellite and remote-sensing measurement techniques, and provides greater accuracy than the older NAD 27."[122] Because it provides greater accuracy and the older NAD 27 is outdated, we propose to amend the rule to use NAD 83 for purposes of specifying these coordinates.[123] We further tentatively conclude that updating the coordinates in the rule to NAD 83 would serve the public interest by conforming the values with the coordinate system used in the Commission's LMS database and with those found in section 90.303(b) of the rules, which define the service that section 73.623(e) protects.[124] As such, our proposal to conform the values in these rules would help to ensure that land mobile operations are more appropriately considered and protected from full power and Class A operations.[125] We seek comment on this proposal.

32. We also propose to amend section 73.1620(a)(1) (Program tests) to remind full power and Class A television stations on channel 14 of the requirement found in section 73.687(e)(4)(iii) that they request Program Test Authority ("PTA") prior to commencing operation of new or modified facilities.[126] We also propose to include a new sentence codifying the practice of requiring LPTV and translator stations on channel 14 to request PTA prior to beginning operation of new or modified facilities. We believe that adding rule text reflecting this practice consistently across all television services will better reflect the purpose of the requirement to protect existing land mobile operations. We seek comment on these proposed changes.

---

[120] The Commission has previously added cross references to its rule sections within its rules. *See, e.g.*, *October 2021 Order* at para. 12 ("We also amend section 73.606 of our rules by . . . adding a cross-reference to "Section 73.622(j)", which sets forth the updated Table of Allotments adopted in this Order.").

[121] 47 CFR § 73.623(e) (Protection of land mobile operations on channels 14-20). In the proposed reorganization, this would be moved to new section 73.617(a). *See supra* para. 26.

[122] *Amendment of Parts 1, 2, 25, 73, 74, 90, and 97 of the Commission's Rules to Make Non-Substantive Editorial Revisions to the Table of Frequency Allocations and to Various Service Rules*, Memorandum Opinion and Order, 23 FCC Rcd 3775, 3796, para. 61, n.101 (OET/OMD 2008).

[123] *Id*.

[124] Section 90.303(b) (Availability of frequencies) defines the specific center points used to permit land mobile operations, which represent the specific locations that section 73.623(e) is designed to protect. *See* 47 CFR § 90.303(a) (stating that "coordinates are referenced to the North American Datum 1983 (NAD83)") and (b).

[125] We made a similar proposal in the *Part 74 NPRM* at para. 12.

[126] We further propose to move 47 CFR §§ 73.687(e)(3)-(4) to 73.617(b). *See supra* para. 26.

H. Coverage Area – Determining Coverage

33. Section 73.625(b) of the Commission's rules[127] describes how coverage and height above average terrain (HAAT) are to be calculated or determined. This rule is largely derived from what was formerly section 73.684(d) and (f) adopted by the Commission in December 1963.[128] We propose changes to certain procedures contained in section 73.625(b) which we believe are obsolete, unnecessary, and are otherwise superseded by the software based tools that the FCC and industry use to prepare and process applications.

34. We propose to remove the second sentence of paragraph (b)(2), which indicates that when the relative field strength at a depression angle is 90% or greater, the 100% value should be used. This would create a discontinuity in the contour, and is inconsistent with how software-based tools used to process and prepare applications function. We seek comment on this proposal.

35. We propose to eliminate the requirement to produce and submit profile graphs and to streamline the section in order to bring it into line with modern software-based tools used to determine contours and HAAT today. Specifically, the fifth and sixth sentences in paragraph (b)(4) of section 73.625 discuss the creation and submission of a radial in the direction of the community of license.[129] The rule does not require the use of a radial in the direction of the community of license in any other calculations, so with the elimination of the requirement to produce and submit profile graphs of radials, a rule that requires the calculation of this radial becomes unnecessary. Moreover, the software-based tools the Commission and industry use to process and prepare applications do not produce this radial. As such, we propose to delete the language. Paragraph (b)(4) also contains similar detail in the seventh and eighth sentences explaining how and when to produce and submit a profile graph for radials over water or foreign territory.[130] Again, with the elimination of the requirement to produce and submit profile graphs of radials, we believe this calculation for radials over water or foreign territory is unnecessary. The rule itself does not require the radials to be used in any other calculations and automated software used by the Commission and industry does not do this. As such, we propose to delete this language.[131] We seek comment on these proposals.

36. Next, paragraph (b)(4) describes how to plot the radials on a graph and provides a range of options for the number of points of elevation to use in each radial. We propose to conform the requirement to reference the TVStudy software currently used for preparing and processing applications, and specify the use of 10 points per kilometer in all circumstances consistent with present practice found in the TVStudy software used by the Commission and licensees to process and prepare applications.[132] We seek comment on this proposal.

37. We propose additional deletions in the rule that we believe are also unnecessary. There are several sentences in paragraph (b)(4) which describe how such graphs should be formatted for

---

[127] 47 CFR § 73.625(b) (DTV coverage of principal community and antenna system – Determining coverage). In the proposed reorganization, this would be moved to section 73.619(b) (Contours and service areas – Determining coverage).

[128] *See* 28 Fed. Reg. 13572, 13678-79 (rel. Dec. 14, 1963) (section 73.684 (1963)).

[129] *See* section 73.684(d) (1963) (Section 73.625(b)(4) was largely adapted from section 73.684(d), and section 73.684(d) itself had been condensed since the 1963 version of the rule. The 1963 version more clearly details the purpose and execution of the rule than the current text.).

[130] *Id*.

[131] We also propose to delete the companion language in section 73.681 in the definition of "antenna height above average terrain."

[132] *See* Federal Communications Commission, Office of Engineering and Technology, *TVStudy Interference Analysis Software*, https://www.fcc.gov/oet/tvstudy (the "FCC Contours" screen in the "Parameters" tab of TVStudy provides a default value of 10 points per kilometer using the default Interference Check template).

submission to the FCC.[133] Because we propose to eliminate the requirement to submit profile graphs, we also propose to delete the formatting requirements. The rule also provides multiple options on how to obtain elevation points. The software currently used by the Commission and industry, however, simply averages the points as provided in the first option. We propose to delete that text on options to obtain elevation points and clarify the use of the average of points elsewhere in the paragraph. Finally, we propose to add a sentence clarifying that actual calculated values are used to determine the HAAT, and to eliminate the final two sentences of paragraph (b)(4) which are no longer used with the conversion from analog to digital.[134] We see comment on these proposals.

38. Section 73.625(b)(5) specifies a number of paper maps which should be used to prepare the profile graphs described in paragraph (b)(4), and to determine the location and height above sea level of the antenna height.[135] We believe that multiple references to various sources of paper maps contained in the rule are outdated methods to make these types of calculations. We therefore propose to remove those references to outmoded paper maps and replace them with a reference to the National Elevation Dataset and other similar bald earth terrain datasets which are used by modern automated software currently used by the Commission and industry. In a new paragraph (b)(6), we propose to clarify that we generally expect these calculations to be done via computer, versus the preference for paper calculations that was specified previously, and then indicate that to the extent a submission to the Commission uses sources different from those officially reflected in our rules, those sources should be clearly identified in the submission.[136] We seek comment on these proposals.

I. Antenna Patterns

39. We propose to clarify, in section 73.625(c)(3)(ii) of the rules,[137] that the horizontal power is to be higher than or equal to the vertical power in all directions, and require documentation that the antenna meets this requirement.[138] This clarification is consistent with the requirements contained in

---

[133] For example, the rule specifies that the graphs may be plotted on "rectangular coordinate paper" or on "special paper which shows the curvature of the earth." *See also* section 73.684(d) (1963).

[134] Specifically, this language is no longer necessary due to the change from the requirements of providing a city grade strength signal of 74-80 dBu, depending on channel, to a principal community strength signal of 35-48 dBu depending on channel. The last two sentences of section 73.625(b)(4) are derived from the last two sentences of section 73.684(f)(1963), which addressed a situation where the adopted predictive coverage methodology would result in a negative HAAT or an HAAT below 100 feet at a number of radials at two and 10 mile intervals. In that case, an applicant could make a supplemental showing. As an example, when a supplemental showing could be made, the rule explained that "a mountain ridge may indicate the practical limit of service although the prediction method may indicate otherwise. In such cases the prediction method should be followed but a supplemental showing may be made concerning the contour distances as determined by other means." To give an example why the last two sentences of section 73.625(b)(4) are obsolete, the standard contour prediction method would show that the television stations in Juneau, Alaska, had a negative HAAT due to surrounding terrain even though the stations' transmission facilities are located in Juneau, which is surrounded by mountains. With the conversion from analog to digital, the use of the city grade contour to determine community coverage was replaced with the use of the minimum service level contour, which tends to be significantly larger, making the issue of an inability to reach the community of license that this rule was designed to capture significantly less likely.

[135] 47 CFR § 73.625(b)(5). This rule is largely derived from section 73.684(g) (1963).

[136] For example, community coverage is demonstrated by providing a map, which applicants sometimes produce using software like V-Soft Probe. Applicants should clearly identify the software being used to produce their engineering showings.

[137] 47 CFR § 73.625(c)(3)(ii) (Antenna system).

[138] This proposed requirement is consistent with stations being primarily horizontal, with a possible vertical component less than or equal to the horizontal component. Most stations already submit this documentation in their applications.

section 73.682(a)(14).[139] We also propose to update the rule to reflect that the LMS filing system permits an alternate method of specifying mechanically beam tilted facilities. The proposed rule indicates the alternate method is preferable because it provides a three-dimensional representation of the antenna, allowing for more accurate predictions with OET Bulletin No. 69. But we continue to allow the previous method in order to avoid imposing any additional burden on stations that were previously authorized using the previous mechanical beam tilt method. We seek comment on these proposals.

40. Section 73.625(c)(3)(v) currently requires that horizontal plane patterns be plotted "to the largest scale possible on unglazed letter-size polar coordinate paper."[140] This requirement is outdated and not consistent with current licensee and Commission staff practices. We propose to instead require licensees to submit patterns in the form of a .pdf attachment to an application filed in LMS, and propose to clarify that similar plots are required for elevation or matrix patterns submitted in the LMS form.[141] This approach would provide flexibility to applicants and conform to modern practices. We seek comment on this proposal.

J. Subscription TV (STV) Rules

41. Sections 73.641 through 73.644, 73.4247, 73.6026, and 74.732(e)[142] contain the rules that allowed analog full power, Class A, and low power television stations to offer a subscription television service "for a fee or charge."[143] Under these rules, analog stations could offer television services during part of the broadcast day, usually during the evening hours, on a subscription basis by sending scrambled signals through the air that could be decoded by a device that the subscriber used and had installed by the STV provider at their television receiver.[144]

42. As of May 1, 1982, there were 27 analog stations that were operating in an STV mode in 18 different markets serving over 1,300,000 subscribers.[145] Upon transitioning to digital in 2009 however, digital television stations are required to transmit one over-the-air video program signal at no direct charge to viewers on their 6 MHz channel and are permitted to provide STV-type services on an ancillary or supplementary basis to their primary digital television service.[146] With the elimination of analog service, there are no full power television stations operating pursuant to the STV rules[147] and LMS

---

[139] *See* 47 CFR § 73.682(a)(14) (TV transmission standards) ("It shall be standard to employ horizontal polarization."). *See also* 47 CFR § 73.316(a) (FM antenna systems).

[140] 47 CFR § 73.625(c)(3)(v).

[141] *See* proposed sections 73.625(c)(3)(vi) and 73.625(c)(3)(vii).

[142] 47 CFR §§ 73.641 (Subscription TV definitions); 73.642 (Subscription TV service); 73.643 (Subscription TV operating requirements); 73.644 (Subscription TV transmission systems); 73.4247 (STV: Competing applications); 73.6026 (Broadcast regulations applicable to Class A television stations); and 74.732(e) (Eligibility and licensing requirement).

[143] 47 CFR § 73.641(b). *See generally Amendment of Part 73 of the Commission's Rules and Regulations in Regard to Section 73.642(a)(3) and other Aspects of the Subscription Television Service*, Docket No. 21502, Fourth Report and Order, 95 FCC 2d 457 (1983) and other Commission Orders and Notices in Docket No. 21502 at nn.1-3.

[144] *Amendment of Part 73 of the Commission's Rules and Regulations in Regard to Section 73.642(a)(3) and Other Aspects of the Subscription Television Service*, Docket No. 21502, Third Report and Order, 90 FCC 2d 341, 344-5, para. 9 (1982).

[145] *Id.* at 344, para. 8.

[146] *See* 47 CFR §§ 73.624(a) and (c) (Digital television broadcast stations); 74.790(i) (Permissible service of TV translator and LPTV stations) (television stations are permitted to offer services of any nature, consistent with the public interest, convenience, and necessity, on an ancillary or supplementary basis, including "subscription video").

[147] Sections 73.642(b) (Subscription TV service) and 74.732(e) (Eligibility and licensing requirements) require that stations notify the Commission when they commence STV operations, and that full power and Class A stations

(continued….)

does not permit the filing of applications or requests to operate in an STV mode. Accordingly, these STV rules are obsolete and we propose to eliminate them.[148] We seek comment on this proposal.

43. If we adopt this proposal, we would also amend part 73 and part 74 rules to remove references to STV and "subscription television service."[149] We seek comment on this proposal.

K. Special Criteria for Converting Vacant Commercial Channels to Reserved Status

44. In 2000, the Commission adopted a needs based test for future rulemakings allowing noncommercial educational (NCE) entities to request that "non-reserved channels not already in the Table of Allotments be added and reserved for NCE use."[150] This needs-based test is reflected in section 73.622(a).[151] Since the Commission adopted this needs based test in 2000, the Media Bureau has never been asked to apply it to television stations. Further, the television band has been reallocated and repacked from channels 2 – 69 to channels 2 – 36, significantly decreasing the number of available channels. We therefore propose to amend section 73.622(a) to remove this language as we do not believe it serves a practical purpose in the current environment. We do not intend, however, to eliminate the ability of an NCE entity to reserve one of the few vacant television channels currently in the Table of TV Allotments.[152] We note that an NCE entity may still file a rulemaking petition to request that the Commission reserve the channel for noncommercial educational use, without being required to rely on the special process enumerated in section 73.622(a). We seek comment on this proposal.

L. Other Technical and Miscellaneous Updates

45. *Special Service Authorization.* Section 73.3543 (Application for renewal or modification of special service authorization) provides that no new special service authorizations may be issued after 1958, however, renewals or modifications will be considered in certain circumstances.[153] The Media

---

notify the Commission when they discontinue STV operations or change their encoding equipment. The Bureau has not received any such filings in at least the past 25 years.

[148] *See* 47 CFR §§ 73.641 (Subscription TV definitions), 73.642 (Subscription TV service), 73.643 (Subscription TV operating requirements), 73.644 (Subscription TV transmission systems), and 73.4247 (STV: Competing applications).

[149] *See* 47 CFR §§ 73.1201(d) (Station identification for subscription television stations); 74.701(f) (Low power TV station); 73.682(b) (Subscription TV technical systems); 73.6026 (deleting cross-references to 73.642-73.644) (Broadcast regulations applicable to Class A television stations); and 74.732(e) (Eligibility and licensing requirements).

[150] *See Reexamination of the Comparative Standards for Noncommercial Educational Applicants*, MM Docket No. 95-31, Report and Order, 15 FCC Rcd 7386, 7434, para. 114 (2000); *Reexamination of the Comparative Standard for Noncommercial Educational Applicants*, MM Docket No. 95-31, Second Report and Order, 18 FCC Rcd 6691 (2003).

[151] 47 CFR § 73.622(a) states in relevant part:

> Where there is only one technically available channel available in a community, an entity that would be eligible to operate a noncommercial educational broadcast station may, prior to application, initiate a rulemaking proceeding requesting that an unoccupied or new channel in the community be changed or added as reserved only for noncommercial educational broadcasting upon demonstrating that the noncommercial educational proponent would provide a first or second noncommercial educational TV service to 2,000 or more people who constitute 10% of the population within the proposed allocation's noise limited contour.

[152] We note that there remain nine channels in the Table of TV Allotments that are allotted but not currently licensed. These channels were recently offered in Auction 112 but none of the channels received any bid offers and they were returned to the Commission. *See Auction of Construction Permits For Full Power Television Stations Closes*, Public Notice, DA 22-659 (rel. June 23, 2022).

[153] 47 CFR § 73.3543 (Application for renewal or modification of special service authorization).

Bureau is unaware of any such authorizations today, and thus we tentatively conclude the rule is obsolete and can be deleted. We therefore propose to delete the rule and seek comment on this proposal.

46. *Broadcast Data Bases.* Section 0.434 (Data bases and lists of authorized broadcast stations and pending broadcast applications) refers to Broadcast Application Processing System (BAPS), which is a legacy database system that has not been in use at the Commission for many years.[154] The Media Bureau currently uses LMS for application processing, which replaced the prior Consolidated Database System (CDBS) system over the past few years (except with respect to certain AM operations), which itself replaced BAPS around the year 2000. Thus, the reference to BAPS is obsolete and we propose to delete it and seek comment on this proposal. We additionally propose to remove the word "periodically" since an updated LMS download is provided daily, remove the link to "ftp.fcc.gov" since LMS data is not provided there, and update the reference to "mass media services" to instead specify "Media Bureau." We also propose to delete the sentences stating that paper copies of lists of stations and applications are available for inspection at the Commission or on microfiche at the Commission's Reference Information Center. We further propose to delete the sentence that lists can be purchased from the FCC's duplicating contractor since the Commission has not contracted with a commercial duplicating firm pursuant to section 0.465(a) of the rules[155] for a number of years. We seek comment on these proposals.

47. *Distributed Transmission System Rule Clarification*. In January 2021, the Commission adopted updated rules in section 73.626 relating to Distributed Transmission Systems.[156] Since that time, questions have arisen about how the rules are to be applied. For example, the rule text makes several references to the term "reference facility" without defining that term, and appears to inaccurately conflate the reference point with the coordinates of the facility which produces the authorized service area. To make the intent and application of the rule less ambiguous, we propose to modify language in 73.626(b) and (f)(2). We propose to define the term "authorized facility"[157] and then replace all uses of the term "reference facility" with the term "authorized facility" in the appropriate locations.[158] We further propose to replace the term "reference point" with "site of its authorized facility" in places where the term "reference point" is improperly used.[159] Finally, we propose to clarify when specifically the Table of Distances values should be applied.[160] We believe this clarifying language will better reflect the method described in the *2021 DTS Order* and used in processing such applications.[161] We seek comment on these proposals.

48. *Transport Stream ID.* All full-power and Class A TV stations are assigned a unique transport stream ID (TSID), which is required to be transmitted in order to provide the Program and

[154] 47 CFR § 0.434 (Data bases and lists of authorized broadcast stations and pending broadcast applications).

[155] 47 CFR § 0.465(a) (Requests for copies of materials which are available, or made available, for public inspection).

[156] *See Rules Governing the Use of Distributed Transmission System Technologies Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard*, MB Docket No. 20-74 and GN Docket No. 16-142, Report and Order, 36 FCC Rcd 1227 (2021) (*2021 DTS Order*).

[157] The proposed section 73.626(b) states that "For purposes of compliance with this section, a station's 'authorized service area' is defined as the area within its predicted noise-limited service contour determined using the facilities authorized for the station in a license or construction permit for non-DTS, single-transmitter-location operation (its "authorized facility")."

[158] *See* proposed section 73.626(f)(2)(i)-(iii).

[159] *See* proposed section 73.626(f)(2)(ii)-(iii).

[160] *See* proposed section 73.626(f)(2)(i)-(ii).

[161] We also propose to remove language from section 73.626(f)(2) which is improperly specific to the station's authorized service area. As written, the language incorrectly implies that the Table of Distances circle is not applicable here.

System Information Protocol (PSIP) data required by section 73.682(d) (Broadcast television transmission standard). Consistent with that rule, we propose to clarify that all such stations must broadcast with their assigned TSID during their hours of operation.[162] In its *Second Periodic Review,* the Commission stated that "broadcasters are required to transmit the TSIDs assigned for their stations in their digital transmission."[163] We believe that it is in the public interest to move this requirement into a separate rule for ease of reference. Similarly, we propose the same requirement with respect to a station's bit stream ID (BSID), which has the same function as the TSID, but in the ATSC 3.0 context, in order to promote consistency. We seek comment on these proposals.

49. *Class A US-Mexico Border Zone.* Full power television stations are required to use full service masks to attenuate the power level of emissions outside their authorized channel of operation in specified amounts expressed in decibels (dB).[164] Section 74.794, which allows LPTV/TV translators to specify use of a simple, stringent, or full service mask, also applies to Class A television stations.[165] The Commission's rules require coordination of applications in border regions with the neighboring countries' appropriate regulatory officials. Under the *Exchange of Coordination Letters with IFT Regarding DTV Transition and Reconfiguration of 600 MHz Spectrum,* signed between the FCC and Mexico's Instituto Federal de Telecomunicaciones (IFT) in July 2015, the use of Tables 1 and 6 were approved for television station realignment.[166] Class A stations approved by Mexico in Table 6 are grouped with full-service stations. There is no allowance for use of a simple or stringent emission mask for any operation within these Tables; however, section 73.6024(d)[167] applies to coordination of stations in proximity of the US border with Mexico. It is the Media Bureau staff's experience that IFT routinely requests that applications submitted for coordination of Class A stations specify a full-service emission mask, and if such applications do not initially specify the full-service emission mask, IFT asks for it to be included in an amendment. This two-step process increases the processing burdens on the FCC, IFT, and stations, and results in delays in granting applications. Therefore, we propose to amend Section 73.6024(d) to require Class A stations within 275 kilometers of the US-Mexico border to specify a full-service emission mask in any modification application. We seek comment on this proposal.

50. *Class A Antenna System.* We propose to delete language in section 73.6025(a) that we find is almost identical to that in section 73.625(c)(3).[168] These rule sections provide similar requirements regarding how applicants should describe and document antenna patterns submitted in their applications. Some sections are identical,[169] but in others there are a few minor differences. Specifically, comparing section 73.625(c)(3)(i) with section 73.6025(a)(1), although two sentences found in the latter concerning

[162] *See* proposed section 73.1201 (Station identification); *see also* proposed section 74.783(d) in the *Part 74 NPRM* at para. 17.

[163] *Second Periodic Review*, 19 FCC Rcd at 18347-48, para. 153.

[164] *See* 47 CFR § 73.622(h) (describing required attenuated power limits of emissions of frequencies outside the authorized channel of operation for full power television stations).

[165] *See* 47 CFR §§ 73.6024(d) and 74.794(a)(2). Section 74.794(a)(2)(i)-(iii) defines the required attenuated power limits of emissions outside the authorize channel of operation for each type of mask.

[166] *See* Letter to Ricardo Castañeda Alvarez Director General de Ingenieria y Estudios Técnicos, IFT, from Mindel De La Torre, Chief, International Bureau (July 15, 2015) and Letter to Mindel De La Torre, Chief, International Bureau, from Alejandro Navarrete Torres, IFT (July 15, 2015) (collectively, "Exchange of Coordination Letters with IFT Regarding DTV Transition and Reconfiguration of 600 MHz Spectrum"). *See* International Agreements, available at: https://www.fcc.gov/general/international-agreements.

[167] 47 CFR § 73.6024(d).

[168] 47 CFR §§ 73.6025(a) (Antenna system and station location) (setting forth required showing when proposing to use a directional antenna system) and 73.625(c)(3) (DTV coverage of principal community and antenna systems).

[169] Specifically, section 73.625(c)(3)(iii) is identical to section 73.6025(a)(3), section 73.625(c)(3)(iv) is identical to section 73.6025(a)(4), and section 73.625(c)(3)(vi) is identical to section 73.6025(a)(5).

descriptions of antenna systems are not specifically contained in section 73.625(c)(3)(i), we believe these sentences are explanatory and sufficiently captured in the requirement in section 73.625(c)(3)(i) that a "[c]omplete description of the proposed antenna system" be included. Currently, section 73.625(c)(3)(ii) also differs slightly from section 73.6025(a)(2) in that it specifies a different orientation of the included antenna plots, but is otherwise identical and would provide the same information to the Commission.[170] Finally, while there is no equivalent to section 73.625(c)(3)(v) in section 73.6025; that subpart merely describes the format of the otherwise-required tabulations.[171] We find that the very minor distinctions between the language in the two sections are insignificant and that no purpose is served by having two essentially duplicative rules in part 73.[172] We instead propose to also cross-reference section 73.625(c)(3) in section 73.6025(a), eliminating the duplication but making clear that the requirements in section 73.625(c)(3) continue to apply to Class A television stations. We seek comment on this proposal.

51. *Minimum Video Program Requirements.* As noted above, we propose to delete much of section 73.624(b).[173] Section 73.6026 (Broadcast regulations applicable to Class A television stations) lists section 73.624 as a rule applicable to Class A stations. It also includes a note stating that "Section 73.624(b) will apply only to the extent that such stations must also transmit at least one over-the-air video program signal at no direct charge to viewers of the digital Class A station." Such language is also included in 73.624(b) and so we propose to remove that text in 73.6026 as duplicative. We also propose to clarify that this change would mandate the use of a minimum 480i video resolution by Class A stations. This requirement is consistent with full-power and LPTV/translator stations (as proposed in the *Part 74 NPRM*),[174] and we believe it is reasonable to also apply it consistently to Class A stations. We seek comment on this conclusion.

52. *Transmitting Antenna Site.* Section 73.683(c)(1),[175] which we propose to move to new section 73.619(a)(1),[176] refers to the estimation of a station's coverage area based on a "particular transmitter site." We note that our application forms do not request information about the location of a station transmitter but of its antenna instead. Therefore, we propose to modify the language in the rule to refer instead to a "particular transmitting antenna site." We believe this proposal is consistent with language that has been used in other parts of the rules,[177] and with a proposal made in the *Part 74 NPRM*.[178] Accordingly, we seek comment on this proposal.

53. *Corrections to Inadvertent Oversights from Prior Rulemakings.* In section 73.616(e),[179] which we propose to relocate to new section 73.620(d) (Interference calculation and protection of TV

---

[170] We propose to modify section 73.625(c)(3)(ii). *See supra* para. 39.

[171] We propose to modify section 73.625(c)(3)(v). *See supra* para. 40. We are also proposing in this *NPRM* to add new sections 73.625(c)(3)(vii) and (viii) to account for stations submitting elevation or matrix patterns. *See id*.

[172] Class A licensees are required to comply with all part 73 regulations except for those that cannot apply for technical or other reasons. *Class A Report and Order*, 15 FCC Rcd at 6365, para. 23. Section 73.625(c)(3) is clearly a rule with which they can comply.

[173] *See supra* para. 6, n.9.

[174] *See Part 74 NPRM* at para. 25.

[175] 47 CFR § 73.683(c)(1) (Field strength contours and presumptive determination of field strength at individual locations).

[176] *See supra* para. 27.

[177] *See e.g.*, 47 CFR § 73.622(d).

[178] *See Part 74 NPRM* at para. 24 ("Because the antenna location, rather than the transmitter location, is the relevant consideration in determining interference, service, and loss, as required by the Commission's rules and policies, we propose to delete Section 74.751(b)(6) entirely regarding the transmitter's location, as it is not relevant in this analysis.").

[179] 47 CFR § 73.616(e) (Post-transition DTV station interference protection).

broadcast services), the rule text appears to be incomplete and contradictory. Paragraph (1) indicates the OET Bulletin No. 69 method of determining coverage and interference shall be used, then indicates that "[t]he threshold levels at which interference is considered to occur are:" but none follow. Paragraph (2) implies the use of contour analysis to determine protection of Class A television stations, but does so while making use of the unspecified threshold levels from paragraph (1). Paragraph (3) indicates that a request for a waiver of the interference protection requirements of the rule may be made using the Longley-Rice terrain dependent propagation methods contained in OET Bulletin No. 69, in contradiction to paragraph (1) which specifies that OET Bulletin No. 69 shall be used. Because these elements make the requirements of the rule difficult to decipher, we propose to remove paragraphs (1), (2), and (3) entirely and streamline the remaining paragraph (e) as a new section 73.620(d), replacing the description of the OET Bulletin No. 69 in paragraph (1) with a cross-reference to paragraphs (a) and (b) of the new section 73.620, which specifies the same method. We seek comment on this proposal.

54. In the *October 2021 Order*, the Commission deleted section 73.623(g) as obsolete because it addressed the digital transition.[180] Deletion of the section, however, inadvertently eliminated from the rules the allowance for negotiated agreements on interference among applicants and licensees. We propose to restore this allowance that was previously contained in section 73.623(g), modify the language to delete language referring to stations operating on channels allotted in section 73.622(b), the initial DTV Table, and place it in a new section 73.620(e). This would clarify in our rules that stations may continue to negotiate agreements on interference consistent with past and present practice. We seek comment on this proposal.

55. In the *Part 74 Order*, the Commission revised or removed certain paragraphs of section 74.787 to reflect the LPTV and translator transition from analog to digital operations, clean up duplicate sections that were contained in both the analog and digital portions of part 74, and provide accurate information about current Commission forms.[181] The *Part 74 Order* revised section 74.787(a)(5)(i) regarding applications for analog-to-digital replacement translators (DRTs) and digital-to-digital replacement television translators (DTDRTs) to state that "[a]pplications for new DRTs and DTDRTs are no longer accepted." The *Part 74 Order* also removed the first sentence of subsection (a)(5)(v). We propose to further amend the text of the rule by clarifying in the now first sentence of paragraph (a)(5)(v) that the pre-auction digital service area is the noise-limited contour of the full power station that was protected in the incentive auction repacking process and removing reference to a 2015 public notice.[182] Because we no longer allow applications for new applications for DTDRTs, we believe the reference to the public notice data is no longer necessary and the inclusion of the additional explanation of the pre-auction digital service area for stations that already hold DTDRTs provides a clearer definition. We seek comment on this proposal.

M. Cost-Benefit and Diversity, Equity and Inclusion Analysis

56. Finally, we seek comment on the benefits and costs associated with adopting the proposals set forth in this *NPRM*. In addition to any benefits to the public at large, are there also benefits to industry through adoption of any of our proposals? We also seek comment on any potential costs that would be imposed on licensees, regulatees, and the public if we adopt the proposals contained in this *NPRM*. Comments should be accompanied by specific data and analysis supporting claimed costs and benefits.

[180] *See October 2021 Order* at para. 13, n.44.

[181] *See Part 74 Order* at paras. 6-7, nn. 22 and 25-28.

[182] *See* 47 CFR § 74.787(a)(5)(v) (Licensing); *see also Incentive Auction Task Force Releases Revised Baseline Data and Prices for Reverse Auction; Announces Revised Filing Window Dates*, Public Notice, DA 15-1296, 30 FCC Rcd 12559 (Nov. 12, 2015).

57. As part of our continuing effort to advance digital equity for all,[183] including people of color, persons with disabilities, persons who live in rural or Tribal areas, and others who are or have been historically underserved, marginalized, or adversely affected by persistent poverty or inequality, we invite comment on how the proposals set forth in the *NPRM* can advance equity in the provision of broadcast services for all people of the United States, without discrimination on the basis of race, color, religion, national origin, sex, or disability.[184] Specifically, we seek comment on how our proposals may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well the scope of the Commission's relevant legal authority.

IV. PROCEDURAL MATTERS

A. Ex Parte Rules - Permit-But-Disclose

58. The proceeding this Notice initiates shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[185] 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 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 rule 1.1206(b). In proceedings governed by rule 1.49(f) 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.

B. Filing Requirements—Comments and Replies

59. *Filing Requirements—Comments and Replies*. Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, 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). *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

---

[183] Section 1 of the Communications Act of 1934, as amended, provides that the FCC "regulat[es] interstate and foreign commerce in communication by wire and radio so as to make [such service] available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex." 47 U.S.C. § 151.

[184] The term "equity" is used here consistent with Executive Order 13985 as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. *See* Exec. Order No. 13985, 86 Fed. Reg. 7009, Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (Jan. 20, 2021).

[185] 47 CFR §§ 1.1200 *et seq.*

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://apps.fcc.gov/ecfs/.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
    - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
    - Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington, D.C. 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.[186]
- During the time the Commission's building is closed to the general public and until further notice, if more than one docket or rulemaking number appears in the caption of a proceeding, paper filers need not submit two additional copies for each additional docket or rulemaking number; an original and one copy are sufficient.

C. Regulatory Flexibility Act

60. *Regulatory Flexibility Act*. The Regulatory Flexibility Act of 1980, as amended (RFA), requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities."[187] Accordingly, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) concerning potential rule and policy changes contained in this *NPRM*. The IRFA is set forth in Appendix B.

D. Paperwork Reduction Act

61. The Notice of Proposed Rulemaking proposes new or modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens and pursuant to the Paperwork Reduction Act of 1995, Public Law 104-13, invites the general public and the Office of Management and Budget (OMB) to comment on these information collection requirements. 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.

62. *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 and Governmental Affairs Bureau at (202) 418-0530.

63. *Additional Information*. For additional information on this proceeding, please contact Joyce Bernstein, Video Division, Media Bureau at (202) 418-1647 or Joyce.Bernstein@fcc.gov or Mark Colombo, Video Division, Media Bureau at (202) 418-7611 or Mark.Colombo@fcc.gov.

V. ORDERING CLAUSES

[186] See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, 35 FCC Rcd 2788 (2020).

[187] *5 U.S.C.* § 605(b).

64. Accordingly, **IT IS ORDERED**, pursuant to the authority contained in sections 1, 4, 301, 303, 307, 308, 309, 310, 316, 319, and 336 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154, 301, 303, 307, 308, 309, 310, 316, 319, and 336, this Notice of Proposed Rulemaking **IS ADOPTED**.

65. **IT IS FURTHER ORDERED** that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, **SHALL SEND** a copy of the Order and Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Proposed Rules

Deleted text is marked with a strikethrough and bolded and new text is bolded. Other text is current and remains part of the Commission's rules.

Part 0 of Title 47 of the U.S. Code of Federal Regulations is proposed to be amended to read as follows:

PART 0 — COMMISSION ORGANIZATION

1. The authority citation for part 0 continues to read as follows:

AUTHORITY: 47 U.S.C. 151, 154(i), 154(j), 155, 225, and 409, unless otherwise noted.

2. Revise section 0.434 to read as follows:

~~**Periodically t**~~**T**he FCC makes available ~~**copies of**~~ its data bases**, Consolidated Database System (CDBS) and Licensing and Management System (LMS),** ~~**and lists**~~ containing information about authorized broadcast stations, pending applications for such stations, and rulemaking proceedings involving amendments to the TV and FM Table of Allotments. ~~**The data bases, and the lists prepared from the data bases,**~~ **CDBS and LMS** contain~~**s**~~ frequencies, station locations, and other particulars. ~~**The lists are available for public inspection at the FCC's main office, located at the address indicated in § 0.401(a). Paper copies of the lists may be purchased from the FCC's duplicating contractor; see § 0.465(a). Many of the databases**~~ **CDBS and LMS** may be viewed at the Commission's web site at *www.fcc.gov* ~~**and *ftp.fcc.gov***~~ under ~~**mass media services**~~ **Media Bureau**. ~~**Microfiche copies of these lists are maintained by the Reference Information Center. These lists are derived from the data bases and can be used as an alternative research source to the Broadcast Application Processing System (BAPS)**~~.

Part 27 of Title 47 of the U.S. Code of Federal Regulations is proposed to be amended to read as follows:

PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICE

3. The authority citation for part 27 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 301, 302a, 303, 307, 309, 332, 336, 337, 1403, 1404, 1451, and 1452, unless otherwise noted.

4. § 27.60 [Removed and Reserved]

§ 27.60 ~~**TV/DTV interference protection criteria.**~~ [Reserved]

~~**Base, fixed, control, and mobile transmitters in the 698-758 MHz, 775-788 MHz, and 805-806 MHz frequency bands must be operated only in accordance with the rules in this section to reduce the potential for interference to public reception of the signals of existing TV and DTV broadcast stations transmitting on TV Channels 51 through 68.**~~

~~**(a) *D/U ratios.* Licensees must choose site locations that are a sufficient distance from co-channel and adjacent channel TV and DTV stations, and/or must use reduced transmitting power or transmitting antenna height such that the following minimum desired signal-to-undesired signal ratios (D/U ratios) are met.**~~

~~(1) The minimum D/U ratio for co-channel stations is:~~

~~(i) 40 dB at the hypothetical Grade B contour (64 dBμV/m) (88.5 kilometers (55 miles)) of the TV station;~~

~~(ii) For transmitters operating in the 698-746 MHz frequency band, 23 dB at the equivalent Grade B contour (41 dBμV/m) (88.5 kilometers (55 miles)) of the DTV station; or~~

~~(iii) For transmitters operating in the 746-758 MHz, 775-788 MHz, and 805-806 MHz frequency bands, 17 dB at the equivalent Grade B contour (41 dBμV/m) (88.5 kilometers (55 miles)) of the DTV station.~~

~~(2) The minimum D/U ratio for adjacent channel stations is 0 dB at the hypothetical Grade B contour (64 dBμV/m) (88.5 kilometers (55 miles)) of the TV station or −23 dB at the equivalent Grade B contour (41 dBμV/m) (88.5 kilometers (55 miles)) of the DTV station.~~

~~(b) *TV stations and calculation of contours.* The methods used to calculate TV contours and antenna heights above average terrain are given in §§ 73.683 and 73.684 of this chapter. Tables to determine the necessary minimum distance from the 698-758 MHz, 775-788 MHz, and 805-806 MHz station to the TV/DTV station, assuming that the TV/DTV station has a hypothetical or equivalent Grade B contour of 88.5 kilometers (55 miles), are located in § 90.309 of this chapter and labeled as Tables B, D, and E. The locations of existing and proposed TV/DTV stations during the period of transition from analog to digital TV service are given in part 73 of this chapter and in the final proceedings of MM Docket No. 87-268.~~

~~(1) Licensees of stations operating within the ERP and HAAT limits of § 27.50 must select one of four methods to meet the TV/DTV protection requirements, subject to Commission approval:~~

~~(i) Utilize the geographic separation specified in Tables B, D, and E of § 90.309 of this chapter, as appropriate;~~

~~(ii) When station parameters are greater than those indicated in the tables, calculate geographic separation in accordance with the required D/U ratios, as provided in paragraph (a) of this section;~~

~~(iii) Submit an engineering study justifying the proposed separations based on the parameters of the land mobile station and the parameters, including authorized and/or applied for facilities, of the TV/DTV station(s) it is trying to protect; or,~~

~~(iv) Obtain written concurrence from the applicable TV/DTV station(s). If this method is chosen, a copy of the agreement must be submitted with the application.~~

~~(2) The following is the method for geographic separations.~~

~~(i) Base and fixed stations that operate in the 746-758 MHz and 775-787 MHz bands having an antenna height (HAAT) less than 152 m. (500 ft.) shall afford protection to co-channel and adjacent channel TV/DTV stations in accordance with the values specified in Table B (co-channel frequencies based on 40 dB protection) and Table E (adjacent channel frequencies based on 0 dB protection) in § 90.309 of this chapter. Base and fixed stations that operate in the 698-746 MHz band having an antenna height (HAAT) less than 152 m. (500 ft.) shall~~

~~afford protection to adjacent channel DTV stations in accordance with the values specified in Table E in § 90.309 of this chapter, shall afford protection to co-channel DTV stations by providing 23 dB protection to such stations' equivalent Grade B contour (41 dBμV/m), and shall afford protection to co-channel and adjacent channel TV stations in accordance with the values specified in Table B (co-channel frequencies based on 40 dB protection) and Table E (adjacent channel frequencies based on 0 dB protection) in § 90.309 of this chapter. For base and fixed stations having an antenna height (HAAT) between 152-914 meters (500-3,000 ft.) the effective radiated power must be reduced below 1 kilowatt in accordance with the values shown in the power reduction graph in Figure B in § 90.309 of this chapter. For heights of more than 152 m. (500 ft.) above average terrain, the distance to the radio path horizon will be calculated assuming smooth earth. If the distance so determined equals or exceeds the distance to the hypothetical or equivalent Grade B contour of a co-channel TV/DTV station (*i.e.*, it exceeds the distance from the appropriate Table in § 90.309 of this chapter to the relevant TV/DTV station), an authorization will not be granted unless it can be shown in an engineering study (*see* paragraph (b)(1)(iii) of this section) that actual terrain considerations are such as to provide the desired protection at the actual Grade B contour (64 dBμV/m for TV and 41 dBμV/m for DTV stations) or unless the effective radiated power will be further reduced so that, assuming free space attenuation, the desired protection at the actual Grade B contour (64 dBμV/m for TV and 41 dBμV/m coverage contour for DTV stations) will be achieved. Directions for calculating powers, heights, and reduction curves are listed in § 90.309 of this chapter for land mobile stations. Directions for calculating coverage contours are listed in §§ 73.683 through 73.685 of this chapter for TV stations and in § 73.625 of this chapter for DTV stations.~~

~~(ii) Control, fixed, and mobile stations (including portables) that operate in the 787-788 MHz and 805-806 MHz bands and control and mobile stations (including portables) that operate in the 698-757 MHz and 776-787 MHz bands are limited in height and power and therefore shall afford protection to co-channel and adjacent channel TV/DTV stations in the following manner:~~

~~(A) For control, fixed, and mobile stations (including portables) that operate in the 787-788 MHz and 805-806 MHz bands and control and mobile stations (including portables) that operate in the 746-757 MHz and 776-787 MHz bands, co-channel protection shall be afforded in accordance with the values specified in Table D (co-channel frequencies based on 40 dB protection for TV stations and 17 dB for DTV stations) in § 90.309 of this chapter.~~

~~(B) For control and mobile stations (including portables) that operate in the 698-746 MHz band, co-channel protection shall be afforded to TV stations in accordance with the values specified in Table D (co-channel frequencies based on 40 dB protection) and to DTV stations by providing 23 dB protection to such stations' equivalent Grade B contour (41 dBμV/m).~~

~~(C) For control, fixed, and mobile stations (including portables) that operate in the 787-788 MHz and 805-806 MHz bands and control and mobile stations (including portables) that operate in the 698-757 MHz and 776-787 MHz bands, adjacent channel protection shall be afforded by providing a minimum distance of 8 kilometers (5 miles) from all adjacent channel TV/DTV station hypothetical or equivalent Grade B contours (adjacent channel frequencies based on 0 dB protection for TV stations and −23 dB for DTV stations).~~

~~(D) Since control, fixed, and mobile stations may affect different TV/DTV stations than the associated base or fixed station, particular care must be taken by applicants/licensees to ensure that all appropriate TV/DTV stations are considered (*e.g.*, a base station may be~~

~~**operating within TV Channel 62 and the mobiles within TV Channel 67, in which case TV Channels 61, 62, 63, 66, 67 and 68 must be protected). Control, fixed, and mobile stations shall keep a minimum distance of 96.5 kilometers (60 miles) from all adjacent channel TV/DTV stations. Since mobiles and portables are able to move and communicate with each other, licensees must determine the areas where the mobiles can and cannot roam in order to protect the TV/DTV stations.**~~

~~**Note to § 27.60:**~~

~~**The 88.5 km (55mi) Grade B service contour (64 dBμV/m) is based on a hypothetical TV station operating at an effective radiated power of one megawatt, a transmitting antenna height above average terrain of 610 meters (2000 feet) and the Commission's R-6602 F(50,50) curves. *See* § 73.699 of this chapter. Maximum facilities for TV stations operating in the UHF band are 5 megawatts effective radiated power at an antenna HAAT of 610 meters (2,000 feet). *See* § 73.614 of this chapter. The equivalent contour for DTV stations is based on a 41 dBμV/m signal strength and the distance to the F(50,90) curve. *See* § 73.625 of this chapter.**~~

5. § 27.1310 [Removed and Reserved]

§ 27.1310 ~~**Protection of Broadcast Television Service in the 600 MHz band from wireless operations.**~~ [Reserved]

~~**(a) Licensees authorized to operate wireless services in the 600 MHz band must cause no harmful interference to public reception of the signals of broadcast television stations transmitting co-channel or on an adjacent channel.**~~

~~**(1) Such wireless operations must comply with the D/U ratios in Table 5 in OET Bulletin No. 74, Methodology for Predicting Inter-Service Interference to Broadcast Television from Mobile Wireless Broadband Services in the UHF Band ([DATE]) ("*OET Bulletin No. 74*"). Copies of this document are available on the FCC's website. See *https://www.fcc.gov/general/oet-bulletins-line.***~~

~~**(2) If a 600 MHz band licensee causes harmful interference within the noise-limited contour or protected contour of a broadcast television station that is operating co-channel or on an adjacent channel, the 600 MHz band licensee must eliminate the harmful interference.**~~

~~**(b) A licensee authorized to operate wireless services in the 600 MHz downlink band:**~~

~~**(1) Is not permitted to deploy wireless base stations within the noise-limited contour or protected contour of a broadcast television station licensed on a co-channel or adjacent channel in the 600 MHz downlink band;**~~

~~**(2) Is required to perform an interference study using the methodology in *OET Bulletin No. 74* before deploying or operating wireless base stations within the culling distances specified in Tables 7-12 of *OET Bulletin No. 74* from the noise-limited contour or protected contour of such a broadcast television station;**~~

~~**(3) Is required to perform an interference study using the methodology in *OET Bulletin No. 74* when modifying a base station within the culling distances in Tables 7-12 of *OET Bulletin 74* that results in an increase in energy in the direction of co-channel or adjacent channel broadcast television station's contours;**~~

~~**(4) Is required to maintain records of the latest *OET Bulletin No. 74* study for each base station and make them available for inspection to the Commission and, upon a claim of harmful interference, to the requesting broadcasting television station.**~~

~~**(c) A licensee authorized to operate wireless services in the 600 MHz uplink band must limit its service area so that mobile and portable devices do not transmit:**~~

~~**(1) Co-channel or adjacent channel to a broadcast television station within that station's noise-limited contour or protected contour;**~~

~~**(2) Co-channel to a broadcast television station within five kilometers of that station's noise-limited contour or protected contour; and**~~

~~**(3) Adjacent channel to a broadcast television station within 500 meters of that station's noise-limited contour or protected contour.**~~

~~**(d) For purposes of this section, the following definitions apply:**~~

~~**(1) Broadcast television station is defined pursuant to § 73.3700(a)(1) of this chapter;**~~

~~**(2) Noise-limited contour is defined to be the full power station's noise-limited contour pursuant to § 73.622(e);**~~

~~**(3) Protected contour is defined to be a Class A television station's protected contour as specified in section 73.6010;**~~

~~**(4) Co-channel operations in the 600 MHz band are defined as operations of broadcast television stations and wireless services where their assigned channels or frequencies spectrally overlap;**~~

~~**(5) Adjacent channel operations are defined as operations of broadcast television stations and wireless services where their assigned channels or frequencies spectrally abut each other or are separated by up to 5 MHz.**~~

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

PART 73 – RADIO BROADCAST SERVICES

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

AUTHORITY: 47 U.S.C. 154, 155, 301, 303, 307, 309, 310, 334, 336, and 339.

7. Section 73.611 is added to read as follows:

§ 73.611 Emission levels and mask filter.

(a) The power level of emissions on frequencies outside the authorized channel of operation must be attenuated no less than the following amounts below the average transmitted power within the authorized channel. In the first 500 kHz from the channel edge the emissions must be attenuated no less than 47 dB. More than 6 MHz from the channel edge, emissions must be

attenuated no less than 110 dB. At any frequency between 0.5 and 6 MHz from the channel edge, emissions must be attenuated no less than the value determined by the following formula:

Attenuation in dB = −11.5(Δf + 3.6);

Where: Δf = frequency difference in MHz from the edge of the channel.

(b) This attenuation is based on a measurement bandwidth of 500 kHz. Other measurement bandwidths may be used as long as appropriate correction factors are applied. Measurements need not be made any closer to the band edge than one half of the resolution bandwidth of the measuring instrument. Emissions include sidebands, spurious emissions and radio frequency harmonics. Attenuation is to be measured at the output terminals of the transmitter (including any filters that may be employed). In the event of interference caused to any service, greater attenuation may be required.

8. Section 73.612 is amended by revising paragraph (a), and removing paragraph (b) and the Note to read as follows:

(a) Permittees and licensees of TV broadcast stations are not protected from any interference which may be caused by the grant of a new station or of authority to modify the facilities of an existing station in accordance with the provisions of this subpart. The nature and extent of the protection from interference accorded to TV broadcast stations is limited solely to the protection which results from the **interference protection requirements** ~~**minimum allotment and station separation requirements and the rules and regulations with respect to maximum powers and antenna heights**~~ set forth in this subpart.

~~**(b) When the Commission determines that grant of an application would serve the public interest, convenience, and necessity and the instrument of authorization specifies an antenna location in a designated antenna farm area which results in distance separation less than those specified in this subpart, TV broadcast station permittees and licensees shall be afforded protection from interference equivalent to the protection afforded under the minimum distance separations specified in this subpart.**~~

~~**Note:**~~

~~**The nature and extent of the protection from interference accorded to TV broadcast stations which were authorized prior to April 14, 1952, and which were operating on said date is limited not only as specified above but is further limited by any smaller separations existing between such stations on said date. Where, as a result of the adoption of the Table of Allotments or of changes in transmitter sites made by such stations after said date, separations smaller than the required minimum are increased but still remain lower than the required minimum, protection accorded such stations will be limited to the new separations.**~~

9. § 73.613 [Removed and Reserved]

§ 73.613 ~~**Protection of Class A TV stations.**~~ [Reserved]

~~**(a) An application for a new TV broadcast station or for changes in the operating facilities of an existing TV broadcast station will not be accepted for filing if it fails to comply with the requirements specified in this section.**~~

~~**Note to § 73.613(a):**~~

~~**Licensees and permittees of TV broadcast stations that were authorized on November 29, 1999 (and applicants for new TV stations that had been cut-off without competing applications or that were the winning bidder in a TV broadcast station auction as of that date, or that were the proposed remaining applicant in a group of mutually exclusive applications for which a settlement agreement was on file as of that date) may continue to operate with facilities that do not protect Class A TV stations. Applications filed on or before November 29, 1999 for a change in the operating facilities of such stations also are not required to protect Class A TV stations under the provisions of this section.**~~

~~**(b) Due to the frequency spacing which exists between TV channels 4 and 5, between channels 6 and 7, and between channels 13 and 14, first-adjacent channel protection standards shall not be applicable to these pairs of channels. Some interference protection requirements of this section only apply to stations transmitting on the UHF TV channels 14 through 36 (*see* § 73.603(a)).**~~

~~**(c) A UHF TV broadcast station application will not be accepted if it specifies a site less than 100 kilometers from the transmitter site of a UHF Class A TV station operating on a channel which is the seventh channel above the requested channel. Compliance with this requirement shall be determined based on a distance computation rounded to the nearest kilometer.**~~

~~**(d) A UHF TV broadcast station application will not be accepted if it specifies a site less than 32 kilometers from the transmitter site of a UHF Class A TV station that is authorized an effective radiated power of more than 50 kilowatts and operating on a channel which is the second, third, or fourth channel above or below the requested channel. Compliance with this requirement shall be determined based on a distance computation rounded to the nearest kilometer.**~~

~~**(e) In cases where a TV broadcast station has been authorized facilities that do not meet the distance separation requirements of this section, an application to modify such a station's facilities will not be accepted if it decreases that separation.**~~

~~**(f) New interference must not be caused to Class A TV stations authorized pursuant to Subpart J of this part, within the protected contour defined in § 73.6010 of this part. For this prediction, the TV broadcast station field strength is calculated from the proposed effective radiated power and the antenna height above average terrain in pertinent directions using the methods in § 73.684 of this part.**~~

~~**(1) For co-channel protection, the field strength is calculated using the appropriate F(50,10) chart from Figure 9a, 10a, or 10c of § 73.699 of this part.**~~

~~**(2) For TV broadcast stations that do not specify the same channel as the Class A TV station to be protected, the field strength is calculated using the appropriate F(50,50) chart from Figure 9, 10, or 10b of § 73.699 of this part.**~~

~~**(g) A TV broadcast station application will not be accepted if the ratio in dB of its field strength to that of the Class A TV station at the Class A TV station's protected contour fails to meet the following:**~~

~~**(1) −45 dB for co-channel operations where the Class A TV station does not specify an offset carrier frequency or where the TV broadcast and Class A TV stations do not specify different**~~

~~**offset carrier frequencies (zero, plus or minus) or −28 dB for offset carrier frequency operation where the TV broadcast and Class A TV stations specify different offset carrier frequencies.**~~

~~**(2) 6 dB when the protected Class A TV station operates on a VHF channel that is one channel above the requested channel.**~~

~~**(3) 12 dB when the protected Class A TV station operates on a VHF channel that is one channel below the requested channel.**~~

~~**(4) 15 dB when the protected Class A TV station operates on a UHF channel that is one channel above or below the requested channel.**~~

~~**(5) 23 dB when the protected Class A TV station operates on a UHF channel that is fourteen channels below the requested channel.**~~

~~**(6) 6 dB when the protected Class A TV station operates on a UHF channel that is fifteen channels below the requested channel.**~~

~~**(h) New interference must not be caused to digital Class A TV stations authorized pursuant to Subpart J of this part, within the protected contour defined in § 73.6010 of this part. A TV broadcast station application will not be accepted if the ratio in dB of the field strength of the digital Class A TV station at the digital Class A TV station's protected contour to the field strength resulting from the facilities proposed in the TV broadcast station application fails to meet the D/U signal ratios for "analog TV-into-DTV" specified in §§ 73.623(c)(2) and 73.623(c)(3) of this part. For digital Class A TV station protection, the TV broadcast station field strength is calculated from the proposed effective radiated power and the antenna height above average terrain in pertinent directions using the methods in § 73.684 of this part and using the appropriate F(50,10) chart from Figure 9a, 10a, or 10c of § 73.699 of this part.**~~

~~**(i) In cases where a TV broadcast station has been authorized facilities that do not meet the interference protection requirements of this section, an application to modify such a station's facilities will not be accepted if it is predicted to cause new interference within the protected contour of the Class A TV or digital Class A TV station.**~~

~~**(j) In support of a request for waiver of the interference protection requirements of this section, an applicant for a TV broadcast station may make full use of terrain shielding and Longley-Rice terrain dependent propagation methods to demonstrate that the proposed facility would not be likely to cause interference to Class A TV stations. Guidance on using the Longely-Rice methodology is provided in *OET Bulletin No. 69*, which is available through the Internet at *http://www.fcc.gov/oet/info/documents/bulletins/#69*.**~~

10. Section 73.614 is amended by revising paragraphs (a), (b) introductory text, (b)(1), (b)(2), (b)(3), (b)(6), (b)(7), and adding paragraphs (b)(1)(i), (b)(1)(ii), (b)(1)(iii), (b)(2)(i), (b)(2)(ii), (b)(2)(iii), (b)(3)(i), (b)(3)(ii), (b)(6)(i), (b)(6)(ii), (b)(6)(iii), and removing and reserving paragraphs (b)(4) and (b)(5) to read as follows:

§ 73.614 Power and antenna height requirements.

(a) ***Minimum requirements.*** Applications will not be accepted for filing if they specify less than ~~**−10 dBk (**~~100 watts~~**)**~~ horizontally polarized visual effective radiated power **(ERP)** in any horizontal direction. No minimum antenna height above average terrain **(HAAT)** is specified. **For stations**

requesting DTS operation pursuant to § 73.626, this requirement applies to at least one site in the DTS.

(b) ***Maximum power.*** Applications **for new full power television stations, for changes in authorized full power television stations, and petitions for changes to the Table of TV Allotments,** will not be accepted for filing if they specify a power which exceeds the maximum permitted boundaries specified in the following formulas:

(1) **A TV station that operates on a channel 2-6 allotment will be allowed a maximum ERP of 10 kW if its antenna HAAT is at or below 305 meters and it is located in Zone I or a maximum ERP of 45 kW if its antenna HAAT is at or below 305 meters and it is located in Zone II or Zone III.**

(i) At higher HAAT levels, such TV stations will be allowed to operate with lower maximum ERP levels in accordance with the following table and formulas (the allowable maximum ERP for intermediate values of HAAT is determined using linear interpolation based on the units employed in the table):

Maximum Allowable ERP and Antenna Height for TV Stations In Zones II or III on Channels 2-6

Antenna HAAT (meters)	ERP (kW)
610	10
580	11
550	12
520	14
490	16
460	19
425	22
395	26
365	31
335	37
305	45

(ii) For TV stations located in Zone I that operate on channels 2-6 with an HAAT that exceeds 305 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:

$$ERP_{max} = 92.57-33.24*\log_{10}(HAAT)$$

(iii) For TV stations located in Zone II or III that operate on channels 2-6 with an HAAT that exceeds 610 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:

$$ERP_{max} = 57.57-17.08*\log_{10}(HAAT)$$

~~**Channels 2-6 in Zone I:**~~

~~$ERP_{Max} = 102.57-33.24*Log_{10}(HAAT)$~~

~~And,~~

~~$-10\ dBk \leq ERP_{Max} \leq 20\ dBk$~~

(2) **A TV station that operates on a channel 7-13 allotment will be allowed a maximum ERP of 30 kW if its antenna HAAT is at or below 305 meters and it is located in Zone I or a maximum ERP of 160 kW if its antenna HAAT is at or below 305 meters and it is located in Zone II or Zone III.**

(i) At higher HAAT levels, such TV stations will be allowed to operate with lower maximum ERP levels in accordance with the following table and formulas (the allowable maximum ERP for intermediate values of HAAT is determined using linear interpolation based on the units employed in the table):

Maximum Allowable ERP and Antenna Height for TV Stations In Zones II or III on Channels 7-13

Antenna HAAT (meters)	ERP (kW)
610	30
580	34
550	40
520	47
490	54
460	64
425	76
395	92
365	110
335	132
305	160

(ii) For TV stations located in Zone I that operate on channels 7-13 with an HAAT that exceeds 305 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:

$$ERP_{max} = 97.35-33.24*\log_{10}(HAAT)$$

(iii) For TV stations located in Zone II or III that operate on channels 7-13 with an HAAT that exceeds 610 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:

$$ERP_{max} = 62.34-17.08*\log_{10}(HAAT)$$

~~**Channels 2-6 in Zones II and III:**~~

~~$ERP_{Max} = 67.57-17.08*\ Log_{10}\ (HAAT)$~~

~~**And,**~~

~~$10\ dBk \leq ERP_{Max} \leq 20\ dBk$~~

(3) **A TV station that operates on a channel 14-36 allotment will be allowed a maximum ERP of 1000 kW if its antenna HAAT is at or below 365 meters.**

(i) At higher HAAT levels, such TV stations will be allowed to operates with lower maximum ERP levels in accordance with the following table and formulas (the allowable maximum ERP for intermediate values of HAAT is determined using linear interpolation based on the units employed in the table):

Maximum Allowable ERP and Antenna Height for TV Stations on Channels 14-36, All Zones

Antenna HAAT (meters)	ERP (kW)
610	316
580	350
550	400
520	460
490	540
460	630
425	750
395	900
365	1000

(ii) For TV stations located in Zone I, II or III that operate on channels 14-36 with an HAAT that exceeds 610 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:

$$ERP_{max} = 72.57-17.08*\log_{10}(HAAT)$$

Where:

ERP_{Max} = Maximum Effective Radiated Power measured in decibels above 1 kW (dBk).

HAAT = Height Above Average Terrain measured in meters.

~~**Channels 7-13 in Zone I:**~~

~~$ERP_{Max} = 107.57-33.24* \log_{10}(HAAT)$~~

~~**And,**~~

~~$-4.0\ dBk \leq ERP_{Max} \leq 25\ dBk$~~

(4) ~~**Channels 7-13 in Zones II and III:**~~

~~$ERP_{Max} = 72.57-17.08* \log_{10}(HAAT)$~~

~~**And,**~~

~~$15\ dBk \leq ERP_{Max} \leq 25\ dBk$~~ [Reserved]

(5) ~~**Channels 14-36 in Zones I, II, and III**~~

~~**$ERP_{Max} = 84.57-17.08* Log_{10}$ (HAAT)**~~

~~**And,**~~

~~**27 dBk ≤ERP_{Max}≤37 dBk**~~ [Reserved]

~~**Where:**~~

~~**ERP_{Max} = Maximum Effective Radiated Power measured in decibels above 1 kW (dBk).**~~

~~**HAAT = Height Above Average Terrain measured in meters.**~~

~~**The boundaries specified are to be used to determine the maximum possible combination of antenna height and ERP_{dBk}. When specifying an ERP_{dBk} less than that permitted by the lower boundary, any antenna HAAT can be used. Also, for values of antenna HAAT greater than 2,300 meters the maximum ERP is the lower limit specified for each equation.**~~

(6) The effective radiated power in any horizontal or vertical direction may not exceed the maximum values permitted by this section~~.~~**, except that licensees and permittees may request an increase in either ERP in some azimuthal direction or antenna HAAT, or both, up to the maximum permissible limits on TV power set forth in paragraph (1), (2), or (3) of this section, as appropriate, up to that needed to provide the same geographic coverage area as the largest station within their market. Such requests must be accompanied by a technical showing that the increase complies with the technical criteria in § 73.620, and thereby will not result in new interference exceeding the *de minimis* standard set forth in that section, or statements agreeing to the change from any co-channel or adjacent channel stations that might be affected by potential new interference, in accordance with § 73.620(e). For the purposes of this paragraph:**

(i) The maximum ERP value shall not exceed the maximum permitted at any height within the relevant zone consistent with the values permitted in paragraph (1), (2), or (3) above. The associated maximum height for that given ERP may be exceeded.

(ii) Stations in the same Nielsen DMA are considered to be in the same market.

(iii) "Geographic coverage area" is defined as the number of square kilometers found within a station's F(50,90) contour as calculated in § 73.619. A station taking advantage of this provision need not specify coverage that is congruent with or encompassed by the largest station in the market.

(7) ~~**The effective radiated power at any angle above the horizontal shall be as low as the state of the art permits, and in the same vertical plane may not exceed the effective radiated power in either the horizontal direction or below the horizontal, whichever is greater.**~~ **See § 73.625(c)(1).**

* * * * *

11. § 73.615 [Removed and Reserved]

§ 73.615 ~~**Administrative changes in authorizations.**~~ [Reserved]

~~**In the issuance of television broadcast station authorizations, the Commission will specify the transmitter output power and effective radiated power to the nearest 0.1 dBk. Power specified by kWs shall be obtained by converting dBk to kWs to 3 significant figures. Antenna heights above average terrain will be specified to the nearest meter. Midway figures will be authorized in the lower alternative.**~~

12. Section 73.616 is amended by revising the section heading and paragraphs (a), (b), (c), (d), (e) and (g) to read as follows:

§ 73.616 ~~**Post-transition D**~~ **References to** TV station interference protection **rules**.

(a) ~~**A petition to add a new channel to the post-transition DTV Table of TV Allotments contained in § 73.622(j) of this subpart will not be accepted unless it meets: The DTV-to-DTV geographic spacing requirements of § 73.623(d) with respect to all existing DTV allotments in the post-transition DTV Table; the principle community coverage requirements of § 73.625(a); the Class A TV and digital Class A TV protection requirements in paragraph (f) of this section; the land mobile protection requirements of § 73.623(e); and the FM radio protection requirement of § 73.623(f).**~~ **See § 73.622(a).**

(b) ~~**The reference coordinates of a post-transition DTV allotment shall be the authorized transmitter site, or, where such a transmitter site is not available for use as a reference point, the coordinates as designated in the FCC order creating or modifying the post-transition DTV Table of TV Allotments.**~~ **See § 73.622(d).**

(c) ~~**The protected facilities of a post-transition DTV allotment shall be the facilities (effective radiated power, antenna height and antenna directional radiation pattern, if any) authorized by a construction permit or license, or, where such an authorization is not available for establishing reference facilities, the facilities designated in the FCC order creating or modifying the post-transition DTV Table of TV Allotments.**~~ **See § 73.619(d).**

(d) ~~**An application will not be accepted if it is predicted to cause interference to more than an additional 0.5 percent of the population served by another post-transition DTV station. For this purpose, the population served by the station receiving additional interference does not include portions of the population within the noise-limited service contour of that station that are predicted to receive interference from the post-transition DTV allotment facilities of the applicant or portions of that population receiving masking interference from any other station.**~~ **See § 73.620(c).**

~~**(1) For evaluating compliance with the requirements of this paragraph, interference to populations served is to be predicted based on the 2000 census population data and otherwise according to the procedure set forth in OET Bulletin No. 69: "Longley-Rice Methodology for Evaluating TV Coverage and Interference" (February 6, 2004) (incorporated by reference, see § 73.8000), including population served within service areas determined in accordance with § 73.622(c), consideration of whether F(50,10) undesired signals will exceed the following desired-to-undesired (D/U) signal ratios, assumed use of a directional receiving antenna, and use of the terrain dependent Longley-Rice point-to-point propagation model. Applicants may request the use of a cell size other than the default of 2.0 km per side, but only requests for cell sizes of 1.0 km per side or 0.5 km per side will be considered. The threshold levels at which interference is considered to occur are:**~~ **See § 73.620(c).**

~~(i) For co-channel stations, the D/U ratio is + 15 dB. This value is only valid at locations where the signal-to-noise ratio is 28 dB or greater. At the edge of the noise-limited service area, where the signal-to-noise (S/N) ratio is 16 dB, this value is + 23 dB. At locations where the S/N ratio is greater than 16 dB but less than 28 dB, D/U values are computed from the following formula:~~

~~$D/U = 15 + 10\log_{10}[1.0/(1.0-10^{-x/10})]$~~

~~Where x = S/N-15.19 (minimum signal to noise ratio)~~

~~(ii) For interference from a lower first-adjacent channel, the D/U ratio is −28 dB.~~

~~(iii) For interference from an upper first-adjacent channel, the D/U ratio is −26 dB.~~

~~(2) Due to the frequency spacing that exists between Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, the minimum adjacent channel technical criteria specified in this section shall not be applicable to these pairs of channels (see § 73.603(a)).~~

(e) ~~A petition to add a new channel to the post-transition DTV Table or a post-transition DTV station application that proposes to expand its allotted or authorized coverage area in any direction will not be accepted if it is predicted to cause interference to a Class A TV station or to a digital Class A TV station authorized pursuant to subpart J of this part, within the protected contour defined in § 73.6010.~~ See § 73.620(d).

~~(1) For evaluating compliance with the requirements of this paragraph, interference to populations served is to be predicted based on the most recent official decennial U.S. Census population data as identified by the Media Bureau in a Public Notice issued not less than 60 days prior to use of the data for a specific year in application processing, and otherwise according to the procedure set forth in OET Bulletin No. 69: "Longley-Rice Methodology for Evaluating TV Coverage and Interference" (February 6, 2004) (incorporated by reference, see § 73.8000), including population served within service areas determined in accordance with § 73.622(e), consideration of whether F(50,10) undesired signals will exceed the following desired-to-undesired (D/U) signal ratios, assumed use of a directional receiving antenna, and use of the terrain-dependent Longley-Rice point-to-point propagation model. Applicants may request the use of a cell size other than the default of 2.0 km per side, but only requests for cell sizes of 1.0 km per side or 0.5 km per side will be considered. The threshold levels at which interference is considered to occur are:~~

~~(2) Interference is predicted to occur if the ratio in dB of the field strength of a digital Class A TV station at its protected contour to the field strength resulting from the facilities proposed in the DTV application (calculated using the appropriate F(50,10) chart from Figure 9a, 10a, or 10c of § 73.699) fails to meet the D/U signal ratios specified in paragraph (c) of this section.~~

~~(3) In support of a request for waiver of the interference protection requirements of this section, an applicant for a post-transition DTV broadcast station may make full use of terrain shielding and Longley-Rice terrain dependent propagation methods to demonstrate that the proposed facility would not be likely to cause interference to Class A TV stations. Guidance on using the Longley-Rice methodology is provided in OET Bulletin No. 69, which is available through the Internet at *http://www.fcc.gov/oet/info/documents/bulletins/#69*.~~

* * * * *

(g) ~~**The interference protection requirements contained in this section apply to television station operations under both the DTV transmission standard in § 73.682(d) and the Next Gen TV transmission standard in § 73.682(f).**~~ **See § 73.620(f).**

13. Section 73.617 is added to read as follows:

§ 73.617 Interference protection of other services.

(a) ***Protection of land mobile operations on channels 14-20.*** **The Commission will not accept petitions to amend the Table of TV Allotments, applications for new TV stations, or applications to change the channel or location of authorized TV stations that would use channels 14-20 where the distance between the TV reference coordinates as defined in section 73.622(d), would be located less than 250 km from the city center of a co-channel land mobile operation or 176 km from the city center of an adjacent channel land mobile operation. Such filings that do not meet the minimum TV-to-land mobile spacing standards will, however, be considered where all affected land mobile licensees consent to the requested action. Land mobile operations are authorized on these channels in the following markets:**

City	Channels	Latitude	Longitude
Boston, MA	14, 16	42° 21′ 24.4″	71° 03′ 23.2″
Chicago, IL	14, 15	41° 52′ 28.1″	87° 38′ 22.2″
Cleveland, OH	14, 15	41° 29′ 51.2″	81° 49′ 49.5″
Dallas, TX	16	32° 47′ 09.5″	96° 47′ 38.0″
Detroit, MI	15, 16	42° 19′ 48.1″	83° 02′ 56.7″
Houston, TX	17	29° 45′ 26.8″	95° 21′ 37.8″
Los Angeles, CA	14, 16, 20	34° 03′ 15.0″	118° 14′ 31.3″
Miami, FL	14	25° 46′ 38.4″	80° 11′ 31.2″
New York, NY	14, 15, 16	40° 45′ 06.4″	73° 59′ 37.5″
Philadelphia, PA	19, 20	39° 56′ 58.4″	75° 09′ 19.6″
Pittsburgh, PA	14, 18	40° 26′ 19.2″	79° 59′ 59.2″
San Francisco, CA	16, 17	37° 46′ 38.7″	122° 24′ 43.9″
Washington, DC	17, 18	38° 53′ 51.4″	77° 00′ 31.9″

NOTE: The Chief, Public Safety and Homeland Security Bureau, waived the rules to allow channel 15 to be used for land mobile operation in Los Angeles County, CA (DA 08-2823; adopted December 30, 2008). Notwithstanding the channels listed in (a), the waiver requires television stations to protect this land mobile operation.

(b) ***Protection of land mobile operations below channel 14***

(1) TV broadcast stations operating on Channel 14 must take special precautions to avoid interference to adjacent spectrum land mobile radio service facilities. Where a TV station is authorized and operating prior to the authorization and operation of the land mobile facility, a Channel 14 station must attenuate its emissions within the frequency range 467 to 470 MHz if necessary to permit reasonable use of the adjacent frequencies by land mobile licensees.

(2) The requirements listed below apply to permittees authorized to construct a new station on TV Channel 14, and to licensees authorized to change the channel of an existing station to Channel 14, to increase effective radiated power (ERP) (including any change in directional antenna characteristics that results in an increase in ERP in any direction), or to change the transmitting location of an existing station.

(i) For the purposes of this paragraph (b), a protected land mobile facility is a receiver that is intended to receive transmissions from licensed land mobile stations within the frequency band below 470 MHz, and is associated with one or more land mobile stations for which a license has been issued by the Commission, or a proper application has been received by the Commission prior to the date of the filing of the TV construction permit application. However, a land mobile facility will not be protected if it is proposed in an application that is denied or dismissed and that action is no longer subject to Commission review. Further, if the land mobile station is not operating when the TV facility commences operation and it does not commence operation within the time permitted by its authorization in accordance with part 90 of this chapter, it will not be protected.

(ii) A TV permittee must take steps before construction to identify potential interference to normal land mobile operation that could be caused by TV emissions outside the authorized channel, land mobile receiver desensitization or intermodulation. It must install filters and take other precautions as necessary, and submit evidence that no interference is being caused before it will be permitted to transmit programming on the new facilities pursuant to the provisions of § 73.1615 or § 73.1620 of this part. A TV permittee must reduce its emissions within the land mobile channel of a protected land mobile facility that is receiving interference caused by the TV emission producing a vertically polarized signal and a field strength in excess of 17 dBu at the land mobile receiver site on the land mobile frequency. The TV emission should be measured with equipment set to a 30 kHz measurement bandwidth including the entire applicable land mobile channel. A TV permittee must correct a desensitization problem if its occurrence can be directly linked to the start of the TV operation and the land mobile station is using facilities with typical desensitization rejection characteristics. A TV permittee must identify the source of an intermodulation product that is generated when the TV operation commences. If the intermodulation source is under its control, the TV permittee must correct the problem. If the intermodulation source is beyond the TV permittee's control, it must cooperate in the resolution of the problem and should provide whatever technical assistance it can.

(c) Parties requesting new allotments on channel 6 be added to the Table of TV Allotments must submit an engineering study demonstrating that no interference would be caused to existing FM radio stations on FM channels 200-220.

(d) Present information is not sufficiently complete to establish blanketing interference areas for television broadcast stations. Blanketing interference is interference in an area adjacent to a transmitter in which the reception of other stations is subject to interference due to the strong signal from this station. The authorization of station construction in areas where blanketing interference is found to be excessive will be on the basis that the applicant will assume full

responsibility for the adjustment of reasonable complaints arising from excessively strong signals of the applicant's station or take other corrective action.

(e) Stations should be aware that a condition is placed on all TV broadcast station authorizations that result in a change in coverage area, or all authorizations for new stations, which requires TV broadcasters to identify and notify hospital and other health care facilities within the station's coverage area to avoid interference to medical telemetry devices.

14. Section 73.618 is added to read as follows:

§ 73.618 Antenna location and principal community coverage.

(a) The TV antenna location shall be chosen so that, on the basis of the effective radiated power (ERP) and antenna height above average terrain (HAAT) employed, the following minimum F(50,90) field strength in dB above one uV/m will be provided over the entire principal community to be served:

Channels 2-6	**35 dBu.**
Channels 7-13	**43 dBu.**
Channels 14-36	**48 dBu.**

(b) The location of the antenna must be so chosen that there is not a major obstruction in the path over the principal community to be served.

(c) For the purposes of this section, coverage is to be determined in accordance with section 73.619(b). Under actual conditions, the true coverage may vary from these estimates because the terrain over any specific path is expected to be different from the average terrain on which the field strength charts were based. Further, the actual extent of service will usually be less than indicated by these estimates due to interference from other stations. Because of these factors, the predicted field strength contours give no assurance of service to any specific percentage of receiver locations within the distances indicated.

15. Section 73.619 is added to read as follows:

§ 73.619 Contours and service areas.

(a) The field strength contours will be considered for the following purposes only:

(1) In the estimation of coverage resulting from the selection of a particular transmitting antenna site by an applicant for a TV station.

(2) In connection with problems of coverage arising out of application of § 73.3555.

(3) In determining compliance with § 73.618(a) concerning the minimum field strength to be provided over the principal community to be served.

(b) ***Determining coverage.***

(1) In predicting the distance to the field strength contours, the F (50,50) field strength charts (Figures 9, 10 and 10b of § 73.699 of this part) and the F (50,10) field strength charts (Figures 9a, 10a and 10c of § 73.699 of this part) shall be used. To use the charts to predict the distance to a given F (50,90) contour, the following procedure is used: Convert the effective radiated power in kilowatts for the appropriate azimuth into decibel value referenced to 1 kW (dBk). Subtract the power value in dBk from the contour value in dBu. Note that for power less than 1 kW, the difference value will be greater than the contour value because the power in dBk is negative. Locate the difference value obtained on the vertical scale at the left edge of the appropriate F (50,50) chart for the TV station's channel. Follow the horizontal line for that value into the chart to the point of intersection with the vertical line above the height of the antenna above average terrain for the appropriate azimuth located on the scale at the bottom of the chart. If the point of intersection does not fall exactly on a distance curve, interpolate between the distance curves below and above the intersection point. The distance values for the curves are located along the right edge of the chart. Using the appropriate F (50,10) chart for the DTV station's channel, locate the point where the distance coincides with the vertical line above the height of the antenna above average terrain for the appropriate azimuth located on the scale at the bottom of the chart. Follow a horizontal line from that point to the left edge of the chart to determine the F (50,10) difference value. Add the power value in dBk to this difference value to determine the F (50,10) contour value in dBu. Subtract the F (50,50) contour value in dBu from this F (50,10) contour value in dBu. Subtract this difference from the F (50,50) contour value in dBu to determine the F (50,90) contour value in dBu at the pertinent distance along the pertinent radial.

(2) The effective radiated power to be used is that radiated at the vertical angle corresponding to the depression angle between the transmitting antenna center of radiation and the radio horizon as determined individually for each azimuthal direction concerned. The depression angle is based on the difference in elevation of the antenna center of radiation above the average terrain and the radio horizon, assuming a smooth spherical earth with a radius of 8,495.5 kilometers (5,280 miles) and shall be determined by the following equation:

A = 0.0277 square root of H

Where:

A is the depression angle in degrees.

H is the height in meters of the transmitting antenna radiation center above average terrain of the 3.2-16.1 kilometers (2-10 miles) sector of the pertinent radial.

This formula is empirically derived for the limited purpose specified here of determining distance to filed strength contours for coverage. Its use for any other purpose may be inappropriate.

(3) Applicants for new TV stations or changes in the facilities of existing TV stations must submit to the FCC a showing as to the location of their stations' or proposed stations' contour. This showing is to include a map showing this contour, except where applicants have previously submitted material to the FCC containing such information and it is found upon careful examination that the contour locations indicated therein would not change, on any radial, when the locations are determined under this section. In the latter cases, a statement by a qualified engineer to this effect will satisfy this requirement and no contour maps need be submitted.

(4) The antenna height to be used with these charts is the height of the radiation center of the antenna above the average terrain along the radial in question. In determining the average elevation of the terrain, the elevations between 3.2-16.1 kilometers (2-10 miles) from the antenna site are employed. Path profiles shall be determined for 8 radials beginning at the antenna site and extending 16.1 kilometers (10 miles) therefrom. The radials should be determined for each 45 degrees of azimuth starting with True North. 10 points per kilometer of elevation (uniformly spaced) should be used for each radial. It is not necessary to take the curvature of the earth into consideration in this procedure, as this factor is taken care of in the charts showing signal strengths. The average elevation of the 12.9 kilometer (8 miles) distance between 3.2-16.1 kilometers (2-10 miles) from the antenna site should then be determined from the path profile for each radial. In directions where the terrain is such that negative antenna heights or heights below 30.5 meters (100 feet) for the 3.2 to 16.1 kilometers (2 to 10 mile) sector are obtained, an assumed height of 30.5 meters (100 feet) shall be used for the prediction of coverage. Actual calculated values should be used for computation of height above average terrain.

(5) In the preparation of the path profiles previously described, and in determining the location and height above sea level of the antenna site, the elevation or contour intervals shall be taken from a high quality bald earth terrain map or dataset such as the United States Geological Survey Topographic Quadrangle Maps or the National Elevation Dataset. If a dataset is used, the data must be processed for intermediate points along each radial using linear interpolation techniques.

(6) It is anticipated that many of these calculations may be done using computer software and with computerized datasets. If software or datasets besides those officially adopted by the FCC are utilized, the alternate software or data must be identified.

(c) ***TV Service Areas.***

(1) The service area of a TV station is the geographic area within the station's noise-limited F(50,90) contour where its signal strength is predicted to exceed the noise-limited service level. The noise-limited contour is the area in which the predicted F(50,90) field strength of the station's signal, in dB above 1 microvolt per meter (dBu) as determined using the method in § 73.619(b) exceeds the following levels (these are the levels at which reception of TV service is limited by noise):

	dBu
Channels 2-6	28
Channels 7-13	36
Channels 14-36	41

(2) Within this contour, service is considered available at locations where the station's signal strength, as predicted using the terrain dependent Longley-Rice point-to-point propagation model, exceeds the levels above. Guidance for evaluating coverage areas using the Longley-Rice methodology is provided in *OET Bulletin No. 69.* Copies of this document are available on the FCC's website. See *https://www.fcc.gov/general/oet-bulletins-line.*

(d) The protected facilities of a TV allotment shall be the facilities (effective radiated power, antenna height and antenna directional radiation pattern, if any) authorized by a construction permit or license, or, where such an authorization is not available for establishing reference

facilities, the facilities designated in the FCC order creating or modifying the Table of TV Allotments.

16. Section 73.620 is added to read as follows:

§ 73.620 Interference calculation and protection of TV broadcast services

(a) Due to the frequency spacing that exists between Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, the minimum adjacent channel technical criteria specified in this section shall not be applicable to these pairs of channels (see § 73.603(a)).

(b) Interference to populations served is to be predicted based on the most recent official decennial U.S. Census population data as identified by the Media Bureau in a Public Notice issued not less than 60 days prior to use of the data for a specific year in application processing, and otherwise according to the procedure set forth in OET Bulletin No. 69: "Longley-Rice Methodology for Evaluating TV Coverage and Interference" (February 6, 2004) (incorporated by reference, see § 73.8000), including population served within service areas determined in accordance with § 73.619, consideration of whether F(50,10) undesired signals will exceed the following desired-to-undesired (D/U) signal ratios, assumed use of a directional receiving antenna, and use of the terrain dependent Longley-Rice point-to-point propagation model. Applicants may request the use of a cell size other than the default of 2.0 km per side, but only requests for cell sizes of 1.0 km per side or 0.5 km per side will be considered. The threshold levels at which interference is considered to occur are:

(1) For co-channel stations, the D/U ratio is + 15 dB. This value is only valid at locations where the signal-to-noise ratio is 28 dB or greater. At the edge of the noise-limited service area, where the signal-to-noise (S/N) ratio is 16 dB, this value is + 23 dB. At locations where the S/N ratio is greater than 16 dB but less than 28 dB, D/U values are computed from the following formula:

$$D/U = 15 + 10\log_{10}[1.0/(1.0-10^{-x/10})]$$

Where x = S/N-15.19 (minimum signal to noise ratio)

(2) For interference from a lower first-adjacent channel, the D/U ratio is −28 dB.

(3) For interference from an upper first-adjacent channel, the D/U ratio is −26 dB.

(c) An application will not be accepted if it is predicted to cause interference to more than an additional 0.5 percent of the population served by another TV station. For this purpose, the population served by the station receiving additional interference does not include portions of the population within the noise-limited service contour of that station that are predicted to receive interference from the TV allotment facilities of the applicant or portions of that population receiving masking interference from any other station.

(d) A petition to add a new channel to the TV Table or any application to modify an existing TV station or allotment will not be accepted if it is predicted to cause more than 0.5 percent new interference, consistent with paragraphs (a) and (b) of this section, to a Class A TV station authorized pursuant to subpart J of this part, within the protected contour defined in § 73.6010.

(e) *Negotiated agreements on interference.* TV stations may operate with increased effective radiated power (ERP) and/or antenna height above average terrain (HAAT) that would result in

more than 0.5 percent additional interference to another TV station if that station agrees, in writing, to accept the additional interference. Such agreements must be submitted with the application for authority to construct or modify the affected TV station. Negotiated agreements under this paragraph can include the exchange of money or other considerations from one station to another, including payments to and from noncommercial television stations assigned to reserved channels. Applications submitted pursuant to the provisions of this paragraph will be granted only if the Commission finds that such action is consistent with the public interest.

(f) The interference protection requirements contained in this section apply to television station operations under both the TV transmission standard in § 73.682(d) and the Next Gen TV transmission standard in § 73.682(f).

17. Section 73.621 is amended by revising paragraph (j) and removing and reserving paragraphs (g) and (h).

§ 73.621 Noncommercial educational TV stations.

* * * * *

(g) ~~**Telecommunications Service on the Vertical Blanking Interval and in the Visual Signal. The provisions governing VBI and visual signal telecommunications service in § 73.646 are applicable to noncommercial educational TV stations.**~~ [Reserved]

(h) ~~**Non-program related data signals transmitted on Line 21 pursuant to § 73.682(a)(22)(ii) may be used for remunerative purposes.**~~ [Reserved]

* * * * *

(j) ~~**With respect to the provision of advanced television services, t**~~The requirements of this section ~~will~~ apply to the entire digital bitstream of noncommercial educational television stations, including the provision of ancillary or supplementary services.

18. Section 73.622 is amended by revising the section heading, paragraphs (a) introductory text, (b), (c) introductory text, (d)(2), (e) introductory text, (f)(5), (f)(6), (f)(7), (f)(8), (h) introductory text, (i) introductory text, and (j), and removing paragraphs (a)(1), (a)(2), (c)(1), (c)(2), (d)(1), (e)(1), (e)(2), Note to (e)(2), (e)(3), (f)(2)(i), (f)(2)(ii), (f)(6)(i) through (iii), (f)(7)(i) through (iii), (f)(8)(i) through (ii), (g)(2), (h)(1), and (h)(2), and removing and reserving paragraphs (f)(2), (f)(3)(i) through (ii), and (f)(4), and adding paragraph (k).

73.622 ~~**Digital Television T**~~**t**able of **TV** allotments.

(a) ***General.*** The following table of **TV** allotments contains the ~~**digital**~~ television ~~**(DTV)**~~ channel allotments designated for the listed communities in the United States, its Territories, and possessions. Requests for addition of new ~~DTV~~ **TV** allotments, or requests to change the channels allotted to a community**,** must be made in a petition for rule making to amend the ~~**DTV**~~ Table of **TV** Allotments. A request to amend the ~~**DTV t**~~**T**able **of TV Allotments** to **add an allotment or** change the channel of an allotment in the ~~**DTV t**~~**T**able will be evaluated for technical acceptability using engineering criteria set forth in §**§ 73.617, 73.618, and** 73.62~~**03(e)**~~. A request to amend the ~~**D**~~TV table to add a new allotment will be evaluated for technical acceptability using the geographic spacing criteria set forth in § 73.62~~**3**~~(~~**d**~~**k**) **and the engineering criteria set forth in §§ 73.614, 73.617, 73.618, and 73.620(a) and (d)**. ~~**D**~~TV allotments designated with an asterisk are assigned for use by non-commercial educational

broadcast stations only. Rules governing noncommercial educational TV stations are contained in § 73.621. ~~**Where there is only one technically available channel available in a community, an entity that would be eligible to operate a noncommercial educational broadcast station may, prior to application, initiate a rulemaking proceeding requesting that an unoccupied or new channel in the community be changed or added as reserved only for noncommercial educational broadcasting upon demonstrating that the noncommercial educational proponent would provide a first or second noncommercial educational TV service to 2,000 or more people who constitute 10% of the population within the proposed allocation's noise limited contour.**~~

~~**(1) Petitions requesting the addition of a new allotment must specify a channel in the range of channels 2-36.**~~

~~**(2) Petitions requesting a change in the channel of an initial allotment must specify a channel in the range of channels 2-58.**~~

(b) ~~**[Reserved]**~~ **See § 73.622(j).**

(c) **See § 73.623(b).**

~~**(1) *Availability of channels.* Applications may be filed to construct DTV broadcast stations only on the channels designated in the DTV Table of TV Allotments set forth in paragraph (bj) of this section, and only in the communities listed therein. Applications that fail to comply with this requirement, whether or not accompanied by a petition to amend the DTV Table, will not be accepted for filing. However, applications specifying channels that accord with publicly announced FCC Orders changing the DTV Table of TV Allotments will be accepted for filing even if such applications are tendered before the effective dates of such channel change. An application for authority to construct a DTV station on an allotment in the initial DTV table may only be filed by the licensee or permittee of the analog TV station with which that initial allotment is paired, as set forth in Appendix B of the Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order in MM Docket 87-268, FCC 98-24 (Memorandum Opinion and Order) adopted January 29, 1998. Copies of the Memorandum Opinion and Order may be inspected during normal business hours at the Federal Communications Commission's Reference Information Center, located at the address of the FCC's main office indicated in 47 CFR 0.401(a). This document is also available through the Internet on the FCC Home Page at http://www.fcc.gov. Applications may also be filed to implement an exchange of channel allotments between two or more licensees or permittees of analog TV stations in the same community, the same market, or in adjacent markets provided, however, that the other requirements of this section and § 73.623 are met with respect to each such application.**~~

~~**(2) Notwithstanding paragraph (c)(1) of this section, an application may be filed for a channel or community not listed in the DTV Table of Allotments if it is consistent with the rules and policies established in the Third Report and Order in WT Docket 99-168 (FCC 01-25), adopted January 18, 2001. Where such a request is approved, the Media Bureau will change the DTV Table of Allotments to reflect that approval.**~~

(d) * * *

~~**(1) The reference coordinates of a DTV allotment included in the initial DTV Table of Allotments are the coordinates of the authorized transmitting antenna site of the associated analog TV station, as set forth in Appendix B of the *Memorandum Opinion and Order***~~

~~**(referenced above). An application for authority to construct or modify DTV facilities on such an allotment may specify an alternate location for the DTV transmitting antenna that is within 5 kilometers of the DTV allotment reference coordinates without consideration of electromagnetic interference to other DTV or analog TV broadcast stations, allotments or applications, provided the application complies with paragraph (f)(2) of this section. Location of the transmitting antenna of such a station at a site more than 5 kilometers from the DTV allotment reference coordinates must comply with the provisions of section 73.623(e). In the case where a DTV station has been granted authority to construct more than 5 kilometers from its reference coordinates pursuant to section 73.623(e), and its authorized coverage area extends in any azimuthal direction beyond the DTV coverage area determined for the DTV allotment reference facilities, then the coordinates of such authorized site are to be used in addition to the coordinates of the DTV allotment to determine protection from new DTV allotments pursuant to § 73.623(d) and from subsequent DTV applications filed pursuant to § 73.623(e).**~~

~~**(2)**~~ The reference coordinates of a ~~**D**~~TV allotment ~~**not included in the initial DTV Table of Allotments**~~ shall be the **coordinates of the** authorized ~~**transmitter site,**~~ **facility.** ~~**or, w**~~ **W**here such a transmitter site is not available for use as ~~**a**~~ reference ~~**point,**~~ **coordinates**, **such as a new allotment,** the coordinates **shall be those** ~~**as**~~ designated in the FCC order modifying the ~~**DTV**~~ Table of **TV** Allotments.

(e) ~~***DTV Service Areas.***~~ **See § 73.619(c).**

~~**(1) The service area of a DTV station is the geographic area within the station's noise-limited F(50,90) contour where its signal strength is predicted to exceed the noise-limited service level. The noise-limited contour is the area in which the predicted F(50,90) field strength of the station's signal, in dB above 1 microvolt per meter (dBu) as determined using the method in § 73.625(b) exceeds the following levels (these are the levels at which reception of DTV service is limited by noise):**~~

	~~**dBu**~~
~~**Channels 2-6**~~	~~**28**~~
~~**Channels 7-13**~~	~~**36**~~
~~**Channels 14-36**~~	~~**41**~~

~~**(2) Within this contour, service is considered available at locations where the station's signal strength, as predicted using the terrain dependent Longley-Rice point-to-point propagation model, exceeds the levels above. Guidance for evaluating coverage areas using the Longley-Rice methodology is provided in *OET Bulletin No. 69.* Copies of this document are available on the FCC's website. See *https://www.fcc.gov/general/oet-bulletins-line.***~~

~~**Note to paragraph (e)(2):**~~

~~**During the transition, in cases where the assigned power of a UHF DTV station in the initial DTV Table is 1000 kW, the Grade B contour of the associated analog television station, as authorized on April 3, 1997, shall be used instead of the noise-limited contour of the DTV station in determining the DTV station's service area. In such cases, the DTV service area is the geographic area within the station's analog Grade B contour where its DTV signal strength is predicted to exceed the noise-limited service level, *i.e.*, 41 dB, as determined using the Longley-Rice methodology.**~~

~~**(3) For purposes of determining whether interference is caused to a DTV station's service area, the maximum technical facilities, *i.e.*, antenna height above average terrain (antenna HAAT) and effective radiated power (ERP), specified for the station's allotment are to be used in determining its service area.**~~

(f)

(1) * * *

(2) ~~***An application for authority to construct* or modify DTV facilities will not be subject to further consideration of electromagnetic interference to other DTV or analog TV broadcast stations, allotments or applications, provided that:***~~ [Reserved]

~~**(i) The proposed ERP in each azimuthal direction is equal to or less than the reference ERP in that direction; and**~~

~~**(ii) The proposed antenna HAAT is equal to or less than the reference antenna HAAT or the proposed antenna HAAT exceeds the reference antenna HAAT by 10 meters or less and the reference ERP in paragraph (f)(2)(i) of this section is adjusted in accordance with paragraph (f)(3) of this section; and**~~

~~**(iii) The application complies with the location provisions in paragraph (d)(1) of this section.**~~

(3)

~~**(i) A DTV station may increase its antenna HAAT by up to 10 meters from that specified in Appendix B if it reduces its DTV power to a level at or below the level of adjusted DTV power computed in the following formula:**~~

~~**ERP adjustment in dB = 20log(H_1/H_2)**~~

~~**Where H_1 = Reference antenna HAAT specified in the DTV Table, and H_2 = Actual antenna HAAT**~~

~~**(ii) Alternatively, a DTV application that specifies an antenna HAAT within 25 meters below that specified in Appendix B may adjust its power upward to a level at or below the adjusted DTV power in accordance with the formula in paragraph (f)(3)(i) of this section without an interference showing. For a proposed antenna more than 25 meters below the reference antenna HAAT, the DTV station may increase its ERP up to the level permitted for operation with an antenna that is 25 meters below the station's reference antenna HAAT.**~~ [Reserved]

(4) ~~**UHF DTV stations may request an increase in power, up to a maximum of 1000 kW ERP, to enhance service within their authorized service area.**~~ [Reserved]

(5) ~~**Licensees and permittees assigned a DTV channel in the initial DTV Table of Allotments may request an increase in either ERP in some azimuthal direction or antenna HAAT, or both, that exceed the initial technical facilities specified for the allotment in Appendix B of the *Memorandum Opinion and Order* (referenced in paragraph (c) of this section), up to the maximum permissible limits on DTV power and antenna height set forth in paragraph (f)(6), (f)(7), or (f)(8) of this section, as appropriate, or up to that needed to provide the same geographic coverage area as the largest station within their market, whichever would allow the largest service area. Such requests must be accompanied by a technical showing that the**~~

~~increase complies with the technical criteria in § 73.623(c), and thereby will not result in new interference exceeding the *de minimis* standard set forth in that section, or statements agreeing to the change from any co-channel or adjacent channel stations that might be affected by potential new interference, in accordance with § 73.623(f). In the case where a DTV station has been granted authority to construct pursuant to § 73.623(c), and its authorized coverage area extends in any azimuthal direction beyond the DTV coverage area determined for the DTV allotment reference facilities, then the authorized DTV facilities are to be used in addition to the assumed facilities of the initial DTV allotment to determine protection from new DTV allotments pursuant to § 73.623(d) and from subsequent DTV applications filed pursuant to § 73.623(e). The provisions of this paragraph regarding increases in the ERP or antenna height of DTV stations on channels in the initial DTV Table of Allotments shall also apply in cases where the licensee or permittee seeks to change the station's channel as well as alter its ERP and antenna HAAT. Licensees and permittees are advised that where a channel change is requested, it may, in fact, be necessary in specific cases for the station to operate with reduced power, a lower antenna, or a directional antenna to avoid causing new interference to another station.~~ See § 73.614(b)(6).

(6) ~~A DTV station that operates on a channel 2-6 allotment created subsequent to the initial DTV Table will be allowed a maximum ERP of 10 kW if its antenna HAAT is at or below 305 meters and it is located in Zone I or a maximum ERP of 45 kW if its antenna HAAT is at or below 305 meters and it is located in Zone II or Zone III. A DTV station that operates on a channel 2-6 allotment included in the initial DTV Table of Allotments may request an increase in power and/or antenna HAAT up to these maximum levels, provided the increase also complies with the provisions of paragraph (f)(5) of this section.~~ See § 73.614(b)(1).

~~(i) At higher HAAT levels, such DTV stations will be allowed to operate with lower maximum ERP levels in accordance with the following table and formulas (the allowable maximum ERP for intermediate values of HAAT is determined using linear interpolation based on the units employed in the table):~~

~~Maximum Allowable ERP and Antenna Height for DTV Stations In Zones II or III on Channels 2-6~~

~~Antenna HAAT (meters)~~	~~ERP (kW)~~
~~610~~	~~10~~
~~580~~	~~11~~
~~550~~	~~12~~
~~520~~	~~14~~
~~490~~	~~16~~
~~460~~	~~19~~
~~425~~	~~22~~
~~395~~	~~26~~
~~365~~	~~31~~
~~335~~	~~37~~
~~305~~	~~45~~

~~(ii) For DTV stations located in Zone I that operate on channels 2-6 with an HAAT that exceeds 305 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:~~

~~$ERP_{max} = 92.57-33.24*\log_{10}(HAAT)$~~

~~**(iii) For DTV stations located in Zone II or III that operate on channels 2-6 with an HAAT that exceeds 610 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:**~~

~~$ERP_{max} = 57.57-17.08*\log_{10}(HAAT)$~~

(7) ~~**A DTV station that operates on a channel 7-13 allotment created subsequent to the initial DTV Table will be allowed a maximum ERP of 30 kW if its antenna HAAT is at or below 305 meters and it is located in Zone I or a maximum ERP of 160 kW if its antenna HAAT is at or below 305 meters and it is located in Zone II or Zone III. A DTV station that operates on a channel 7-13 allotment included in the initial DTV Table of Allotments may request an increase in power and/or antenna HAAT up to these maximum levels, provided the increase also complies with the provisions of paragraph (f)(5) of this section.**~~ **See § 73.614(b)(2).**

~~**(i) At higher HAAT levels, such DTV stations will be allowed to operate with lower maximum ERP levels in accordance with the following table and formulas (the allowable maximum ERP for intermediate values of HAAT is determined using linear interpolation based on the units employed in the table):**~~

~~**Maximum Allowable ERP and Antenna Height for DTV Stations In Zones II or III on Channels 7-13**~~

~~Antenna HAAT (meters)~~	~~ERP (kW)~~
~~610~~	~~30~~
~~580~~	~~34~~
~~550~~	~~40~~
~~520~~	~~47~~
~~490~~	~~54~~
~~460~~	~~64~~
~~425~~	~~76~~
~~395~~	~~92~~
~~365~~	~~110~~
~~335~~	~~132~~
~~305~~	~~160~~

~~**(ii) For DTV stations located in Zone I that operate on channels 7-13 with an HAAT that exceeds 305 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:**~~

~~$ERP_{max} = 97.35-33.24*\log_{10}(HAAT)$~~

~~**(iii) For DTV stations located in Zone II or III that operate on channels 7-13 with an HAAT that exceeds 610 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:**~~

~~$ERP_{max} = 62.34-17.08*\log_{10}(HAAT)$~~

(8) ~~**A DTV station that operates on a channel 14-3659 allotment created subsequent to the initial DTV Table will be allowed a maximum ERP of 1000 kW if theirits antenna HAAT is at or below 365 meters. A DTV station that operates on a channel 14-59 allotment included in the initial DTV Table of Allotments may request an increase in power and/or antenna HAAT up to these maximum levels, provided the increase also complies with the provisions of paragraph (f)(5) of this section.**~~ **See § 73.614(b)(3).**

~~**(i) At higher HAAT levels, such DTV stations will be allowed to operates with lower maximum ERP levels in accordance with the following table and formulas (the allowable maximum ERP for intermediate values of HAAT is determined using linear interpolation based on the units employed in the table):**~~

~~**Maximum Allowable ERP and Antenna Height for DTV Stations on Channels 14-3659, All Zones**~~

~~**Antenna HAAT (meters)**~~	~~**ERP (kW)**~~
~~**610**~~	~~**316**~~
~~**580**~~	~~**350**~~
~~**550**~~	~~**400**~~
~~**520**~~	~~**460**~~
~~**490**~~	~~**540**~~
~~**460**~~	~~**630**~~
~~**425**~~	~~**750**~~
~~**395**~~	~~**900**~~
~~**365**~~	~~**1000**~~

~~**(ii) For DTV stations located in Zone I, II or III that operate on channels 14-5936 with an HAAT that exceeds 610 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:**~~

~~$ERP_{max} = 72.57-17.08*\log_{10}(HAAT)$~~

(g) * * *

~~**(2) Unless it conflicts with operation complying with paragraph (g)(1) of this section, where a low power television station or TV translator station is operating on the lower adjacent channel within 32 km of the DTV station and notifies the DTV station that it intends to minimize interference by precisely maintaining its carrier frequencies, the DTV station shall cooperate in locking its carrier frequency to a common reference frequency and shall be responsible for any costs relating to its own transmission system in complying with this provision.**~~

(h) **See § 73.611.**

~~**(1) The power level of emissions on frequencies outside the authorized channel of operation must be attenuated no less than the following amounts below the average transmitted power within the authorized channel. In the first 500 kHz from the channel edge the emissions must be attenuated no less than 47 dB. More than 6 MHz from the channel edge, emissions must be attenuated no less than 110 dB. At any frequency between 0.5 and 6 MHz from the channel edge, emissions must be attenuated no less than the value determined by the following formula:**~~

~~**Attenuation in dB = −11.5(Δf + 3.6);**~~

~~**Where: Δf = frequency difference in MHz from the edge of the channel.**~~

~~**(2) This attenuation is based on a measurement bandwidth of 500 kHz. Other measurement bandwidths may be used as long as appropriate correction factors are applied. Measurements need not be made any closer to the band edge than one half of the resolution bandwidth of the measuring instrument. Emissions include sidebands, spurious emissions and radio frequency harmonics. Attenuation is to be measured at the output terminals of the transmitter (including any filters that may be employed). In the event of interference caused to any service, greater attenuation may be required.**~~

(i) ~~**[Reserved]**~~ **See § 73.622(j).**

(j) ***Table of TV Allotments.***

* * *

Oklahoma

* * *

Tulsa	8, ~~**10,**~~ *11, 12, **14,** 16, 22, 26, 34

* * *

(k) ***Minimum geographic spacing requirements for new TV allotments.*** **No petition to add a new channel to the Table of TV Allotments will be accepted unless it shows compliance with the requirements of this paragraph.**

(1) Requests filed pursuant to this paragraph must demonstrate compliance with the principal community coverage requirements of section 73.618.

(2) Requests filed pursuant to this paragraph must meet the following requirements for geographic spacing with regard to all other TV stations and allotments:

(i) For VHF channels 2-13 in Zone I, co-channel allotments must be separated by 244.6 km, and no adjacent-channel allotments are permitted between 20 km and 110 km.

(ii) For UHF channels 14-36 in Zone I, co-channel allotments must be separated by 196.3 km, and no adjacent-channel allotments are permitted between 24 km and 110 km.

(iii) For VHF channels 2-13 in Zones II and III, co-channel allotments must be separated by 273.6 km, and no adjacent-channel allotments are permitted between 23 km and 110 km.

(iv) For UHF channels 14-36 in Zones II and III, co-channel allotments must be separated by 223.7 km, and no adjacent-channel allotments are permitted between 24 km and 110 km.

(3) Zones are defined in § 73.609. The minimum distance separation between a TV station in one zone and TV station in another zone shall be that of the zone requiring the lower separation.

(4) Due to the frequency spacing that exists between Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, the minimum geographic spacing requirements specified in paragraph (k)(2) of this section shall not be applicable to these pairs of channels (§ 73.603(a)).

19. Section 73.623 is amended by revising the section heading and paragraphs (a), (b), (c)(1), (c)(2), (c)(3), (c)(4), (c)(5), (d) introductory text, (e), (f), (g), (h) introductory text, (h)(2), (h)(2)(i), (h)(2)(i)(D)-(E); (h)(2)(ii); (h)(2)(i)(A)-(E), (h)(2)(iii), (h)(2)(iii)(A) through (C), (h)(3), removing paragraphs (c)(3)(i), (c)(3)(ii), (c)(5)(i), (c)(5)(ii), (c)(5)(iii), (d)(1), (d)(2), (d)(3), (d)(4), (h)(1)(i) through (iii), (h)(2)(ii)(F) through (H), and removing and reserving paragraphs (h)(1) and (h)(2)(i)(A) through (C).

§ 73.623 ~~D~~TV application~~s and changes to DTV allotments~~ **processing**.

(a) ***General.*** ~~This section contains the technical criteria for evaluating applications requesting DTV facilities that do not conform to the provisions of § 73.622 and petitions for rulemaking to amend the DTV Table of Allotments (§ 73.622(b)). Petitions to amend the DTV Table of TV Allotments (other than those also expressly requesting amendment of this section) and a~~ **A**pplications for new ~~D~~TV broadcast stations or for changes in authorized ~~D~~TV stations filed pursuant to this section will not be accepted for filing if they fail to comply with the requirements of this section **and §§ 73.614, 73.617, 73.618, and 73.620**. ~~Petitions for rule making and applications seeking facilities that will operate after the end of the DTV transition must also comply with § 73.616.~~

(b) ~~In considering petitions to amend the DTV Table and applications filed pursuant to this section, the Commission will use geographic coordinates defined in § 73.622(d) as reference points in determining allotment separations and evaluating interference potential.~~ ***Availability of channels.*** **Applications may be filed to construct TV broadcast stations only on the channels designated in the Table of TV Allotments set forth in § 73.622(j), and only in the communities listed therein. Applications that fail to comply with this requirement, whether or not accompanied by a petition to amend the TV Table, will not be accepted for filing.**

(c) * * *

(1) ~~Requests filed pursuant to this paragraph must demonstrate compliance with the principal community coverage requirements of section 73.625(a).~~ **See § 73.618(a).**

(2) ~~Requests filed pursuant to this paragraph (c) must demonstrate that the requested change would not result in more than an additional 2 percent the population served by another station being subject to interference; provided, however, that no new interference may be caused to any station that already experiences interference to 10 percent or more of its population or that would result in a station receiving interference in excess of 10 percent of its population. The station population values for existing NTSC service and DTV service contained in Appendix B of the *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order* in MM Docket No. 87-268, FCC 98-24, adopted January 29, 1998, referenced in § 73.622(e), are to be used for the purposes of determining whether a power increase or other change is permissible under this de minimis standard. For evaluating compliance with this requirement, interference to populations served is to be predicted based on the procedure set forth in *OET Bulletin No. 69,* including population served within service areas determined in accordance with § 73.622(e), consideration of whether F(50,10) undesired signals will exceed the following desired-to-~~

~~undesired (D/U) signal ratios, assumed use of a directional receiving antenna, and use of the terrain-dependent Longley-Rice point-to-point propagation model. Copies of OET Bulletin No. 69 may be inspected during normal business hours at the Federal Communications Commission's Reference Information Center, located at the address of the FCC's main office indicated in 47 CFR 0.401(a). These documents are also available through the Internet on the *FCC Home Page* at *http://www.fcc.gov*. The threshold levels at which interference is considered to occur are:~~ See § 73.620.

	~~D/U Ratio~~
~~Co-channel:~~	
~~DTV-into-analog TV~~	~~+ 34~~
~~Analog TV-into-DTV~~	~~+ 2~~
~~DTV-into-DTV~~	~~+ 15~~
~~First Adjacent Channel:~~	
~~Lower DTV-into-analog TV~~	~~−14~~
~~Upper DTV-into-analog TV~~	~~−17~~
~~Lower analog TV-into-DTV~~	~~−48~~
~~Upper analog TV-into-DTV~~	~~−49~~
~~Lower DTV-into-DTV~~	~~−28~~
~~Upper DTV-into-DTV~~	~~−26~~
~~Other Adjacent Channel (Channels 14-69 only)~~	
~~DTV-into-analog TV, where N = analog TV channel and DTV Channel:~~	
~~N-2~~	~~−24~~
~~N + 2~~	~~−28~~
~~N-3~~	~~−30~~
~~N + 3~~	~~−34~~
~~N-4~~	~~−34~~
~~N + 4~~	~~−25~~
~~N-7~~	~~−35~~
~~N + 7~~	~~−43~~

~~N-8~~	~~−32~~
~~N+8~~	~~−43~~
~~N+14~~	~~−33~~
~~N+15~~	~~−31~~

(3) ~~**The values in paragraph (c)(2) of this section for co-channel interference to DTV service are only valid at locations where the signal-to-noise ratio is 28 dB or greater for interference from DTV and 25 dB or greater for interference from analog TV service. At the edge of the noise-limited service area, where the signal-to-noise (S/N) ratio is 16 dB, these this values are 21 dB and is 23 dB for interference from analog TV and DTV, respectively. At locations where the S/N ratio is greater than 16 dB but less than 28 dB, D/U values for co-channel interference to DTV are as follows:**~~ **See § 73.620(b).**

~~**(i) For DTV-to-DTV interference, the minimum D/U ratios are computed from the following formula:**~~

~~$D/U = 15 + 10\log_{10}[1.0/(1.0-10^{-x/10})]$~~

~~**Where x = S/N-15.19 (minimum signal to noise ratio)**~~

~~**(ii) For analog-to-DTV interference, the minimum D/U ratios are found from the following Table (for values between measured values, linear interpolation can be used):**~~

~~Signal-to-noise ratio (dB)~~	~~Desired-to-undesired ratio (dB)~~
~~16.00~~	~~21.00~~
~~16.35~~	~~19.94~~
~~17.35~~	~~17.69~~
~~18.35~~	~~16.44~~
~~19.35~~	~~7.19~~
~~20.35~~	~~4.69~~
~~21.35~~	~~3.69~~
~~22.35~~	~~2.94~~
~~23.35~~	~~2.44~~
~~25.00~~	~~2.00~~

(4) ~~**Due to the frequency spacing that exists between Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, the minimum adjacent channel technical criteria specified**~~

~~in paragraph (c)(2) of this section shall not be applicable to these pairs of channels (see § 73.603(a)).~~ See § 73.620(a).

(5) ~~A DTV station application that proposes to expand the DTV station's allotted or authorized coverage area in any direction will not be accepted if it is predicted to cause interference to a Class A TV station or to a digital Class A TV station authorized pursuant to Subpart J of this part, within the protected contour defined in § 73.6010 of this part. This paragraph applies to all DTV applications filed after May 1, 2000, and to DTV applications filed between December 31, 1999 and April 30, 2000 unless the DTV station licensee or permittee notified the Commission of its intent to "maximize" by December 31, 1999.~~ See § 73.620(d).

~~(i) Interference is predicted to occur if the ratio in dB of the field strength of a Class A TV station at its protected contour to the field strength resulting from the facilities proposed in the DTV application (calculated using the appropriate F(50,10) chart from Figure 9a, 10a, or 10c of § 73.699 of this part) fails to meet the D/U signal ratios for "DTV-into-analog TV" specified in paragraph (c)(2) of this section.~~

~~(ii) Interference is predicted to occur if the ratio in dB of the field strength of a digital Class A TV station at its protected contour to the field strength resulting from the facilities proposed in the DTV application (calculated using the appropriate F(50,10) chart from Figure 9a, 10a, or 10c of § 73.699 of this part) fails to meet the D/U signal ratios for "DTV-into-DTV" specified in paragraphs (c)(2) and (c)(3) of this section.~~

~~(iii) In support of a request for waiver of the interference protection requirements of this section, an applicant for a DTV broadcast station may make full use of terrain shielding and Longley-Rice terrain dependent propagation methods to demonstrate that the proposed facility would not be likely to cause interference to Class A TV stations. Guidance on using the Longely-Rice methodology is provided in *OET Bulletin No. 69*, which is available through the Internet at *http://www.fcc.gov/oet/info/documents/bulletins/#69*.~~

(d) ~~*Minimum geographic spacing requirements for new DTV allotments not included in the initial DTV Table of Allotments.* No petition to add a new channel to the DTV Table of TV Allotments or modify an allotment not included in the initial DTV Table will be accepted unless it shows compliance with the requirements of this paragraph.~~ See § 73.622(k).

~~(1) Requests filed pursuant to this paragraph must demonstrate compliance with the principle community coverage requirements of section 73.625(a).~~

~~(2) Requests filed pursuant to this paragraph must meet the following requirements for geographic spacing with regard to all other DTV stations, DTV allotments and analog TV stations and allotments:~~

~~(i) For VHF channels 2-13 in Zone I, co-channel allotments must be separated by 244.6 km, and no adjacent-channel allotments are permitted between 20 km and 110 km.~~

~~(ii) For UHF channels 14-36 in Zone I, co-channel allotments must be separated by 196.3 km, and no adjacent-channel allotments are permitted between 24 km and 110 km.~~

~~(iii) For VHF channels 2-13 in Zones II and III, co-channel allotments must be separated by 273.6 km, and no adjacent-channel allotments are permitted between 23 km and 110 km.~~

~~(iv) For UHF channels 14-36 in Zones II and III, co-channel allotments must be separated by 223.7 km, and no adjacent-channel allotments are permitted between 24 km and 110 km.~~

~~Channel relationship~~	~~Separation requirement~~
~~VHF Channels 2-13:~~	
~~Co-channel, DTV to DTV~~	
	~~Zone I: 244.6 km.~~
	~~Zones II & III: 273.6 km.~~
~~Co-channel, DTV to analog TV~~	
	~~Zone I: 244.6 km.~~
	~~Zone II & III: 273.6 km.~~
~~Adjacent Channel:~~	
~~DTV to DTV~~	~~No allotments permitted between:~~
	~~Zone I: 20 km and 110 km.~~
	~~Zones II & III: 23 km and 110 km.~~
~~DTV to analog TV~~	~~No allotments permitted between:~~
	~~Zone I: 9 km and 125 km.~~
	~~Zone II & III: 11 km and 125 km.~~
~~UHF Channels:~~	
~~Co-channel, DTV to DTV~~	
	~~Zone I: 196.3 km.~~
	~~Zone II & III: 223.7 km.~~
~~Co-channel, DTV to analog TV~~	
	~~Zone I: 217.3 km.~~

~~Channel relationship~~	~~Separation requirement~~
	~~Zone II & III: 244.6 km.~~
~~Adjacent Channel:~~	
~~DTV to DTV~~	~~No allotments permitted between:~~ ~~All Zones: 24 km and 110 km.~~
~~DTV to analog TV~~	~~No allotments permitted between:~~ ~~All Zones: 12 km and 106 km.~~
~~Taboo Channels, DTV to analog TV only (DTV channels ±2, ±3, ±4, ±7, ±8, and 14 or 15 channels above the analog TV channel)~~	~~No allotments permitted between:~~ ~~Zone I: 24.1 km and 80.5 km.~~ ~~Zone II & III: 24.1 km and 96.6 km.~~

~~(3) Zones are defined in § 73.609. The minimum distance separation between a DTV station in one zone and an analog TV or DTV station in another zone shall be that of the zone requiring the lower separation.~~

~~(4) Due to the frequency spacing that exists between Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, the minimum geographic spacing requirements specified in paragraph (d)(3) of this section shall not be applicable to these pairs of channels (§ 73.603(a)).~~

(e) ~~*Protection of land mobile operations on channels 14-20.* The Commission will not accept petitions to amend the DTV Table of Allotments, applications for new DTV stations, or applications to change the channel or location of authorized DTV stations that would use channels 14-20 where the distance between the DTV reference point as defined in section 73.622(d), would be located less than 250 km from the city center of a co-channel land mobile operation or 176 km from the city center of an adjacent channel land mobile operation. Petitions to amend the DTV Table, applications for new DTV stations, or requests to modify the DTV Table that do not meet the minimum DTV-to-land mobile spacing standards will, however, be considered where all affected land mobile licensees consent to the requested action. Land mobile operations are authorized on these channels in the following markets:~~ See § 73.617(a).

~~City~~	~~Channels~~	~~Latitude~~	~~Longitude~~
~~Boston, MA~~	~~14, 16~~	~~42°21′24″~~	~~71°03′25″~~
~~Chicago, IL~~	~~14, 15~~	~~41°52′28″~~	~~87°38′22″~~

~~City~~	~~Channels~~	~~Latitude~~	~~Longitude~~
~~Cleveland, OH~~	~~14, 15~~	~~41°29′51.2″~~	~~81°41′49.5″~~
~~Dallas, TX~~	~~16~~	~~32°47′09″~~	~~96°47′37″~~
~~Detroit, MI~~	~~15, 16~~	~~42°19′48.1″~~	~~83°02′56.7″~~
~~Houston, TX~~	~~17~~	~~29°45′26″~~	~~95°21′37″~~
~~Los Angeles, CA~~	~~14, 16, 20~~	~~34°03′15″~~	~~118°14′28″~~
~~Miami, FL~~	~~14~~	~~25°46′37″~~	~~80°11′32″~~
~~New York, NY~~	~~14, 15, 16~~	~~40°45′06″~~	~~73°59′39″~~
~~Philadelphia, PA~~	~~19, 20~~	~~39°56′58″~~	~~75°09′21″~~
~~Pittsburgh, PA~~	~~14, 18~~	~~40°26′19″~~	~~80°00′00″~~
~~San Francisco, CA~~	~~16, 17~~	~~37°46′39″~~	~~122°24′40″~~
~~Washington, DC~~	~~17, 18~~	~~38°53′51″~~	~~77°00′33″~~

(f) ~~**Parties requesting new allotments on channel 6 be added to the DTV Table must submit an engineering study demonstrating that no interference would be caused to existing FM radio stations on FM channels 200-220.**~~ **See § 73.617(c).**

(g) ~~**[Reserved]**~~ **See § 73.620(e).**

(h) ~~***DTV application processing priorities.***~~

(1) [Reserved] ~~**DTV applications for a construction permit or a modified construction permit pending as of January 18, 2001:**~~

~~**(i) Shall be afforded the interference protection set forth in paragraph (c) or (d) of this section, as applicable:**~~

~~**(A) By all NTSC minor change applications;**~~

~~**(B) By NTSC new station applications, except those covered by paragraphs (h)(1)(ii)(G) and (h)(1)(iii)(D) of this section;**~~

~~**(C) By all rulemaking petitions to amend the NTSC TV table of allotments;**~~

~~**(D) By DTV applications filed after January 18, 2001; and**~~

~~**(E) By rulemaking petitions to amend the DTV table of allotments filed after January 18, 2001;**~~

~~**(ii) Must demonstrate the requisite interference protection set forth in paragraph (c) or (d) of this section, as applicable, to:**~~

~~**(A) DTV licensed stations;**~~

~~**(B) DTV construction permits;**~~

~~**(C) Existing DTV allotments;**~~

~~**(D) Rulemaking petitions to amend the DTV table of allotments for which a Notice of Proposed Rule Making has been released and the comment deadline specified therein has passed prior to the filing date of the DTV application;**~~

~~**(E) NTSC stations with licenses covering construction permits that were granted before the DTV application was filed;**~~

~~**(F) NTSC construction permits that were granted before the DTV application was filed;**~~

~~**(G) Applications for new NTSC television stations that were in groups of mutually exclusive applications on file prior to July 1, 1997, regardless of whether they are the only applications that remain pending from their group.**~~

~~**(iii) That do not provide the requisite interference protection set forth in paragraph (c) or (d) of this section, as applicable, to the following applications and petitions will be deemed mutually exclusive with those applications and petitions:**~~

~~**(A) Other DTV applications pending as of January 18, 2001;**~~

~~**(B) Rulemaking petitions to amend the DTV table of allotments filed on or before January 18, 2001 for which a Notice of Proposed Rule Making had been released and the comment deadline specified therein had not passed prior to the filing date of the DTV application;**~~

~~**(C) Rulemaking petitions to amend the DTV table of allotments filed on or before January 18, 2001 for which a Notice of Proposed Rule Making had not been released; and**~~

~~**(D) Applications for new NTSC stations that are not covered by paragraph (h)(1)(ii)(G) of this section and were filed and accepted for filing on or before January 18, 2001 that:**~~

~~**(*1*) Were filed by post-auction winners pursuant to § 73.5005.**~~

~~**(*2*) Are part of a settlement agreement on-file with the Commission that would result in the grant of the NTSC application; or**~~

~~**(*3*) Are cut-off singletons.**~~

(2) ~~**D**~~TV applications for a construction permit or a modified construction permit ~~**filed after January 18, 2001**~~:

(i) Shall be afforded the interference protection set forth in **§ 73.620:** ~~**paragraph (c) or (d) of this section, as applicable:**~~

(A) ~~**By all NTSC minor change applications;**~~ [Reserved]

(B) ~~**By NTSC new station applications, except those covered by paragraph (h)(2)(ii)(H) and (I) of this section;**~~ [Reserved]

(C) ~~**By all rulemaking petitions to amend the NTSC TV table of allotments except those filed by NTSC applicants in those groups defined in (h)(2)(ii)(I) of this section for which a Notice of Proposed Rule Making has been released and the comment deadline specified therein has passed prior to the filing date of the DTV application;**~~ [Reserved]

(D) By later-filed ~~**D**~~TV applications; and

(E) By later-filed rulemaking petitions to amend the ~~**DTV t**~~**T**able of **TV** ~~**a**~~**A**llotments;

(ii) Must demonstrate the requisite interference protection set forth in **§ 73.620** ~~**paragraph (c) or (d) of this section, as applicable,**~~ to:

(A) ~~**D**~~TV licensed stations;

(B) ~~**D**~~TV construction permits;

(C) Earlier-filed ~~**D**~~TV applications;

(D) Existing ~~**D**~~TV allotments;

(E) Rulemaking petitions to amend the ~~**DTV t**~~**T**able of **TV A**~~**a**~~llotments for which a Notice of Proposed Rule Making has been released and the comment deadline specified therein has passed prior to the filing date of the ~~**D**~~TV application;

~~**(F) NTSC stations with licenses covering construction permits that were granted before the DTV application was filed;**~~

~~**(G) NTSC construction permits that were granted before the DTV application was filed; and**~~

~~**(H) Earlier-filed and accepted for filing applications for new NTSC stations that are not covered by paragraph (h)(2)(ii)(I) of this section, and that:**~~

~~***(1)*** **Were filed by post-auction winners pursuant to § 73.5005.**~~

~~***(2)*** **Are part of a settlement agreement on-file with the Commission that would result in the grant of the NTSC application; or**~~

~~***(3)*** **Are cut-off singletons;**~~

~~**(I) Applications for new NTSC television stations that were in groups of mutually exclusive applications on file prior to July 1, 1997, regardless of whether they are the only applications that remain pending from their group;**~~

~~**(J) Rulemaking petitions to amend the NTSC table of allotments filed by applicants defined in (h)(2)(ii)(I) of this section for which a Notice of Proposed Rule Making has been released and the comment deadline specified therein has passed prior to the filing of the DTV application.**~~

(iii) That do not provide the requisite interference protection set forth ~~**paragraph (c) or (d) of this section**~~ **§ 73.620**~~**, as applicable,**~~ to the following applications and petitions will be deemed mutually exclusive with those applications and petitions:

(A) Other ~~**D**~~TV applications filed the same day;

(B) Rulemaking petitions to amend the ~~**DTV t**~~**T**able of **TV A**~~**a**~~llotments for which a Notice of Proposed Rule Making had been released and the comment deadline specified therein had not passed prior to the filing date of the ~~**D**~~TV application; and

(C) Earlier-filed rulemaking petitions to amend the ~~**DTV t**~~**T**able of **TV A**~~**a**~~llotments for which a Notice of Proposed Rule Making had not been released.

(3) ~~**DTV applicants, DTV applicants and NTSC applicants, or D**~~TV applicants and ~~**D**~~TV rulemaking petitioners that are mutually exclusive pursuant to this section will be notified by Public Notice and provided with a 90-day period of time to resolve their mutual exclusivity via engineering amendment or settlement. Those applications and petitions that remain mutually exclusive upon conclusion of the 90-day settlement period will be dismissed.

20. Section 73.624 is amended by revising the section heading and paragraphs (a), (b) introductory text, (b)(1), (b)(3), (c), (g) introductory text, (g)(1)(ii), (g)(2)(i), (g)(2)(ii), and removing and reserving paragraph (b)(2), (d), (e), (f).

§ 73.624 ~~**Digital t**~~**T**elevision broadcast stations.

(a) ~~**Digital t**~~**T**elevision ~~**("DTV")**~~ broadcast stations are assigned channels 6 MHz wide. ~~**Initial eligibility for licenses for DTV broadcast stations is limited to persons that, as of April 3, 1997, are licensed to operate a full power television broadcast station or hold a permit to construct such a station (or both).**~~

(b) ~~**DTV broadcast station permittees or licensees must transmit at least one over-the-air video program signal at no direct charge to viewers on the DTV channel. Until such time as a DTV station permittee or licensee ceases analog transmissions and returns that spectrum to the Commission, and except as provided in paragraph (b)(1) of this section, at any time that a DTV broadcast station permittee or licensee transmits a video program signal on its analog television channel, it must also transmit at least one over-the-air video program signal on the DTV channel.**~~ ***Minimum programming requirements.*** The ~~**D**~~TV service that is provided pursuant to this paragraph (b) must have a resolution of at least 480i (vertical resolution of 480 lines, interlaced).

(1) ~~**DTV broadcast station permittees and licensees required to construct and operate a DTV station by May 1, 2002, or May 1, 2003, pursuant to paragraph (d) of this section must, at a minimum, beginning on the date on which the DTV station is required to be constructed, provide a digital video program signal, of the quality described in paragraph (b) of this section, during prime time hours as defined in § 79.3(a)(6) of this chapter. These licensees and permittees must also comply with the minimum operating hours requirements in paragraph (f) of this section.**~~ **TV licensees or permittees that broadcast in ATSC 1.0 (using the transmission**

standard in 73.682(d)) shall transmit at least one free over the air video program signal at no direct charge to viewers.

(2) ~~**DTV licensees or permittees that choose to commence digital operation before the construction deadline set forth in paragraph (d) of this section are not subject to any minimum schedule for operation on the DTV channel.**~~ [Reserved]

(3) ~~**D**~~TV licensees or permittees that choose to broadcast an ATSC 3.0 signal (using the Next Gen TV transmission standard in § 73.682(f)) shall transmit at least one free over the air video programming stream on that signal that requires at most the signal threshold of a comparable received ~~**D**~~TV signal. ~~**D**~~TV licensees or permittees that choose to broadcast an ATSC 3.0 signal (using the Next Gen TV transmission standard in § 73.682(f)) shall also simulcast the primary video programming stream on its ATSC 3.0 signal by broadcasting an ATSC 1.0 signal (using the ~~**D**~~TV transmission standard in § 73.682(d)) from another broadcast television facility within its local market in accordance with the local simulcasting requirement in §§ 73.3801, 73.6029 and 74.782 of this chapter.

(c) Provided that ~~**D**~~TV broadcast stations comply with paragraph (b) of this section, ~~**D**~~TV broadcast stations are permitted to offer services of any nature, consistent with the public interest, convenience, and necessity, on an ancillary or supplementary basis. The kinds of services that may be provided include, but are not limited to computer software distribution, data transmissions, teletext, interactive materials, aural messages, paging services, audio signals, subscription video, and any other services that do not derogate ~~**D**~~TV broadcast stations' obligations under paragraph (b) of this section. Such services may be provided on a broadcast, point-to-point or point-to-multipoint basis, provided, however, that any video broadcast signal provided at no direct charge to viewers shall not be considered ancillary or supplementary.

(1) ~~**D**~~TV licensees that provide ancillary or supplementary services that are analogous to other services subject to regulation by the Commission must comply with the Commission regulations that apply to those services, provided, however, that no ancillary or supplementary service shall have any rights to carriage under §§ 614 or 615 of the Communications Act of 1934, as amended, or be deemed a multichannel video programming distributor for purposes of section 628 of the Communications Act of 1934, as amended.

(2) In all arrangements entered into with outside parties affecting service operation, the ~~**D**~~TV licensee or permittee must retain control over all material transmitted in a broadcast mode via the station's facilities, with the right to reject any material in the sole judgement of the permittee or licensee. The license or permittee is also responsible for all aspects of technical operation involving such telecommunications services.

(3) In any application for renewal of a broadcast license for a television station that provides ancillary or supplementary services, a licensee shall establish that all of its program services ~~**on the analog and the DTV spectrum**~~ are in the public interest. Any violation of the Commission's rules applicable to ancillary or supplementary services will reflect on the licensee's qualifications for renewal of its license.

(d) ~~**Digital television broadcast facilities that comply with the FCC DTV Standard (section 73.682(d)), shall be constructed in the following markets by the following dates:**~~ [Reserved]

~~**(1)**~~

~~**(i) May 1, 1999: all network-affiliated television stations in the top ten television markets;**~~

~~(ii) November 1, 1999: all network-affiliated television stations not included in category (1)(i) and in the top 30 television markets;~~

~~(iii) May 1, 2002: all remaining commercial television stations;~~

~~(iv) May 1, 2003: all noncommercial television stations.~~

~~(v) May 18, 2008 in all markets for completion of construction of post-transition (DTV) facilities for all commercial and noncommercial television stations that will use the same channel used for pre-transition operation for post-transition operation and that, as of December 31, 2007, have a construction permit for facilities that conform to the facilities defined by the new DTV Table of Allotments and accompanying Appendix B, established by the Seventh Report and Order in MB Docket No. 87-268 and codified at 47 CFR 73.622(i).~~

~~(vi) August 18, 2008 in all markets for completion of construction of post-transition (DTV) facilities for all commercial and noncommercial television stations that will use the same channel used for pre-transition operation for post-transition operation but which, as of December 31, 2007, do not have a construction permit for facilities that conform to the facilities defined by the new DTV Table of Allotments and accompanying Appendix B, established by the Seventh Report and Order in MB Docket No. 87-268 and codified at 47 CFR 73.622(i).~~

~~(vii) June 12, 2009 in all markets for completion of construction of post-transition (DTV) facilities for all commercial and noncommercial television stations whose post-transition digital channel is different from their pre-transition digital channel and for those stations whose post-transition channel is the same as their pre-transition channel but that are subject to a unique technical challenge that has been specifically recognized as such by the Commission.~~

~~(2) For the purposes of paragraph (d)(1):~~

~~(i) The term, "network," is defined to include the ABC, CBS, NBC, and Fox television networks;~~

~~(ii) The term, "television market," is defined as the Designated Market Area or DMA as defined by Nielsen Media Research as of April 3, 1997; and~~

~~(iii) The terms, "network-affiliated" or "network-affiliate," are defined to include those television stations affiliated with at least one of the four networks designated in paragraph (d)(2)(i) as of April 3, 1997. In those DMAs in which a network has more than one network affiliate, paragraphs (d)(1) (i) and (ii) of this section shall apply to its network affiliate with the largest audience share for the 9 a.m. to midnight time period as measured by Nielsen Media Research in its Nielsen Station Index, Viewers in Profile, as of February, 1997.~~

~~(3) *Authority delegated.*~~

~~(i) Authority is delegated to the Chief, Media Bureau to grant an extension of time of up to six months beyond the relevant construction deadline specified in paragraph (d)(1) of this section upon demonstration by the DTV licensee or permittee that failure to meet that construction deadline is due to circumstances that are either unforeseeable or beyond the licensee's control where the licensee has taken all reasonable steps to resolve the problem expeditiously.~~

~~**(ii) For construction deadlines occurring prior to June 13, 2009, the following circumstances may include, but shall not be limited to:**~~

~~**(A) Inability to construct and place in operation a facility necessary for transmitting digital television, such as a tower, because of delays in obtaining zoning or FAA approvals, or similar constraints; or**~~

~~**(B) Where the licensee or permittee is currently the subject of a bankruptcy or receivership proceeding, or is experiencing severe financial hardship as defined by negative cash flow for the past three years.**~~

~~**(iii) For construction deadlines occurring after June 12, 2009, the tolling provisions of § 73.3598 shall apply.**~~

~~**(iv) The Bureau may grant no more than two extension requests upon delegated authority. Subsequent extension requests shall be referred to the Commission. The Bureau may deny extension requests upon delegated authority.**~~

~~**(v) Applications for extension of time shall be filed no earlier than 90 and no later than 60 days prior to the relevant construction deadline, absent a showing of sufficient reasons for filing within less than 60 days of the relevant construction deadline.**~~

(e) ~~**The application for construction permit must be filed on Form 301 (except for noncommercial stations, which must file on Form 340) on or before the date on which half of the construction period has elapsed. Thus, for example, for applicants in category (d)(1)(i), the application for construction period must be filed by May 1, 1998.**~~ [Reserved]

(f) [Reserved]

~~**(1) Commencing on April 1, 2003, DTV television licensees and permittees required to construct and operate a DTV station by May 1, 2002, or May 1, 2003, must transmit at least one over-the-air video program signal at no direct charge to viewers on their DTV channel at least 50 percent of the time they are transmitting a video program signal on their analog channel.**~~

~~**(2) Commencing on April 1, 2004, DTV licensees and permittees described in paragraph (f)(1) of this section must transmit a video program signal as described in paragraph (f)(1) of this section on the DTV channel at least 75 percent of the time they are transmitting a video program signal on the analog channel.**~~

~~**(3) Commencing on April 1, 2005, DTV licensees and permittees described in paragraph (f)(1) of this section must transmit a video program signal as described in paragraph (f)(1) of this section on the DTV channel at least 100 percent of the time they are transmitting a video program signal on the analog channel.**~~

~~**(4) The minimum operating hours requirements imposed in paragraphs (f) (1) through (3) of this section will terminate when the analog channel terminates operation and a 6 MHz channel is returned by the DTV licensee or permittee to the Commission.**~~

(g) Commercial ~~**D**~~TV licensees and permittees, and low power television, TV translator, and Class A ~~**television stations DTV**~~ licensees and permittees, must annually remit a fee of 5 percent of the gross revenues derived from all ancillary and supplementary services, as defined by paragraph (**c**~~**b**~~) of this

section, which are feeable, as defined in paragraphs (g)(1)(i) and (ii) of this section. Noncommercial ~~D~~TV licensees and permittees must annually remit a fee of 5 percent of the gross revenues derived from all ancillary and supplementary services, as defined by paragraph (~~b~~**c**) of this section, which are feeable, as defined in paragraphs (g)(1)(i) and (ii) of this section, except that such licensees and permittees must annually remit a fee of 2.5 percent of the gross revenues from such ancillary or supplementary services which are nonprofit, noncommercial, and educational.

(1)

(i) * * *

(ii) Any ancillary or supplementary service for which no payment is required from consumers in order to receive the service is feeable if the ~~D~~TV licensee directly or indirectly receives compensation from a third party in return for the transmission of material provided by that third party (other than commercial advertisements used to support broadcasting for which a subscription fee is not required). The fee required by this provision shall be imposed on any and all revenues from such services, other than revenues received from a third party in return for the transmission of commercial advertisements used to support broadcasting for which a subscription fee is not required.

(2) * * *

(i) Each December 1, all commercial and noncommercial ~~D~~TV licensees and permittees that provided feeable ancillary or supplementary services as defined in this section at any point during the 12-month period ending on the preceding September 30 will electronically report, for the applicable period:

(A) * * *

(B) * * *

(C) * * *

(ii) A commercial or noncommercial ~~D~~TV licensee or permittee that has provided feeable ancillary or supplementary services at any point during a 12-month period ending on September 30 must additionally file the FCC's standard remittance form (Form 159) on the subsequent December 1. Licensees and permittees will certify the amount of gross revenues received from feeable ancillary or supplementary services for the applicable 12-month period and will remit the payment of the required fee.

(iii) * * *

21. Section 73.625 is amended by revising the section heading and paragraph (a), (b), (c)(3)(ii), (c)(3)(v), (c)(4)(i), (c)(4)(ii), (c)(5) and adding paragraphs (c)(3)(vii), (c)(3)(viii), (c)(4)(iii), and (d) to read as follows:

§ 73.625 ~~D~~TV ~~**coverage of principal community and**~~ antenna system.

(a) ~~***Transmitter location.***~~

~~**(1) The DTV transmitter location shall be chosen so that, on the basis of the effective radiated power and antenna height above average terrain employed, the following minimum F(50,90) field strength in dB above one uV/m will be provided over the entire principal community to be served:**~~

~~**Channels 2-6**~~	~~**35 dBu.**~~
~~**Channels 7-13**~~	~~**43 dBu.**~~
~~**Channels 14-36**~~	~~**48 dBu.**~~

~~**(2) The location of the antenna must be so chosen that there is not a major obstruction in the path over the principal community to be served.**~~

~~**(3) For the purposes of this section, coverage is to be determined in accordance with paragraph (b) of this section. Under actual conditions, the true coverage may vary from these estimates because the terrain over any specific path is expected to be different from the average terrain on which the field strength charts were based. Further, the actual extent of service will usually be less than indicated by these estimates due to interference from other stations. Because of these factors, the predicted field strength contours give no assurance of service to any specific percentage of receiver locations within the distances indicated.**~~ **See § 73.618.**

(b) ~~***Determining coverage.***~~

~~**(1) In predicting the distance to the field strength contours, the F (50,50) field strength charts (Figures 9, 10 and 10b of § 73.699 of this part) and the F (50,10) field strength charts (Figures 9a, 10a and 10c of § 73.699 of this part) shall be used. To use the charts to predict the distance to a given F (50,90) contour, the following procedure is used: Convert the effective radiated power in kilowatts for the appropriate azimuth into decibel value referenced to 1 kW (dBk). Subtract the power value in dBk from the contour value in dBu. Note that for power less than 1 kW, the difference value will be greater than the contour value because the power in dBk is negative. Locate the difference value obtained on the vertical scale at the left edge of the appropriate F (50,50) chart for the DTV station's channel. Follow the horizontal line for that value into the chart to the point of intersection with the vertical line above the height of the antenna above average terrain for the appropriate azimuth located on the scale at the bottom of the chart. If the point of intersection does not fall exactly on a distance curve, interpolate between the distance curves below and above the intersection point. The distance values for the curves are located along the right edge of the chart. Using the appropriate F (50,10) chart for the DTV station's channel, locate the point where the distance coincides with the vertical line above the height of the antenna above average terrain for the appropriate azimuth located on the scale at the bottom of the chart. Follow a horizontal line from that point to the left edge of the chart to determine the F (50,10) difference value. Add the power value in dBk to this difference value to determine the F (50,10) contour value in dBu. Subtract the F (50,50) contour value in dBu from this F (50,10) contour value in dBu. Subtract this difference from the F (50,50) contour value in dBu to determine the F (50,90) contour value in dBu at the pertinent distance along the pertinent radial.**~~

~~**(2) The effective radiated power to be used is that radiated at the vertical angle corresponding to the depression angle between the transmitting antenna center of radiation and the radio horizon as determined individually for each azimuthal direction concerned. In cases where the relative field strength at this depression angle is 90% or more of the maximum field strength**~~

~~developed in the vertical plane containing the pertaining radial, the maximum radiation shall be used. The depression angle is based on the difference in elevation of the antenna center of radiation above the average terrain and the radio horizon, assuming a smooth spherical earth with a radius of 8,495.5 kilometers (5,280 miles) and shall be determined by the following equation:~~

~~A = 0.0277 square root of H~~

~~Where:~~

~~A is the depression angle in degrees.~~

~~H is the height in meters of the transmitting antenna radiation center above average terrain of the 3.2-16.1 kilometers (2-10 miles) sector of the pertinent radial.~~

~~This formula is empirically derived for the limited purpose specified here. Its use for any other purpose may be inappropriate.~~

~~(3) Applicants for new DTV stations or changes in the facilities of existing DTV stations must submit to the FCC a showing as to the location of their stations' or proposed stations' contour. This showing is to include a map showing this contour, except where applicants have previously submitted material to the FCC containing such information and it is found upon careful examination that the contour locations indicated therein would not change, on any radial, when the locations are determined under this section. In the latter cases, a statement by a qualified engineer to this effect will satisfy this requirement and no contour maps need be submitted.~~

~~(4) The antenna height to be used with these charts is the height of the radiation center of the antenna above the average terrain along the radial in question. In determining the average elevation of the terrain, the elevations between 3.2-16.1 kilometers (2-10 miles) from the antenna site are employed. Profile graphs shall be drawn for 8 radials beginning at the antenna site and extending 16.1 kilometers (10 miles) therefrom. The radials should be drawn for each 45 degrees of azimuth starting with True North. At least one radial must include the principal community to be served even though such community may be more than 16.1 kilometers (10 miles) from the antenna site. However, in the event none of the evenly spaced radials include the principal community to be served and one or more such radials are drawn in addition to the 8 evenly spaced radials, such additional radials shall not be employed in computing the antenna height above average terrain. Where the 3.2-16.1 kilometers (2-10 mile) portion of a radial extends in whole or in part over large bodies of water (such as ocean areas, gulfs, sounds, bays, large lakes, etc., but not rivers) or extends over foreign territory but the contour encompasses land area within the United States beyond the 16.1 kilometers (10 mile) portion of the radial, the entire 3.2-16.1 kilometers (2-10 mile) portion of the radial shall be included in the computation of antenna height above average terrain. However, where the contour does not so encompass United States land area and (1) the entire 3.2-16.1 kilometers (2-10 mile) portion of the radial extends over large bodies of water or foreign territory, such radial shall be completely omitted from the computation of antenna height above average terrain, and (2) where a part of the 3.2-16.1 kilometers (2-10 mile) portion of a radial extends over large bodies of water or over foreign territory, only that part of the radial extending from the 3.2 kilometer (2 mile) sector to the outermost portion of land area within the United States covered by the radial shall be employed in the computation of antenna height above average terrain. The profile graph for each radial should be plotted by contour intervals of from 12.2-30.5 meters (40-100 feet) and, where the data permits, at least 50 points of elevation (generally uniformly spaced) should be used for each radial. In instances of very rugged terrain where the use of~~

~~**contour intervals of 30.5 meters (100 feet) would result in several points in a short distance, 61.0-122.0 meter (200-400 foot) contour intervals may be used for such distances. On the other hand, where the terrain is uniform or gently sloping the smallest contour interval indicated on the topographic map (see paragraph (b)(5) of this section) should be used, although only relatively few points may be available. The profile graphs should indicate the topography accurately for each radial, and the graphs should be plotted with the distance in kilometers as the abscissa and the elevation in meters above mean sea level as the ordinate. The profile graphs should indicate the source of the topographical data employed. The graph should also show the elevation of the center of the radiating system. The graph may be plotted either on rectangular coordinate paper or on special paper which shows the curvature of the earth. It is not necessary to take the curvature of the earth into consideration in this procedure, as this factor is taken care of in the charts showing signal strengths. The average elevation of the 12.9 kilometer (8 miles) distance between 3.2-16.1 kilometers (2-10 miles) from the antenna site should then be determined from the profile graph for each radial. This may be obtained by averaging a large number of equally spaced points, by using a planimeter, or by obtaining the median elevation (that exceeded for 50% of the distance) in sectors and averaging those values. In directions where the terrain is such that negative antenna heights or heights below 30.5 meters (100 feet) for the 3.2 to 16.1 kilometers (2 to 10 mile) sector are obtained, an assumed height of 30.5 meters (100 feet) shall be used for the prediction of coverage. However, where the actual contour distances are critical factors, a supplemental showing of expected coverage must be included together with a description of the method employed in predicting such coverage. In special cases, the Commission may require additional information as to terrain and coverage.**~~

~~**(5) In the preparation of the profile graph previously described, and in determining the location and height above sea level of the antenna site, the elevation or contour intervals shall be taken from the United States Geological Survey Topographic Quadrangle Maps, United States Army Corps of Engineers' maps or Tennessee Valley Authority maps, whichever is the latest, for all areas for which such maps are available. If such maps are not published for the area in question, the next best topographic information should be used. Topographic data may sometimes be obtained from State and Municipal agencies. Data from Sectional Aeronautical Charts (including bench marks) or railroad depot elevations and highway elevations from road maps may be used where no better information is available. In cases where limited topographic data is available, use may be made of an altimeter in a car driven along roads extending generally radially from the transmitter site. United States Geological Survey Topographic Quadrangle Maps may be obtained from the United States Geological Survey, Department of the Interior, Washington, D.C. 20240. Sectional Aeronautical Charts are available from the United States Coast and Geodetic Survey, Department of Commerce, Washington, D.C. 20235. In lieu of maps, the average terrain elevation may be computer generated, except in the cases of dispute, using elevations from a 30 second point or better topographic data file. The file must be identified and the data processed for intermediate points along each radial using linear interpolation techniques. The height above mean sea level of the antenna site must be obtained manually using appropriate topographic maps.**~~ **See § 73.619(b).**

(c) * * *

(1) * * *

(2) * * *

(3) * * *

(i) * * *

(ii) Relative field horizontal plane pattern (**patterns for both** horizontal **and vertical** polarization ~~only~~ **should be included if elliptical or circular polarization is used consistent with paragraph (d) of this section**) of the proposed directional antenna. A value of 1.0 should be used for the maximum radiation **in the horizontal polarization**. The plot of the pattern should be oriented so that 0 degrees corresponds to true North. Where mechanical beam tilt is intended, the amount of tilt in degrees of the antenna vertical axis and the orientation of the downward tilt with respect to true North must be specified.~~, and t~~**T**he horizontal plane pattern must reflect the use of mechanical beam tilt **if no elevation pattern is included, but it is preferable to submit a separate unmodified horizontal plane pattern with the elevation pattern for mechanically-tilted stations**.

(iii) * * *

(iv) * * *

(v) All horizontal plane patterns must be plotted ~~**to the largest scale possible on unglazed letter-size polar coordinate paper (main engraving approximately 18 cm × 25 cm (7 inches × 10 inches)) using only scale divisions and subdivisions of 1, 2, 2.5, or 5 times 10-nth. All vertical plane patterns must be plotted on unglazed letter-size rectangular coordinate paper. Values of field strength on any pattern less than 10 percent of the maximum field strength plotted on that pattern must be shown on an enlarged scale**~~ **in a PDF attachment to the application in a size sufficient to be easily viewed**.

(vi) * * *

(vii) If an elevation pattern is submitted in the application form, similar tabulations and PDF attachments shall be provided for the elevation pattern.

(viii) If a matrix pattern is submitted in the application form, similar tabulations and PDF attachments shall be provided as necessary to accurately represent the pattern.

(4) * * *

(i) In cases where it is proposed to use a tower of an AM broadcast station as a supporting structure for a ~~**D**~~TV broadcast antenna, an appropriate application for changes in the radiating system of the AM broadcast station must be filed by the licensee thereof. A formal application (FCC Form 301, or FCC Form 340 for a noncommercial educational station) will be required if the proposal involves substantial change in the physical height or radiation characteristics of the AM broadcast antennas; otherwise an informal application will be acceptable. (In case of doubt, an informal application (letter) together with complete engineering data should be submitted.) An application may be required for other classes of stations when the tower is to be used in connection with a ~~**D**~~TV station.

(ii) When the proposed ~~**D**~~TV antenna is to be mounted on a tower in the vicinity of an AM station directional antenna system and it appears that the operation of the directional antenna system may be affected, an engineering study must be filed with the ~~**D**~~TV application concerning the effect of the ~~**D**~~TV antenna on the AM directional radiation pattern. Field measurements of the AM stations may be required prior to and following construction of the ~~**D**~~TV station antenna, and readjustments made as necessary.

(iii) In any case, where the TV licensee or permittee proposes to mount its antenna on or near an AM tower, as defined in § 1.30002, the TV licensee or permittee must comply with § 1.30002 or § 1.30003, as applicable.

(5) Applications proposing the use of electrical beam tilt ~~**pursuant to section 73.622(f)(4)**~~ must be accompanied by the following:

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(d) It shall be standard to employ horizontal polarization. However, circular or elliptical polarization may be employed if desired, in which case clockwise (right hand) rotation, as defined in the IEEE Standard Definition 42A65-3E2, and transmission of the horizontal and vertical components in time and space quadrature shall be used. For either omnidirectional or directional antennas the licensed effective radiated power of the vertically polarized component may not exceed the licensed effective radiated power of the horizontally polarized component. For directional antennas, the maximum effective radiated power of the vertically polarized component shall not exceed the maximum effective radiated power of the horizontally polarized component in any specified horizontal or vertical direction.

22. Section 73.626 is amended by revising the section heading and paragraphs (a), (b), and (c)(1), (c)(2), (d), (e), (f)(2), (f)(2)(i) through (iii), (f)(4), (f)(5), and (f)(6) to read as follows:

§ 73.626 ~~**D**~~TV distributed transmission systems.

(a) A ~~**D**~~TV station may be authorized to operate multiple synchronized transmitters on its assigned channel to provide service consistent with the requirements of this section. Such operation is called a distributed transmission system (DTS). Except as expressly provided in this section, ~~**D**~~TV stations operating a DTS facility must comply with all rules applicable to ~~**D**~~TV single-transmitter stations.

(b) For purposes of compliance with this section, a station's "authorized service area" is defined as the area within its predicted noise-limited service contour determined using the facilities authorized for the station in a license or construction permit for non-DTS, single-transmitter-location operation **(its "authorized facility")**.

(c) * * *

(1) ~~**D**~~TV station zones are defined in § 73.609.

(2) ***DTS reference point.*** A station's DTS reference point is established in the FCC Order that created or made final modifications to the ~~**Post-Transition DTV**~~ Table of **TV** Allotments, § 73.622(**ij**), and the corresponding facilities for the station's channel assignment as set forth in that FCC Order.

(d) ***Determining DTS coverage.*** The coverage for each DTS transmitter is determined based on the F(50,90) field strength given in the Table of Distances (in paragraph (c) of this section), calculated in

accordance with § 73.6~~25~~**19**(b). The combined coverage of a DTS station is the logical union of the coverage of all DTS transmitters.

(e) ***DTS protection from interference.*** A DTS station must be protected from interference in accordance with the criteria specified in § 73.~~61~~6**20**. To determine compliance with the interference protection requirements of § 73.~~61~~6**20**, the population served by a DTS station shall be the population within the station's combined coverage contour, excluding the population in areas that are outside both the ~~D~~TV station's authorized service area and the Table of Distances area (in paragraph (c) of this section). Only population that is predicted to receive service by the method described in § 73.6~~22(e~~**19(c)**(2) from at least one individual DTS transmitter will be considered.

(f) * * *

(1) * * *

(2) Each DTS transmitter's coverage is contained within either the ~~D~~TV station's Table of Distances area (pursuant to paragraph (c) of this section) or its authorized service area, except where such extension of coverage ~~**beyond the station's authorized service area**~~ meets the following criteria:

(i) In no event shall the F(50,50) service contour of any DTS transmitter extend beyond that of its ~~**reference**~~ **authorized** facility **and its Table of Distances F(50,50) area**; and

(ii) In no event shall the F(50,10) node-interfering contour of any DTS transmitter, aside from one located at the ~~**reference point**~~ **site of its authorized facility**, extend beyond the F(50,10) reference-interfering contour of its ~~**reference**~~ **authorized** facility **and its Table of Distances F(50,10) reference area**; and

(iii) In no event shall the F(50,10) reference-interfering contour of a facility ~~**at the reference point**~~ **located at the site of its authorized facility** extend beyond the F(50,10) reference-interfering contour of its ~~**reference**~~ **authorized** facility;

(3) * * *

(4) The coverage from one or more DTS transmitter(s) is shown to provide principal community coverage as required in § 73.6~~25(a)~~**18**;

(5) The "combined field strength" of all the DTS transmitters in a network does not cause interference to another station in excess of the criteria specified in § 73.~~61~~6**20**, where the combined field strength level is determined by a "root-sum-square" calculation, in which the combined field strength level at a given location is equal to the square root of the sum of the squared field strengths from each transmitter in the DTS network at that location.

(6) Each DTS transmitter must be located within either the ~~D~~TV station's Table of Distances area or its authorized service area.

23. § 73.641 [Removed]

~~**§ 73.641 Subscription TV definitions.**~~

~~**(a) *Subscription television.* A system whereby subscription television programs are transmitted and received.**~~

~~**(b) *Subscription television program.* A television broadcast program intended to be received in intelligible form for a fee or charge.**~~

24. § 73.642 [Removed]

~~**§ 73.642 Subscription TV service.**~~

~~**(a) Subscription TV service may be provided by:**~~

~~**(1) Licensees and permittees of commercial and noncommercial TV stations, and**~~

~~**(2) Licensees and permittees of low power TV stations.**~~

~~**(b) A licensee or permittee of a commercial or noncommercial TV station or a low power TV station may begin subscription TV service upon installation of encoding equipment having advance FCC approval. However, the licensee or permittee of a TV broadcast station (not applicable to low power TV stations) must send a letter to the FCC in Washington, DC, that subscription TV service will commence at least 30 days prior to commencement of such service. In that letter, to be entitled "Notice of Commencement of STV Operations," the licensee or permittee is to state that it will comply with the provisions of paragraphs (c)(1) through (c)(3) and § 73.644(c) of this chapter and identify the make and type of encoding system to be used. A similar notice must be submitted if the licensee or permittee commences using another type of encoding system. (See section 644(h).) A notice must also be submitted to the FCC in Washington, DC, if encoded subscription TV service is to be discontinued, at least 30 days prior to such discontinuance.**~~

~~**(c) The station proof of system compliance measurement data (see § 73.644(e)) need not be submitted to the FCC, however, the measurement data must be available to the FCC upon request.**~~

~~**(d) The use of the visual vertical blanking interval or an aural subcarrier for transmitting subscriber decoder control code signals during periods of normal non-encoded programming may be used only upon specific FCC authorization. Letter requests to use either the video blanking intervals or aural subcarriers during periods of non-subscription programming are to be sent to the FCC in Washington, D.C.**~~

~~**(e) A licensee or permittee of a commercial or noncommercial TV broadcast or low power TV station may not transmit a subscription service if it has a contract, arrangement, or understanding expressed or implied, that:**~~

~~**(1) Prevents or hinders it from rejecting or refusing any subscription TV broadcast program that it reasonably believes to be unsatisfactory or unsuitable or contrary to the public interests; or substituting a subscription or conventional program that, in its opinion, is of greater local or national importance; or**~~

~~**(2) Delegates to any other person the right to schedule the hours of transmission of subscription programs. However, this rule does not prevent a licensee or permittee from entering into an agreement or arrangement whereby it agrees to schedule a specific subscription TV broadcast program at a specific time or to schedule a specific number of hours of subscription programs during the broadcast day (or segments thereof) or weeks; or**~~

~~**(3) Deprives it of the right of ultimate decision concerning the maximum amount of any subscription program charge or fee.**~~

~~**(4) Has provisions that do not comply with the following policies of the FCC:**~~

~~**(i) Unless a satifactory signal is unavailable at the location where service is desired, subscription TV service must be provided to all persons desiring it within the Grade A contour of the station broadcasting subscription programs. Geographic or other reasonable patterns of installation for new subscription services is permitted and, for good cause, service may be terminated.**~~

~~**(ii) Charges, terms and conditions of service to subscribers must be applied uniformly. However, subscribers may be divided into reasonable classifications approved by the FCC, and the impositions of different sets of terms and conditions may be applied to subscribers in different classifications. Further, for good cause, within such classification, deposits may be required from some subscribers and not of others; and, also for good cause, if a subscription system generally uses a credit-type decoder, cash operated decoders may be installed for some subscribers.**~~

25. § 73.643 [Removed]

~~**§ 73.643 Subscription TV operating requirements.**~~

~~**The non-technical rules and policies applicable to regular TV broadcast stations are applicable to subscription TV operations, except where specifically exempted in the provisions of those rules and policies.**~~

26. § 73.644 [Removed]

~~**§ 73.644 Subscription TV transmission systems.**~~

~~**(a) Licensees and permittees of commercial and noncommercial TV broadcast and low power TV stations may conduct subscription operations only by using an encoding system that has been approved in advance by the FCC. Such advance approval may be applied for and granted in accordance with the procedures given in subpart M part 2 of the Rules.**~~

~~**(b) The criteria for advance approval of subscription TV transmitting systems by the FCC are as follows:**~~

~~**(1) Spectral energy in the transmitted signal must not exceed the limitations given in § 73.687(e).**~~

~~**(2) No increase in width of the television broadcast channel (6 MHz.) is permitted.**~~

~~**(3) The technical system must enable stations to transmit encoded subscription TV programs without increasing the RMS output power from either the video or audio transmitters over that required to transmit the same program material using normal transmission standards.**~~

~~**(4) Modification of a type accepted TV broadcast or low power TV transmitter for encoded transmissions must not render transmitter incapable of operating in accordance with the operating specifications upon which type acceptance was granted. (See § 2.1001 (b), (k))**~~

~~(5) Interference to reception of conventional television either of co-channel or adjacent channel stations must not increase over that resulting from the transmission of programming with normal transmission standards.~~

~~(6) Subscriber decoder devices must meet the provisions, where required, of subpart H of part 15 of the FCC Rules for TV Interface Devices.~~

~~(c) Prior to commencing the transmission of encoded subscription programming, the licensee or permittee of a TV broadcast or low power TV station must perform such tests and measurements to determine that the transmitted encoded signal conforms to the radiated radio frequency and demodulated baseband and waveforms, transmitter operating power determination, and the occupied bandwidth limitations specified in the application for advance FCC approval of the system being used. A copy of the measurement data is to be maintained in the station files and made available to the FCC upon request.~~

~~(d) The licensee of a station transmitting an encoded subscription service must have at the transmitter control point the technical specifications for the system being used of both the aural and visual baseband signals and the transmitted radiofrequency signals, and have the necessary measuring and monitoring equipment, including transmitter output power measuring equi`pment, to determine that the transmissions conform to the advance approval specifications on file with the FCC. Full operating specifications for the system must be available to representatives of the FCC upon request.~~

~~(e) The operating power of the transmitters during encoded operations must be determined and maintained according to the procedures given in the application for advance approval.~~

~~(f) A station using an encoding system in accordance with the specifications filed with the application for advance approval is deemed to be exempted from those technical regulations of this subpart and subpart H to the extent they are specifically detailed in the application.~~

~~(g) No protection from interference of any kind will be afforded to reception of encoded subscription programming over that afforded reception of non-encoded signals.~~

~~(h) A licensee or permittee may make no modifications on a subscription encoding system that would alter the characteristics of the transmitted aural or visual signal from those specified in the application for advance approval. A licensee or permittee of a station replacing its encoding system must perform the measurements required by paragraph (c) of this section. A TV broadcast station licensee or permittee must also send a letter advising the FCC of the new system being used as required by § 73.642(b) of this chapter.~~

~~(i) The station licensee is fully responsible for all technical operations of the station during transmissions of encoded subscription programming, regardless of the supplier of the encoding equipment or subscription program service.~~

~~Note:~~

~~Stations transmitting encoded subscription programming prior to October 1, 1983, must comply with all technical and operating requirements of this Section no later than April 1, 1984. Stations not having the information to comply with this Section must obtain such information from the manufacturer of the encoding system being used, and if necessary, by measurements of the station's transmission system.~~

~~**(j) Upon request by an authorized representative of the FCC, the licensee of a TV station transmitting encoded programming must make available a receiving decoder to the Commission to carry out its regulatory responsibilities.**~~

27. § 73.646 [Removed and Reserved]

§ 73.646 ~~**Telecommunications Service on the Vertical Blanking Interval and in the Visual Signal.**~~ [Reserved]

~~**(a) Telecommunications services permitted on the vertical blanking interval (VBI) and in the visual signal include the transmission of data, processed information, or any other communication in either a digital or analog mode.**~~

~~**(b) Telecommunications service on the VBI and in the visual signal is of an ancillary nature and as such is an elective, subsidiary activity. No service guidelines, limitations, or performance standards are applied to it. The kinds of service that may be provided include, but are not limited to, teletext, paging, computer software and bulk data distribution, and aural messages. Such services may be provided on a broadcast, point-to-point, or point to multipoint basis.**~~

~~**(c) Telecommunications services that are common carrier in nature are subject to common carrier regulation. Licensees operating such services are required to apply to the Commission for the appropriate authorization and to comply with all policies and rules applicable to the particular service.**~~

~~**(d) Television licensees are authorized to lease their VBI and visual signal telecommunications facilities to outside parties. In all arrangements entered into with outside parties affecting telecommunications service operation, the licensee or permittee must retain control over all material transmitted in a broadcast mode via the station's facilities, with the right to reject any material that it deems inappropriate or undesirable. The licensee or permittee is also responsible for all aspects of technical operation involving such telecommunications services.**~~

~~**(e) The grant or renewal of a TV station license or permit will not be furthered or promoted by proposed or past VBI or visual signal telecommunications service operation; the licensee must establish that its broadcast operation serves the public interest wholly apart from such telecommunications service activities. (Violation of rules applicable to VBI and visual signal telecommunications services could, of course, reflect on a licensee's qualifications to hold its license or permit.)**~~

~~**(f) TV broadcast stations are authorized to transmit VBI and visual telecommunications service signals during any time period, including portions of the day when normal programming is not broadcast. Such transmissions must be in accordance with the technical provisions of § 73.682.**~~

28. § 73.653 [Removed and Reserved]

§ 73.653 ~~**Operation of TV aural and visual transmitters.**~~ [Reserved]

~~**The aural and visual transmitters may be operated independently of each other or, if operated simultaneously, may be used with different and unrelated program material.**~~

29. Section 73.664 is amended by revising paragraphs (a), (b) introductory text, (b)(1), (b)(2), (c) introductory text, (c)(3)(ii), and (c)(3)(iii), and removing the Note to read as follows.

(a) The operating power of each TV ~~**visual**~~ transmitter shall normally be determined by the direct method.

(b) ***Direct method~~, visual transmitter~~.*** The direct method of power determination for a TV ~~**visual**~~ transmitter uses the indications of a calibrated transmission line meter ~~**(responsive to peak power)**~~ located at the RF output terminals of the transmitter. The indications of the calibrated meter are used to observe and maintain the authorized operating power of the ~~**visual**~~ transmitter. This meter must be calibrated whenever any component in the metering circuit is repaired or replaced and as often as necessary to ensure operation in accordance with the provisions of § 73.1560 of this part. The following calibration procedures are to be used:

(1) The transmission line meter is calibrated by measuring the average power at the output terminals of the transmitter, including any ~~**vestigial sideband and harmonic**~~ filters which may be used in normal operation. For this determination the average power output is measured while operating into a dummy load of substantially zero reactance and a resistance equal to the transmission line characteristic impedance. ~~**During this measurement the transmitter is to be modulated only by a standard synchronizing signal with blanking level set at 75% of peak amplitude as observed in an output waveform monitor, and with this blanketing level amplitude maintained throughout the time interval between synchronizing pulses.**~~

(2) If electrical devices are used to determine the output power, such devices must permit determination of this power to within an accuracy of ±5% of the power indicated by the full scale reading of the electrical indicating instrument of the device. If temperature and coolant flow indicating devices are used to determine the power output, such devices must permit determination of this power to within an accuracy of ±4% of measured average power output. ~~**The peak power output is the power so measured in the dummy load multiplied by the factor 1.68.**~~ During this measurement the input voltage and current to the final radio frequency amplifier stage and the transmission line meter are to be read and compared with similar readings taken with the dummy load replaced by the antenna. These readings must be in substantial agreement.

(3) * * *

(c) ***Indirect method~~, visual transmitter~~.*** The operating power is determined by the indirect method by applying an appropriate factor to the input power to the final radio-frequency amplifier stage of the transmitter using the following formula:

Transmitter output power = Ep × Ip × *F*

Where:

Ep = DC input voltage of the final radio-frequency amplifier stage.

Ip = DC input current of the final radio-frequency amplifier stage.

F = Efficiency factor.

(1) * * *

(2) * * *

(3) * * *

(i) * * *

(ii) Using measurement data shown on the transmitter manufacturer's test data supplied to the licensee, provided that measurements were made at the authorized ~~carrier frequency~~ **channel** and transmitter output power.

(iii) Using the transmitter manufacturer's measurement data ~~**submitted to the FCC for type acceptance as shown in the instruction book supplied to the licensee**~~.

~~**Note:**~~

~~**Refer to § 73.1560 for aural transmitter output power levels.**~~

30. § 73.665 [Removed and Reserved]

§ 73.665 ~~**Use of TV aural baseband subcarriers.**~~ [Reserved]

~~**Licensees of TV broadcast stations may transmit, without further authorization from the FCC, subcarriers and signals within the composite baseband for the following purposes:**~~

~~**(a) Stereophonic (biphonic, quadraphonic, etc.) sound programs under the provisions of §§ 73.667 and 73.669.**~~

~~**(b) Transmission of signals relating to the operation of TV stations, such as relaying broadcast materials to other stations, remote cueing and order messages, and control and telemetry signals for the transmitting system.**~~

~~**(c) Transmission of pilot or control signals to enhance the station's program service such as (but not restricted to) activation of noise reduction decoders in receivers, for any other receiver control purpose, or for program alerting and program identification.**~~

~~**(d) Subsidiary communications services.**~~

31. § 73.667 [Removed and Reserved]

§ 73.667 ~~**TV subsidiary communications services.**~~ [Reserved]

~~**(a) Subsidiary communications services are those transmitted within the TV aural baseband signal, but do not include services which enhance the main program broadcast service or exclusively relate to station operations (see § 73.665(a), (b), and (c)). Subsidiary communications include, but are not limited to, services such as functional music, specialized foreign language programs, radio reading services, utility load management, market and financial data and news, paging and calling, traffic control signal switching, and point-to-point or multipoint messages.**~~

~~**(b) TV subsidiary communications services that are common-carrier or private radio in nature are subject to common carrier or private radio regulation. Licensees operating such services are required to apply to the FCC for the appropriate authorization and to comply with all policies and rules applicable to the service. Responsibility for making the initial determinations of whether a particular activity requires separate authority rests with the TV station licensee or permittee. Initial determinations by licensees or permittees are subject to FCC examination and may be reviewed at the FCC's discretion.**~~

~~**(c) Subsidiary communications services are of a secondary nature under the authority of the TV station authorization, and the authority to provide such communications services may not be retained or transferred in any manner separate from the station's authorization. The grant or renewal of a TV station permit or license is not furthered or promoted by proposed or past subsidiary communications services. The permittee or licensee must establish that the broadcast operation is in the public interest wholly apart from the subsidiary communications services provided.**~~

~~**(d) The station identification, delayed recording, and sponsor identification announcement required by §§ 73.1201, 73.1208, and 73.1212 are not applicable to leased communications services transmitted via services that are not of a general broadcast nature.**~~

~~**(e) The licensee or permittee must retain control over all material transmitted in a broadcast mode via the station's facilities, with the right to reject any material that it deems inappropriate or undesirable.**~~

32. § 73.669 [Removed and Reserved]

§ 73.669 ~~**TV stereophonic aural and multiplex subcarrier operation.**~~ [Reserved]

~~**(a) A TV broadcast station may without specific authority from the FCC, transmit multichannel aural programs upon installation of multichannel sound equipment. Prior to commencement of multichannel broadcasting, the equipment shall be measured in accordance with § 73.1690(e).**~~

~~**(b) Multiplex subcarriers may be used by a TV station pursuant to the provisions of § 73.665 and may be transmitted on a secondary, non-interference basis to broadcast programming without specific authority from the FCC. Transmissions must be conducted in accordance with the technical standards given in § 73.682(e).**~~

~~**(c) In all arrangements entered into with outside parties affecting non-common carrier subcarrier operation, the licensee or permittee must retain control over all material transmitted over the station's facilities, with the right to reject any material which is deemed inappropriate or undesirable. Subchannel leasing arrangements must be kept in writing at the station and made available to the FCC upon request.**~~

33. Revise section 73.681 to read as follows:

~~***Amplitude modulation* (*AM*). A system of modulation in which the envelope of the transmitted wave contains a component similar to the wave form of the signal to be transmitted.**~~

Antenna electrical beam tilt. The shaping of the radiation pattern in the vertical plane of a transmitting antenna by electrical means so that maximum radiation occurs at an angle below the horizontal plane.

Antenna height above average terrain. The average of the antenna heights above the terrain from approximately 3.2 (2 miles) to 16.1 kilometers (10 miles) from the antenna for the eight directions spaced evenly for each 45 degrees of azimuth starting with True North. (In general, a different antenna height will be determined in each direction from the antenna. The average of these various heights is considered the antenna height above the average terrain. ~~**In some cases less than 8 directions may be used. See § 73.684(d)).**~~ Where circular or elliptical polarization is employed, the antenna height above average terrain shall be based upon the height of the radiation center of the antenna which transmits the horizontal component of radiation.

Antenna mechanical beam tilt. The intentional installation of a transmitting antenna so that its axis is not vertical, in order to change the normal angle of maximum radiation in the vertical plane.

Antenna power gain. The square of the ratio of the root-mean-square free space field strength produced at 1 kilometer in the horizontal plane, in millivolts per meter for one kW antenna input power to 221.4 mV/m. This ratio should be expressed in decibels (dB). (If specified for a particular direction, antenna power gain is based on the field strength in that direction only.)

Aspect ratio. The ratio of picture width to picture height as transmitted.

~~***Aural center frequency.***~~

~~**(1) The average frequency of the emitted wave when modulated by a sinusoidal signal;**~~

~~**(2) the frequency of the emitted wave without modulation.**~~

~~***Aural transmitter.*** **The radio equipment for the transmission of the aural signal only.**~~

Auxiliary facility. An auxiliary facility is an antenna separate a from the main facility's antenna, permanently installed on the same tower or at a different location, from which a station may broadcast for short periods without prior Commission authorization or notice to the Commission while the main facility is not in operation (e.g., where tower work necessitates turning off the main antenna or where lightning has caused damage to the main antenna or transmission system) (*See* § 73.1675).

~~***BTSC.*** **Broadcast Television systems committee recommendation for multichannel television sound transmission and audio processing as defined in FCC Bulletin OET 60.**~~

~~***Baseband.*** **Aural transmitter input signals between 0 and 120 kHz.**~~

~~***Blanking level.*** **The level of the signal during the blanking interval, except the interval during the scanning synchronizing pulse and the chrominance subcarrier synchronizing burst.**~~

~~***Chrominance.*** **The colorimetric difference between any color and a reference color of equal luminance, the reference color having a specific chromaticity.**~~

~~***Chrominance subcarrier.*** **The carrier which is modulated by the chrominance information.**~~

~~***Color transmission.*** **The transmission of color television signals which can be reproduced with different values of hue, saturation, and luminance.**~~

Effective radiated power. The product of the antenna input power and the antenna power gain. This product should be expressed in kW and in dB above 1 kW (dBk). (If specified for a particular direction, effective radiated power is based on the antenna power gain in that direction only. The licensed effective radiated power is based on the maximum antenna power gain. When a station is authorized to use a directional antenna or an antenna beam tilt, the direction of the maximum effective radiated power will be specified.) Where circular or elliptical polarization is employed, the term effective radiated power is applied separately to the horizontally and vertically polarized components of radiation. For assignment purposes, only the effective radiated power authorized for the horizontally polarized component will be considered.

Equivalent isotropically radiated power (EIRP). The term "equivalent isotropically radiated power" (also known as "effective radiated power above isotropic") means the product of the antenna input power and the antenna gain in a given direction relative to an isotropic antenna.

~~***Field.*** **Scanning through the picture area once in the chosen scanning pattern. In the line interlaced scanning pattern of two to one, the scanning of the alternate lines of the picture area once.**~~

~~***Frame.*** **Scanning all of the picture area once. In the line interlaced scanning pattern of two to one, a frame consists of two fields.**~~

Free space field strength. The field strength that would exist at a point in the absence of waves reflected from the earth or other reflecting objects.

~~***Frequency departure.*** **The amount of variation of a carrier frequency or center frequency from its assigned value.**~~

~~***Frequency deviation.*** **The peak difference between the instantaneous frequency of the modulated wave and the carrier frequency.**~~

~~***Frequency modulation* (*FM*).** **A system of modulation where the instantaneous radio frequency varies in proportion to the instantaneous amplitude of the modulating signal (amplitude of modulating signal to be measured after pre-emphasis, if used) and the instantaneous radio frequency is independent of the frequency of the modulating signal.**~~

~~***Frequency swing.*** **The peak difference between the maximum and the minimum values of the instantaneous frequency of the carrier wave during modulation.**~~

Interlaced scanning. A scanning process in which successively scanned lines are spaced an integral number of line widths, and in which the adjacent lines are scanned during successive cycles of the field frequency.

~~***IRE standard scale.*** **A linear scale for measuring, in IRE units, the relative amplitudes of the components of a television signal from a zero reference at blanking level, with picture information falling in the positive, and synchronizing information in the negative domain.**~~

~~**Note:**~~

~~**When a carrier is amplitude modulated by a television signal in accordance with § 73.682, the relationship of the IRE standard scale to the conventional measure of modulation is as follows:**~~

~~**Level**~~	~~**IRE standard scale (units)**~~	~~**Modulation percentage**~~
~~**Zero carrier**~~	~~**120**~~	~~**0**~~
~~**Reference white**~~	~~**100**~~	~~**12.5**~~
~~**Blanking**~~	~~**0**~~	~~**75**~~
~~**Synchronizing peaks (maximum carrier level)**~~	~~**−40**~~	~~**100**~~

~~***Luminance.*** **Luminous flux emitted, reflected, or transmitted per unit solid angle per unit projected area of the source.**~~

~~***Main channel.*** **The band of frequencies from 50 to 15,000 Hertz which frequency modulate the main aural carrier.**~~

~~***Monochrome transmission.*** **The transmission of television signals which can be reproduced in gradations of a single color only.**~~

~~***Multichannel Television Sound (MTS).*** **Any system of aural transmission that utilizes aural baseband operation between 15 kHz and 120 kHz to convey information or that encodes digital information in the video portion of the television signal that is intended to be decoded as audio information.**~~

~~***Multiplex Transmission*** **(*Aural*). A subchannel added to the regular aural carrier of a television broadcast station by means of frequency modulated subcarriers.**~~

~~***Negative transmission.*** **Where a decrease in initial light intensity causes an increase in the transmitted power.**~~

~~***Peak power.*** **The power over a radio frequency cycle corresponding in amplitude to synchronizing peaks.**~~

~~***Percentage modulation.*** **As applied to frequency modulation, the ratio of the actual frequency deviation to the frequency deviation defined as 100% modulation expressed in percentage. For the aural transmitter of TV broadcast stations, a frequency deviation of ±25 kHz is defined as 100% modulation.**~~

~~***Pilot subcarrier.*** **A subcarrier used in the reception of TV stereophonic aural or other subchannel broadcasts.**~~

Polarization. The direction of the electric field as radiated from the transmitting antenna.

~~***Program related data signal.*** **A signal, consisting of a series of pulses representing data, which is transmitted simultaneously with and directly related to the accompanying television program.**~~

~~***Reference black level.*** **The level corresponding to the specified maximum excursion of the luminance signal in the black direction.**~~

~~***Reference white level of the luminance signal.*** **The level corresponding to the specified maximum excursion of the luminance signal in the white direction.**~~

~~***Scanning.*** **The process of analyzing successively, according to a predetermined method, the light values of picture elements constituting the total picture area.**~~

~~***Scanning line.*** **A single continuous narrow strip of the picture area containing highlights, shadows, and half-tones, determined by the process of scanning.**~~

Standard television signal. A signal which conforms to the television transmission standards.

Synchronization. The maintenance of one operation in step with another.

Television broadcast band. The frequencies in the band extending from 54 to 608 megahertz which are assignable to television broadcast stations. These frequencies are 54 to 72 megahertz (channels 2 through 4), 76 to 88 megahertz (channels 5 and 6), 174 to 216 megahertz (channels 7 through 13), and 470 to 608 megahertz (channels 14 through 36).

Television broadcast station. A station in the television broadcast band transmitting simultaneous visual and aural signals intended to be received by the general public.

Television channel. A band of frequencies 6 MHz wide in the television broadcast band and designated either by number or by the extreme lower and upper frequencies.

Television transmission standards. The standards which determine the characteristics of a television signal as radiated by a television broadcast station.

Television transmitter. The radio transmitter or transmitters for the transmission of both visual and aural signals.

Vestigial sideband transmission. A system of transmission wherein one of the generated sidebands is partially attenuated at the transmitter and radiated only in part.

~~***Visual carrier frequency.*** **The frequency of the carrier which is modulated by the picture information.**~~

~~***Visual transmitter.*** **The radio equipment for the transmission of the visual signal only.**~~

~~***Visual transmitter power.*** **The peak power output when transmitting a standard television signal.**~~

34. Section 73.682 is amended by revising paragraph (a)(14) and (d), adding paragraph (e)(7), removing paragraphs (a)(15) through (a)(24) and the Note to 73.682, and removing and reserving paragraphs (a) introductory text, (a)(1) through (a)(13), (b), (c)

(a) ~~***Transmission standards.***~~ [Reserved]

(1) ~~**The width of the television broadcast channel shall be 6 MHz.**~~ [Reserved]

(2) ~~**The visual carrier frequency shall be nominally 1.25 MHz above the lower boundary of the channel.**~~ [Reserved]

(3) ~~**The aural center frequency shall be 4.5 MHz higher than the visual carrier frequency.**~~ [Reserved]

(4) ~~**The visual transmission amplitude characteristic shall be in accordance with the chart designated as Figure 5 of § 73.699: *Provided, however,* That for stations operating on Channel 15 through 69 and employing a transmitter with maximum peak visual power output of 1 kW or less the visual transmission amplitude characteristic may be in accordance with the chart designated as Figure 5a of § 73.699.**~~ [Reserved]

(5) ~~**The chrominance subcarrier frequency is 63/88 times precisely 5 MHz (3.57954545 . . . MHz). The tolerance is ±10 Hz and the rate of frequency drift must not exceed 0.1 Hz per second (cycles per second squared).**~~ [Reserved]

(6) ~~**For monochrome and color transmissions the number of scanning lines per frame shall be 525, interlaced two to one in successive fields. The horizontal scanning frequency shall be 2/455 times the chrominance subcarrier frequency; this corresponds nominally to 15,750 Hz with an actual value of 15,734.264 ±0.044 Hz). The vertical scanning frequency is 2/525 times the horizontal scanning frequency; this corresponds nominally to 60 Hz (the actual value is 59.94 Hz). For monochrome transmissions only, the nominal values of line and field frequencies may be used.**~~ [Reserved]

(7) ~~**The aspect ratio of the transmitted television picture shall be 4 units horizontally to 3 units vertically.**~~ [Reserved]

(8) ~~**During active scanning intervals, the scene shall be scanned from left to right horizontally and from top to bottom vertically, at uniform velocities.**~~ [Reserved]

(9) ~~**A carrier shall be modulated within a single television channel for both picture and synchronizing signals. The two signals comprise different modulation ranges in amplitude in accordance with the following:**~~ [Reserved]

~~**(i) Monochrome transmissions shall comply with synchronizing waveform specifications in Figure 7 of § 73.699.**~~ [Reserved]

~~**(ii) Color transmissions shall comply with the synchronizing waveform specifications in Figure 6 of § 73.699.**~~ [Reserved]

~~**(iii) All stations operating on Channels 2 through 14 and those stations operating on Channels 15 through 69 licensed for a peak visual transmitter output power greater than one kW shall comply with the picture transmission amplitude characteristics shown in Figure 5 of § 73.699.**~~ [Reserved]

~~**(iv) Stations operating on Channels 15 through 69 licensed for a peak visual transmitter output power of one kW or less shall comply with the picture transmission amplitude characteristic shown in Figure 5 or 5a of § 73.699.**~~ [Reserved]

(10) ~~**A decrease in initial light intensity shall cause an increase in radiated power (negative transmission).**~~ [Reserved]

(11) ~~**The reference black level shall be represented by a definite carrier level, independent of light and shade in the picture.**~~ [Reserved]

(12) ~~**The blanking level shall be transmitted at 75±2.5 percent of the peak carrier level.**~~ [Reserved]

(13) ~~**The reference white level of the luminance signal shall be 12.5±2.5 percent of the peak carrier level.**~~ [Reserved]

(14) ~~**It shall be standard to employ horizontal polarization. However, circular or elliptical polarization may be employed if desired, in which case clockwise (right hand) rotation, as defined in the IEEE Standard Definition 42A65-3E2, and transmission of the horizontal and vertical components in time and space quadrature shall be used. For either omnidirectional or directional antennas the licensed effective radiated power of the vertically polarized component may not exceed the licensed effective radiated power of the horizontally polarized component.**~~

~~For directional antennas, the maximum effective radiated power of the vertically polarized component shall not exceed the maximum effective radiated power of the horizontally polarized component in any specified horizontal or vertical direction.~~ See § 73.625(d).

~~(15) The effective radiated power of the aural transmitter must not exceed 22% of the peak radiated power of the visual transmitter.~~

~~(16) The peak-to-peak variation of transmitter output within one frame of video signal due to all causes, including hum, noise, and low-frequency response, measured at both scanning synchronizing peak and blanking level, shall not exceed 5 percent of the average scanning synchronizing peak signal amplitude. This provision is subject to change but is considered the best practice under the present state of the art. It will not be enforced pending a further determination thereof.~~

~~(17) The reference black level shall be separated from the blanking level by the setup interval, which shall be 7.5±2.5 percent of the video range from blanking level to the reference white level.~~

~~(18) For monochrome transmission, the transmitter output shall vary in substantially inverse logarithmic relation to the brightness of the subject. No tolerances are set at this time. This provision is subject to change but is considered the best practice under the present state of the art. It will not be enforced pending a further determination thereof.~~

~~(19) The color picture signal shall correspond to a luminance component transmitted as amplitude modulation of the picture carrier and a simultaneous pair of chrominance components transmitted as the amplitude modulation sidebands of a pair of suppressed subcarriers in quadrature.~~

~~(20) Equation of complete color signal.~~

~~(i) The color picture signal has the following composition:~~

$$E_M = E_Y' + [E_Q' \sin(\omega t + 33°) + E_I' \cos(\omega t + 33°)]$$

~~Where:~~

$$E_Q' = 0.41(E_B' - E_Y') + 0.48(E_R' - E_Y').$$

$$E_I' = -0.27(E_B' - E_Y') + 0.74(E_R' - E_Y').$$

$$E_Y' = 0.30E_R' + 0.59E_G' + 0.-1E_B'.$$

~~For color-difference frequencies below 500 kHz (see (iii) below), the signal can be represented by:~~

$$E_M = E_Y' + [(1/1.14)[(1/1.78)(E_B' - E_Y') \sin\omega t + (E_R' - E_Y') \cos\omega t]]$$

~~(ii) The symbols in paragraph (a)(20)(i) of this section have the following significance:~~

E_M ~~is the total video voltage, corresponding to the scanning of a particular picture element, applied to the modulator of the picture transmitter.~~

~~E_Y' is the gamma-corrected voltage of the monochrome (black-and-white) portion of the color picture signal, corresponding to the given picture element.~~

~~Note:~~

~~Forming of the high frequency portion of the monochrome signal in a different manner is permissible and may in fact be desirable in order to improve the sharpness on saturated colors.~~

~~E_Q' and E_I' are the amplitudes of two orthogonal components of the chrominance signal corresponding respectively to narrow-band and wide-band axes.~~

~~E_R', E_G', and E_B' are the gamma-corrected voltages corresponding to red, green, and blue signals during the scanning of the given picture element.~~

~~ω is the angular frequency and is 2 times the frequency of the chrominance subcarrier.~~

~~The portion of each expression between brackets in (i) represents the chrominance subcarrier signal which carries the chrominance information.~~

~~The phase reference in the E_M equation in (i) is the phase of the burst + 180°, as shown in Figure 8 of § 73.699. The burst corresponds to amplitude modulation of a continuous sine wave.~~

~~(iii) The equivalent bandwidth assigned prior to modulation to the color difference signals E_Q' and E_I' are as follows:~~

~~Q-channel bandwidth:~~

~~At 400 kHz less than 2 dB down.~~

~~At 500 kHz less than 6 dB down.~~

~~At 600 kHz at least 6 dB down.~~

~~I-channel bandwidth:~~

~~At 1.3 MHz less than 2 dB down.~~

~~At 3.6 MHz at least 20 dB down.~~

~~(iv) The gamma-corrected voltages E_R', E_G', and E_B' are suitable for a color picture tube having primary colors with the following chromaticities in the CIE system of specification:~~

	~~x~~	~~y~~
~~Red (R)~~	~~0.67~~	~~0.33~~
~~Green (G)~~	~~0.21~~	~~0.71~~
~~Blue (B)~~	~~0.14~~	~~0.08~~

~~and having a transfer gradient (gamma exponent) of 2.2 associated with each primary color. The voltages E_R', E_G', and E_B' may be respectively of the form $E_R^{1/\gamma}$, $E_G^{1/\gamma}$, and $E_B^{1/\gamma}$ although other forms may be used with advances in the state of the art.~~

~~Note:~~

~~At the present state of the art it is considered inadvisable to set a tolerance on the value of gamma and correspondingly this portion of the specification will not be enforced.~~

~~(v) The radiated chrominance subcarrier shall vanish on the reference white of the scene.~~

~~Note:~~

~~The numerical values of the signal specification assume that this condition will be reproduced as CIE Illuminant C ($x = 0.310$, $y = 0.316$).~~

~~(vi) E_X', E_Q', E_I', and the components of these signals shall match each other in time to 0.05 μsecs.~~

~~(vii) The angles of the subcarrier measured with respect to the burst phase, when reproducing saturated primaries and their complements at 75 percent of full amplitude, shall be within ±10° and their amplitudes shall be within ±20 percent of the values specified above. The ratios of the measured amplitudes of the subcarrier to the luminance signal for the same saturated primaries and their complements shall fall between the limits of 0.8 and 1.2 of the values specified for their ratios. Closer tolerances may prove to be practicable and desirable with advance in the art.~~

~~(21) The interval beginning with line 17 and continuing through line 20 of the vertical blanking interval of each field may be used for the transmission of test signals, cue and control signals, and identification signals, subject to the conditions and restrictions set forth below. Test signals may include signals designed to check the performance of the overall transmission system or its individual components. Cue and control signals shall be related to the operation of the TV broadcast station. Identification signals may be transmitted to identify the broadcast material or its source, and the date and time of its origination. Figures 6 and 7 of § 73.699 identify the numbered lines referred to in this paragraph.~~

~~(i) Modulation of the television transmitter by such signals shall be confined to the area between the reference white level and the blanking level, except where test signals include chrominance subcarrier frequencies, in which case positive excursions of chrominance components may exceed reference white, and negative excursions may extend into the synchronizing area. In no case may the modulation excursions produced by test signals extend beyond peak-of-sync, or to zero carrier level.~~

~~(ii) The use of such signals shall not result in significant degradation of the program transmission of the television broadcast station, nor produce emission outside of the frequency band occupied for normal program transmissions.~~

~~(iii) Such signals may not be transmitted during that portion of each line devoted to horizontal blanking.~~

~~(iv) Regardless of other provisions of this paragraph, after June 30, 1994, Line 19, in each field, may be used only for the transmission of the ghost-canceling reference signal described in OET Bulletin No. 68, which is available from the FCC Warehouse, 9300 East Hampton Drive, Capitol Heights, MD 20743. Notwithstanding the modulation limits contained in paragraph (a)(23)(i) of this section, the vertical interval reference signal formerly permitted on Line 19 and described in Figure 16 of § 73.699, may be transmitted on any of lines 10 through 16 without specific Commission authorization, subject to the conditions contained in paragraphs (a)(21)(ii) and (a)(22)(ii) of this section.~~

~~(22)~~

~~(i) Line 21, in each field, may be used for the transmission of a program-related data signal which, when decoded, provides a visual depiction of information simultaneously being presented on the aural channel (captions). Line 21, field 2 may be used for transmission of a program-related data signal which, when decoded, identifies a rating level associated with the current program. Such data signals shall conform to the format described in figure 17 of § 73.699 of this chapter, and may be transmitted during all periods of regular operation. On a space-available basis, line 21 field 2 may also be used for text-mode data and extended data service information.~~

~~Note:~~

~~The signals on Fields 1 and 2 shall be distinct data streams, for example, to supply captions in different languages or at different reading levels.~~

~~(ii) At times when Line 21 is not being used to transmit a program related data signal, data signals which are not program related may be transmitted, *Provided:* the same data format is used and the information to be displayed is of a broadcast nature.~~

~~(iii) The use of Line 21 for transmission of other data signals conforming to other formats may be used subject to prior authorization by the Commission.~~

~~(iv) The data signal shall cause no significant degradation to any portion of the visual signal nor produce emissions outside the authorized television channel.~~

~~(v) Transmission of visual emergency messages pursuant to § 73.1250 shall take precedence and shall be cause for interrupting transmission of data signals permitted under this paragraph.~~

~~(23) Specific scanning lines in the vertical blanking interval may be used for the purpose of transmitting telecommunications signals in accordance with § 73.646, subject to certain conditions:~~

~~(i) Telecommunications may be transmitted on Lines 10-18 and 20, all of Field 2 and Field 1. Modulation level shall not exceed 70 IRE on lines 10, 11, and 12; and, 80 IRE on lines 13-18 and 20.~~

~~(ii) No observable degradation may be caused to any portion of the visual or aural signals.~~

~~(iii) Telecommunications signals must not produce emissions outside the authorized television channel bandwidth. Digital data pulses must be shaped to limit spectral energy to the nominal video baseband.~~

~~(iv) Transmission of emergency visual messages pursuant to § 73.1250 must take precedence over, and shall be cause for interrupting, a service such as teletext that provides a visual depiction of information simultaneously transmitted on the aural channel.~~

~~(v) A reference pulse for a decoder associated adaptive equalizer filter designed to improve the decoding of telecommunications signals may be inserted on any portion of the vertical blanking interval authorized for data service, in accordance with the signal levels set forth in paragraph (a)(23)(i) of this section.~~

~~(vi) All lines authorized for telecommunications transmissions may be used for other purposes upon prior approval by the Commission.~~

~~(24) Licensees and permittees of TV broadcast and low power TV stations may insert non-video data into the active video portion of their TV transmission, subject to certain conditions:~~

~~(i) The active video portion of the visual signal begins with line 22 and continues through the end of each field, except it does not include that portion of each line devoted to horizontal blanking. Figures 6 and 7 of § 73.699 identify the numbered line referred to in this paragraph;~~

~~(ii) Inserted non-video data may be used for the purpose of transmitting a telecommunications service in accordance with § 73.646. In addition to a telecommunications service, non-video data can be used to enhance the station's broadcast program service or for purposes related to station operations. Signals relating to the operation of TV stations include, but are not limited to program or source identification, relay of broadcast materials to other stations, remote cueing and order messages, and control and telemetry signals for the transmitting system; and~~

~~(iii) A station may only use systems for inserting non-video information that have been approved in advance by the Commission. The criteria for advance approval of systems are as follows:~~

~~(A) The use of such signals shall not result in significant degradation to any portion of the visual, aural, or program-related data signals of the television broadcast station;~~

~~(B) No increase in width of the television broadcast channel (6 MHz) is permitted. Emissions outside the authorized television channel must not exceed the limitations given in § 73.687(e). Interference to reception of television service either of co-channel or adjacent channel stations must not increase over that resulting from the transmission of programming without inserted data; and~~

~~(C) Where required, system receiving or decoding devices must meet the TV interface device provisions of Part 15, Subpart H of this chapter.~~

~~(iv) No protection from interference of any kind will be afforded to reception of inserted non-video data.~~

~~**(v) Upon request by an authorized representative of the Commission, the licensee of a TV station transmitting encoded programming must make available a receiving decoder to the Commission to carry out its regulatory responsibilities.**~~

(b) ~~***Subscription TV technical systems.*** **The FCC may specify, as part of the advance approval of the technical system for transmitting encoded subscription programming, deviations from the power determination procedures, operating power levels, aural or video baseband signals, modulation levels or other characteristics of the transmitted signal as otherwise specified in this Subpart. Any decision to approve such operating deviations shall be solely at the discretion of the FCC.**~~ [Reserved]

(c) ~~**TV multiplex subcarrier/stereophonic aural transmission standards.**~~ [Reserved]

~~**(1) The modulating signal for the main channel shall consist of the sum of the stereophonic (biphonic, quadraphonic, etc.) input signals.**~~

~~**(2) The instantaneous frequency of the baseband stereophonic subcarrier must at all times be within the range 15 kHz to 120 kHz. Either amplitude or frequency modulation of the stereophonic subcarrier may be used.**~~

~~**(3) One or more pilot subcarriers between 16 kHz and 120 kHz may be used to switch a TV receiver between the stereophonic and monophonic reception modes or to activate a stereophonic audio indicator light, and one or more subcarriers between 15 kHz and 120 kHz may be used for any other authorized purpose; except that stations employing the BTSC system of stereophonic sound transmission and audio processing may transmit a pilot subcarrier at 15,734 Hz, ±2 Hz. Other methods of multiplex subcarrier or stereophonic aural transmission systems must limit energy at 15,734 Hz, ±20 Hz, to no more than ±0.125 kHz aural carrier deviation.**~~

~~**(4) Aural baseband information above 120 kHz must be attenuated 40 dB referenced to 25 kHz main channel deviation of the aural carrier.**~~

~~**(5) For required transmitter performance, all of the requirements of § 73.687(b) shall apply to the main channel, with the transmitter in the multiplex subcarrier or stereophonic aural mode.**~~

~~**(6) For electrical performance standards of the transmitter, the requirements of § 73.687(b) apply to the main channel.**~~

~~**(7) Multiplex subcarrier or stereophonic aural transmission systems must be capable of producing and must not exceed ±25 kHz main channel deviation of the aural carrier.**~~

~~**(8) The arithmetic sum of non-multiphonic baseband signals between 15 kHz and 120 kHz must not exceed ±50 kHz deviation of the aural carrier.**~~

~~**(9) Total modulation of the aural carrier must not exceed ±75 kHz.**~~

(d) ~~***Digital b***~~***Broadcast television transmission standards.***

(1) ~~**Effective October 11, 2011 t**~~**T**ransmission of ~~**digital**~~ broadcast television ~~**(DTV)**~~ signals shall comply with the standards for such transmissions set forth in**:**

(i) ATSC A/52: "ATSC Standard Digital Audio Compression (AC-3)",

(ii) ATSC A/53, Parts 1-4 and 6: 2007 "ATSC Digital Television Standard," (January 3, 2007), and ATSC A/53 Part 5:2010 "ATSC Digital Television Standard: Part 5 - AC-3 Audio System Characteristic," (July 6, 2010), except for section 6.1.2 ("Compression Format Constraints") of A/53 Part 4: 2007 ("MPEG-2 Video Systems Characteristics") and the phrase "see Table 6.2" in section 6.1.1 Table 6.1 and section 6.1.3 Table 6.3, and

(iii) ATSC A/65C: "ATSC Program and System Information Protocol for Terrestrial Broadcast and Cable, Revision C With Amendment No. 1 dated May 9, 2006," (January 2, 2006) ~~**(all standards incorporated by reference, see § 73.8000)**~~.

(2) All standards are incorporated by reference, see § 73.8000.

(3) Although not incorporated by reference, licensees may also consult**:**

(i) ATSC A/54A: "Recommended Practice: Guide to Use of the ATSC Digital Television Standard, including Corrigendum No. 1," (December 4, 2003, Corrigendum No. 1 dated December 20, 2006, and

(ii) ATSC A/69: "Recommended Practice PSIP Implementation Guidelines for Broadcasters," (June 25, 2002) ~~**(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))**~~.

(4) ~~**ATSC A/54A and ATSC A/69**~~ **The documents listed in paragraph (d)** are available from **the** Advanced Television Systems Committee (ATSC)~~**, 1750 K Street, NW., Suite 1200, Washington, DC 20006, or**~~ at the ATSC Web site: ~~***http://www.atsc.org/standards.html***~~ ***https://www.atsc.org/documents/atsc-1-0-standards/.***

(e) * * *

(1) * * *

(2) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(3) * * *

(i) * * *

(A) * * *

(B) * * *

(C) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(A) * * *

(B) * * *

(C) * * *

(*1*) * * *

(*2*) * * *

(*3*) * * *

(*4*) * * *

(*5*) * * *

(D) * * *

(*1*) * * *

(*2*) * * *

(E) * * *

(*1*) * * *

(*2*) * * *

(4) * * *

(i) * * *

(ii) * * *

(iii) * * *

(5) * * *

(i) * * *

(ii) * * *

(iii) * * *

(6) * * *

(7) For additional information regarding this requirement, *see* Implementation of the Commercial Advertisement Loudness Mitigation (CALM) Act, FCC 11-182.

* * * * *

~~**Note to § 73.682:**~~

~~**For additional information regarding this requirement, *see* Implementation of the Commercial Advertisement Loudness Mitigation (CALM) Act, FCC 11-182.**~~

35. Section 73.683 is amended by revising the section heading and paragraphs (a), (c), and (d), removing and reserving paragraph (b) to read as follows:

§ 73.683 ~~**Field strength contours and p-**~~**P**resumptive determination of field strength at individual locations.

(a) ~~**In the authorization of TV stations, two field strength contours are considered. These are specified as Grade A and Grade B and indicate the approximate extent of coverage over average terrain in the absence of interference from other television stations. Under actual conditions, the true coverage may vary greatly from these estimates because the terrain over any specific path is expected to be different from the average terrain on which the field strength charts were based. The required field strength, *F* (50,50), in dB above one micro-volt per meter (dBu) for the Grade A and Grade B contours are as follows:**~~ **See 73.619(c). For purposes of the cross-reference from 90.307(b), the Grade B contour is defined as the F(50,50) contour at 64 dBu.**

	~~**Grade A (dBu)**~~	~~**Grade B (dBu)**~~
~~**Channels 2-6**~~	~~**68**~~	~~**47**~~
~~**Channels 7-13**~~	~~**71**~~	~~**56**~~
~~**Channels 14-69**~~	~~**74**~~	~~**64**~~

(b) ~~**It should be realized that the F (50,50) curves when used for Channels 14-69 are not based on measured data at distances beyond about 48.3 kilometers (30 miles). Theory would indicate that the field strengths for Channels 14-69 should decrease more rapidly with distance beyond the horizon than for Channels 2-6, and modification of the curves for Channels 14-69 may be expected as a result of measurements to be made at a later date. For these reasons, the curves should be used with appreciation of their limitations in estimating levels of field strength. Further, the actual extent of service will usually be less than indicated by these estimates due to interference from other stations. Because of these factors, the predicted field strength contours give no assurance of service to any specific percentage of receiver locations within the distances indicated. In licensing proceedings these variations will not be considered.**~~ [Reserved]

(c) ~~**The field strength contours will be considered for the following purposes only:**~~

~~**(1) In the estimation of coverage resulting from the selection of a particular transmitter site by an applicant for a TV station.**~~

~~**(2) In connection with problems of coverage arising out of application of § 73.3555.**~~

~~**(3) In determining compliance with § 73.685(a) concerning the minimum field strength to be provided over the principal community to be served.**~~ **See § 73.619(a).**

(d) For purposes of determining the eligibility of individual households for satellite retransmission of distant network signals under the copyright law provisions of 17 U.S.C. 119(d)(10)(A), field strength shall be determined by the Individual Location Longley-Rice (ILLR) propagation prediction model. Such eligibility determinations shall consider only the signals of network stations located in the subscriber's Designated Market Area. ~~**Guidance for use of the ILLR model in predicting the field strength of analog television signals for such determinations is provided in OET Bulletin No. 72 (stations operating with analog signals include some Class A stations licensed under part 73 of this chapter and some licensed low power TV and TV translator stations that operate under part 74 of this chapter).**~~ Guidance for use of the ILLR model in predicting the field strength of ~~digital~~ television signals for such determinations is provided in OET Bulletin No. 73 ~~**(stations operating with digital signals include all full service stations and some Class A stations that operate under part 73 of this chapter and some low power TV and TV translator stations that operate under Part 74 of this chapter). OET Bulletin No. 72 and**~~ OET Bulletin No. 73 ~~**are**~~ **is** available at the Federal Communications Commission's Reference Information Center, located at the address of the FCC's main office indicated in 47 CFR 0.401(a), or at the FCC's Office of Engineering and Technology (OET) website: *http://www.fcc.gov/oet/info/documents/bulletins/*.

* * * * *

36. § 73.684 [Removed and Reserved]

§ 73.684 ~~**Prediction of coverage.**~~ **[**Reserved]

~~**(a) All predictions of coverage made pursuant to this section shall be made without regard to interference and shall be made only on the basis of estimated field strengths. The peak power of the visual signal is used in making predictions of coverage.**~~

~~**(b) Predictions of coverage shall be made only for the same purposes as relate to the use of field strength contours as specified in § 73.683(e).**~~

~~**(c) In predicting the distance to the field strength contours, the F (50,50) field strength charts (Figures 9 and 10 of § 73.699) shall be used. If the 50% field strength is defined as that value exceeded for 50% of the time, these F (50,50) charts give the estimated 50% field strengths exceeded at 50% of the locations in dB above 1 uV/m. The charts are based on an effective power of 1 kW radiated form a half-wave dipole in free space, which produces an unattenuated field strength at 1.61 kilometers (1 mile) of about 103 dB above 1 uV/m. To use the charts to predict the distance to a given contour, the following procedure is used: Convert the effective radiated power in kilowatts for the appropriate azimuth into decibel value referenced to 1 kW (dBu). If necessary, convert the selected contour to the decibel value (dBu) above 1 microvolt per meter (1 uV/m). Subtract the power value in dBk from the contour value in dBu. Note that for power less than 1 kW, the difference value will be greater than the contour value because the power in dBk is negative. Locate the difference value obtained on the vertical scale at the left edge of the chart. Follow the horizontal line for that value into the chart to the point of intersection with the vertical**~~

~~line above the height of the antenna above average terrain for the appropriate azimuth located on the scale at the bottom of the chart. If the point of intersection does not fall exactly on a distance curve, interpolate between the distance curves below and above the intersection point. The distance values for the curves are located along the right edge of the chart.~~

~~(1) In predicting the distance to the Grade A and Grade B field strength contours, the effective radiated power to be used is that radiated at the vertical angle corresponding to the depression angle between the transmitting antenna center of radiation and the radio horizon as determined individually for each azimuthal direction concerned. The depression angle is based on the difference in elevation of the antenna center of radiation above the average terrain and the radio horizon, assuming a smooth sperical earth with a radius of 8,495.5 kilometers (5,280 miles) and shall be determined by the following equation:~~

~~$A = 0.0277\sqrt{H}$~~

~~Where:~~

~~A is the depression angle in degrees.~~

~~H is the height in meters of the transmitting antenna radiation center above average terrain of the 3.2-16.1 kilometers (2-10 miles) sector of the pertinent radial.~~

~~This formula is empirically derived for the limited purpose specified here. Its use for any other purpose may be inappropriate.~~

~~(2) In case where the relative field strength at the depression angle determined by the above formula is 90% or more of the maximum field strength developed in the vertical plane containing the pertaining radial, the maximum radiation shall be used.~~

~~(3) In predicting field strengths for other than the Grade A and Grade B contours, the effective radiated power to be used is to be based on the appropriate antenna vertical plane radiation pattern for the azimuthal direction concerned.~~

~~(4) Applicants for new TV stations or changes in the facilities of existing TV stations must submit to the FCC a showing as to the location of their stations' or proposed stations' predicted Grade A and Grade B contours, determined in accordance with § 73.684. This showing is to include maps showing these contours, except where applicants have previously submitted material to the FCC containing such information and it is found upon careful examination that the contour locations indicated therein would not change, on any radial, when the locations are determined under this Section. In the latter cases, a statement by a qualified engineer to this effect will satisfy this requirement and no contour maps need be submitted.~~

~~(d) The antenna height to be used with these charts is the height of the radiation center of the antenna above the average terrain along the radial in question. In determining the average elevation of the terrain, the elevations between 3.2-16.1 kilometers (2-10 miles) from the antenna site are employed. Profile graphs shall be drawn for 8 radials beginning at the antenna site and extending 16.1 kilometers (10 miles) therefrom. The radials should be drawn for each 45 degrees of azimuth starting with the True North. At least one radial must include the principal community to be served even though such community may be more than 16.1 kilometers (10 miles) from the antenna site. However, in the event none of the evenly spaced radials include the principal community to be served and one or more such radials are drawn in addition to the 8~~

~~evenly spaced radials, such additional radials shall not be employed in computing the antenna height above average terrain. Where the 3.2-16.1 kilometers (2-10 mile) portion of a radial extends in whole or in part over large bodies of water as specified in paragraph (c) of this section or extends over foreign territory but the Grade B strength contour encompasses land area within the United States beyond the 16.1 kilometers (10 mile) portion of the radial, the entire 3.2-16.1 kilometers (2-10 mile) portion of the radial shall be included in the computation of antenna height above average terrian. However, where the Grade B contour does not so encompass United States land area and~~

~~(1) the entire 3.2-16.1 kilometers (2-10 mile) portion of the radial extends over large bodies of water of foreign territory, such radial shall be completely omitted from the computation of antenna height above average terrain, and~~

~~(2) where a part of the 3.2-16.1 kilometers (2-10 mile) portion of a radial extends over large bodies of water or over foreign territory, only that part of the radial extending from the 3.2 kilometer (2 mile) sector to the outermost portion of land area within the United States covered by the radial shall be employed in the computation of antenna height above average terrian. The profile graph for each radial should be plotted by contour intervals of from 12.2-30.5 meters (40-100 feet) and, where the data permits, at least 50 points of elevation (generally uniformly spaced) should be used for each radial. In instances of very rugged terrain where the use of contour intervals of 30.5 meters (100 feet) would result in several points in a short distance, 61.0-122.0 meter (200-400 foot) contour intervals may be used for such distances. On the other hand, where the terrain is uniform or gently sloping the smallest contour interval indicated on the topograhic may (see paragraph (g) of this section) should be used, although only relatively few points may be available. The profile graphs should indicate the topography accurately for each radial, and the graphs should be plotted with the distance in kilometers as the abscissa and the elevation in meters above mean sea level as the ordinate. The profile graphs should indicate the source of the topographical data employed. The graph should also show the elevation of the center of the radiating system. The graph may be plotted either on rectangular coordinate paper or on special paper which shows the curvature of the earth. It is not necessary to take the curvature of the earth into consideration in this procedure, as this factor is taken care of in the charts showing signal strengths. The average elevation of the 12.9 kilometer (8 miles) distance between 3.2-16.1 kilometers (2-10 miles) from the antenna site should then be determined from the profile graph for each radial. This may be obtained by averaging a large number of equally spaced points, by using a planimeter, or by obtaining the median elevation (that exceeded for 50% of the distance) in sectors and averaging those values.~~

~~Note:~~

~~The Commission will, upon a proper showing by an existing station that the application of this rule will result in an unreasonable power reduction in relation to other stations in close proximity, consider requests for adjustment in power on the basis of a common average terrain figure for the stations in question as determined by the FCC.~~

~~(e) In instance where it is desired to determine the area in square kilometers within the Grade A and Grade B field strength contours, the area may be determined from the coverage map by planimeter or other approximate means; in computing such areas, exclued~~

~~(1) areas beyond the borders of the United States, and~~

~~(2) large bodies of water, such as ocean areas, gulfs sounds, bays, large lakes, etc., but not rivers.~~

~~(f) In cases where terrain in one or more directions from the antenna site departs widely from the average elevation of the 3.2 to 16.1 kilometers (2 to 10 mile) sector, the prediction method may indicate contour distances that are different from what may be expected in practice. For example, a mountain ridge may indicate the practical limit of service although the prediction method may indicate otherwise. In such case the prediction method should be followed, but a supplemental showing may be made concerning the contour distances as determined by other means. Such supplemental showing should describe the procedure employed and should include sample calculations. Maps of predicted coverage should include both the coverage as predicted by the regular method and as predicted by a supplemental method. When measurements of area are required, these should include the area obtained by the regular predicted method and the area obtained by the supplemental method. In directions where the terrain is such that negative antenna heights or heights below 30.5 meters (100 feet) for the 3.2 to 16.1 kilometers (2 to 10 mile) sector are obtained, an assumed height of 30.5 meters (100 feet) shall be used for the prediction of coverage. However, where the actual contour distances are critical factors, a supplemental showing of expected coverage must be included together with a description of the method employed in predicting such coverage. In special cases, the Commission may require additional information as to terrain and coverage.~~

~~(g) In the preparation of the profile graph previously described, and in determining the location and height above sea level of the antenna site, the elevation or contour intervals shall be taken from the United States Geological Survey Topographic Quadrangle Maps, United States Army Corps of Engineers' maps or Tennessee Valley Authority maps, whichever is the latest, for all areas for which such maps are available. If such maps are not published for the area in question, the next best topographic information should be used. Topographic data may sometimes be obtained from State and Municipal agencies. Data from Sectional Aeronautical Charts (including bench marks) or railroad depot elevations and highway elevations from road maps may be used where no better information is available. In cases where limited topographic data is available, use may be made of an altimeter in a car driven along roads extending generally radially from the transmitter site. Ordinarily the Commission will not require the submission of topographical maps for areas beyond 24.1 kilometers (15 miles) from the antenna site, but the maps must include the principal community to be served. If it appears necessary, additional data may be requested. United States Geological Survey Topographic Quadrangle Maps may be obtained from the United States Geological Survey, Department of the Interior, Washington, DC 20240. Sectional Aeronautical Charts are available from the United States Coast and Geodetic Survey, Department of Commerce, Washington, DC 20235. In lieu of maps, the average terrain elevation may be computer generated, except in the cases of dispute, using elevations from a 30 second point or better topographic data file. The file must be identified and the data processed for intermediate points along each radial using linear interpolation techniques. The height above mean sea level of the antenna site must be obtained manually using appropriate topographic maps.~~

~~(h) The effect of terrain roughness on the predicted field strength of a signal at points distant from a television broadcast station is assumed to depend on the magnitude of a terrain roughness factor (Δ h) which, for a specific propagation path, is determined by the characteristics of a segment of the terrain profile for that path 40.2 kilometers (25 miles) in length, located between 9.7 and 49.9 kilometers (6 and 31 miles) from the transmitter. The terrain roughness factor has a value equal to the difference, in meters, between elevations exceeded by all points on the profile for 10 percent and 90 percent, respectively, of the length of the profile segment (see § 73.699, Fig. 10d).~~

~~(i) If the lowest field strength value of interest is initially predicted to occur over a particular propagation path at a distance which is less than 49.9 kilometers (31 miles) from the transmitter,~~

~~**the terrain profile segment used in the determination of the terrain roughness factor over that path shall be that included between points 9.7 kilometers (6 miles) from the transmitter and such lesser distance. No terrain roughness correction need be applied when all field strength values of interest are predicted to occur 9.7 kilometers (6 miles) or less from the transmitter.**~~

~~**(j) Profile segments prepared for terrain roughness factor determinations should be plotted in rectangular coordinates, with no less than 50 points evenly spaced within the segment, using data obtained from topographic maps, if available, with contour intervals of 15.2 meters (50 feet), or less.**~~

~~**(k) The field strength charts (§ 73.699, Figs. 9-10c) were developed assuming a terrain roughness factor of 50 meters, which is considered to be representative of average terrain in the United States. Where the roughness factor for a particular propagation path is found to depart appreciably from this value, a terrain roughness correction (ΔF) should be applied to field strength values along this path as predicted with the use of these charts. The magnitude and sign of this correction, for any value of Δh, may be determined from a chart included in § 73.699 as Figure 10c, with linear interpolation as necessary, for the frequency of the UHF signal under consideration.**~~

~~**(l) Alternatively, the terrain roughness correction may be computed using the following formula:**~~

~~$\Delta F = C - 0.03(\Delta h)(1 + f/300)$~~

~~**Where:**~~

~~**ΔF = terrain roughness correction in dB**~~

~~**C = a constant having a specific value for use with each set of field strength charts:**~~

~~**1.9 for TV Channels 2-6**~~

~~**2.5 for TV Channels 7-13**~~

~~**4.8 for TV Channels 14-69**~~

~~**Δh = terrain roughness factor in meters**~~

~~**f = frequency of signal in megahertz (MHz)**~~

37. Section 73.685 is amended by revising paragraphs (b), (d), (f) introductory text, and (h), removing paragraphs (f)(1) through (f)(6), and removing and reserving paragraphs (a), (c), (e), and (g) to read as follows:

(a) ~~**The transmitter location shall be chosen so that, on the basis of the effective radiated power and antenna height above average terrain employed, the following minimum field strength in dB above one uV/m will be provided over the entire principal community to be served:**~~ [Reserved]

~~**Channels 2-6**~~	~~**Channels 7-13**~~	~~**Channels 14-69**~~
~~**74 dBu**~~	~~**77 dBu**~~	~~**80 dBu**~~

(b) ~~**Location of the antenna at a point of high elevation is necessary to reduce to a minimum the shadow effect on propagation due to hills and buildings which may reduce materially the strength of the station's signals. In general, the transmitting antenna of a station should be located at the most central point at the highest elevation available. To provide the best degree of service to an area, it is usually preferable to use a high antenna rather than a low antenna with increased transmitter power. The location should be so chosen that line-of-sight can be obtained from the antenna over the principal community to be served; in no event should there be a major obstruction in this path. The antenna must be constructed so that it is as clear as possible of surrounding buildings or objects that would cause shadow problems. It is recognized that topography, shape of the desired service area, and population distribution may make the choice of a transmitter location difficult. In such cases, consideration may be given to the use of a directional antenna system, although it is generally preferable to choose a site where a nondirectional antenna may be employed.**~~ **See § 73.618**.

(c) ~~**In cases of questionable antenna locations it is desirable to conduct propagation tests to indicate the field strength expected in the principal community to be served and in other areas, particularly where severe shadow problems may be expected. In considering applications proposing the use of such locations, the Commission may require site tests to be made. Such tests should be made in accordance with the measurement procedure in § 73.686, and full data thereon must be supplied to the Commission. Test transmitters should employ an antenna having a height as close as possible to the proposed antenna height, using a balloon or other support if necessary and feasible. Information concerning the authorization of site tests may be obtained from the Commission upon request.**~~ [Reserved]

(d) ~~**Present information is not sufficiently complete to establish "blanket areas" of television broadcast stations. A "blanket area" is that area adjacent to a transmitter in which the reception of other stations is subject to interference due to the strong signal from this station. The authorization of station construction in areas where blanketing is found to be excessive will be on the basis that the applicant will assume full responsibility for the adjustment of reasonable complaints arising from excessively strong signals of the applicant's station or take other corrective action.**~~ **See § 73.617(d).**

(e) ~~**An antenna designed or altered to produce a noncircular radiation pattern in the horizontal plane is considered to be a directional antenna. Antennas purposely installed in such a manner as to result in the mechanical beam tilting of the major vertical radiation lobe are included in this category. Directional antennas may be employed for the purpose of improving service upon an appropriate showing of need. Stations operating on Channels 2-13 will not be permitted to employ a directional antenna having a ratio of maximum to minimum radiation in the horizontal plane in excess of 10 dB. Stations operating on Channels 14-69 with transmitters delivering a peak visual power output of more than 1 kW may employ directive transmitting antennas with a maximum to minimum radiation in the horizontal plane of not more than 15 dB. Stations operating on Channels 14-69 and employing transmitters delivering a peak visual power output of 1 kW or less are not limited as to the ratio of maximum to minimum radiation.**~~ [Reserved]

(f) ~~**Applications proposing the use of directional antenna systems must be accompanied by the following:**~~ **See § 73.625(c).**

~~**(1) Complete description of the proposed antenna system, including the manufacturer and model number of the proposed directional antenna.**~~

~~**(2) Relative field horizontal plane pattern (horizontal polarization only) of the proposed directional antenna. A value of 1.0 should be used for the maximum radiation. The plot of the**~~

~~**pattern should be oriented so that 0° corresponds to true North. Where mechanical beam tilt is intended, the amount of tilt in degrees of the antenna vertical axis and the orientation of the downward tilt with respect to true North must be specified, and the horizontal plane pattern must reflect the use of mechanical beam tilt.**~~

~~**(3) A tabulation of the relative field pattern required in paragraph (b)(2), of this section. The tabulation should use the same zero degree reference as the plotted pattern, and be tabulated at least every 10°. In addition, tabulated values of all maxima and minima, with their corresponding azimuths, should be submitted.**~~

~~**(4) Horizontal and vertical plane radiation patterns showing the effective radiated power, in dBk, for each direction. Sufficient vertical plane patterns must be included to indicate clearly the radiation characteristics of the antenna above and below the horizontal plane. In cases where the angles at which the maximum vertical radiation varies with azimuth, a separate vertical radiation pattern must be provided for each pertinent radial direction.**~~

~~**(5) All horizontal plane patterns must be plotted to the largest scale possible on unglazed letter-size polar coordinate paper (main engraving approximately 18 cm × 25 cm (7 inches × 10 inches)) using only scale divisions and subdivisions of 1, 2, 2.5 or 5 times 10-nth. All vertical plane patterns must be plotted on unglazed letter-size rectangular coordinate paper. Values of field strength on any pattern less than 10% of the maximum field strength plotted on that pattern must be shown on an enlarged scale.**~~

~~**(6) The horizontal and vertical plane patterns that are required are the patterns for the complete directional antenna system. In the case of a composite antenna composed of two or more individual antennas, this means that the patterns for the composite antenna, not the patterns for each of the individual antennas, must be submitted.**~~

(g) ~~**Applications proposing the use of television broadcast antennas within 61.0 meters (200 feet) of other television broadcast antennas operating on a channel within 20 percent in frequency of the proposed channel, or proposing the use of television broadcast antennas on Channels 5 or 6 within 61.0 meters (200 feet) of FM broadcast antennas, must include a showing as to the expected effect, if any, of such proximate operation.**~~ [Reserved]

(h) ~~**Where the TV licensee or permittee proposes to mount its antenna on or near an AM tower, as defined in § 1.30002, the TV licensee or permittee must comply with § 1.30003 or § 1.30002.**~~ **See § 73.625(c)(4).**

38. Section 73.686 is amended by revising paragraphs (c)(1)(i) and (e) introductory text, and removing and reserving paragraph (d) to read as follows:

* * * * *

(c) * * *

(1) * * *

(i) The population (P) of the community, and its suburbs, if any, is determined by reference to **the most recent official decennial U.S. Census population data as identified by the Media Bureau in a Public Notice** ~~**an appropriate source, e.g., the 1970 U.S. Census tables of population of cities and urbanized areas**~~. **See § 73.620(b).**

(d) ~~***NTSC - Collection of field strength data to determine NTSC television signal intensity at an individual location - cluster measurements***~~ [Reserved]

~~**(1)** ***Preparation for measurements -***~~

~~**(i)** ***Testing antenna.*** **The test antenna shall be either a standard half-wave dipole tuned to the visual carrier frequency of the channel being measured or a gain antenna, provided its antenna factor for the channel(s) under test has been determined. Use the antenna factor supplied by the antenna manufacturer as determined on an antenna range.**~~

~~**(ii)** ***Testing locations.*** **At the location, choose a minimum of five locations as close as possible to the specific site where the site's receiving antenna is located. If there is no receiving antenna at the site, choose the minimum of five locations as close as possible to a reasonable and likely spot for the antenna. The locations shall be at least three meters apart, enough so that the testing is practical. If possible, the first testing point should be chosen as the center point of a square whose corners are the four other locations. Calculate the median of the five measurements (in units of dBu) and report it as the measurement result.**~~

~~**(iii)** ***Multiple signals.*** **If more than one signal is being measured (*i.e.*, signals from different transmitters), use the same locations to measure each signal.**~~

~~**(2)** ***Measurement procedure.*** **Measurements shall be made in accordance with good engineering practice and in accordance with this section of the Rules. At each measuring location, the following procedure shall be employed:**~~

~~**(i)** ***Testing equipment.*** **Measure the field strength of the visual carrier with a calibrated instrument with an i.f. bandwidth of at least 200 kHz, but no greater than one megahertz (1,000 kHz). Perform an on-site calibration of the instrument in accordance with the manufacturer's specifications. The instrument must accurately indicate the peak amplitude of the synchronizing signal. Take all measurements with a horizontally polarized antenna. Use a shielded transmission line between the testing antenna and the field strength meter. Match the antenna impedance to the transmission line at all frequencies measured, and, if using an unbalanced line, employ a suitable balun. Take account of the transmission line loss for each frequency being measured.**~~

~~**(ii)** ***Weather.*** **Do not take measurements in inclement weather or when major weather fronts are moving through the measurement area.**~~

~~**(iii)** ***Antenna elevation.*** **When field strength is being measured for a one-story building, elevate the testing antenna to 6.1 meters (20 feet) above the ground. In situations where the field strength is being measured for a building taller than one-story, elevate the testing antenna 9.1 meters (30 feet) above the ground.**~~

~~**(iv)** ***Antenna orientation.*** **Orient the testing antenna in the direction which maximizes the value of field strength for the signal being measured. If more than one station's signal is being measured, orient the testing antenna separately for each station.**~~

~~**(3) Written record shall be made and shall include at least the following:**~~

~~**(i) A list of calibrated equipment used in the field strength survey, which for each instrument, specifies the manufacturer, type, serial number and rated accuracy, and the date of the most**~~

~~**recent calibration by the manufacturer or by a laboratory. Include complete details of any instrument not of standard manufacture.**~~

~~**(ii) A detailed description of the calibration of the measuring equipment, including field strength meters, measuring antenna, and connecting cable.**~~

~~**(iii) For each spot at the measuring site, all factors which may affect the recorded field, such as topography, height and types of vegetation, buildings, obstacles, weather, and other local features.**~~

~~**(iv) A description of where the cluster measurements were made.**~~

~~**(v) Time and date of the measurements and signature of the person making the measurements.**~~

~~**(vi) For each channel being measured, a list of the measured value of field strength (in units of dBu and after adjustment for line loss and antenna factor) of the five readings made during the cluster measurement process, with the median value highlighted.**~~

(e) ~~***DTV –***~~ ***Collection of field strength data to determine ~~digital~~ television signal intensity at an individual location - cluster measurements*** -

(1) * * *

(i) * * *

(ii) * * *

(iii) * * *

(A) * * *

(B) * * *

(2) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(3) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(v) * * *

(vi) * * *

39. Section 73.687 is amended by revising paragraph (c) introductory text and (e) introductory text, removing paragraphs (e)(1) through (e)(4), and removing and reserving paragraphs (a), (b), and (c)(1) to read as follows:

(a) ~~***Visual transmitter.***~~ [Reserved]

~~**(1) The field strength or voltage of the lower sideband, as radiated or dissipated and measured as described in paragraph (a)(2) of this section, shall not be greater than −20 dB for a modulating frequency of 1.25 MHz or greater and in addition, for color, shall not be greater than −42 dB for a modulating frequency of 3.579545 MHz (the color subcarrier frequency). For both monochrome and color, the field strength or voltage of the upper sideband as radiated or dissipated and measured as described in paragraph (a)(2) of this section shall not be greater than −20 dB for a modulating frequency of 4.75 MHz or greater. For stations operating on Channels 15-36 and employing a transmitter delivering maximum peak visual power output of 1 kW or less, the field strength or voltage of the upper and lower sidebands, as radiated or dissipated and measured as described in paragraph (a)(2) of this section, shall depart from the visual amplitude characteristic (Figure 5a of § 73.699) by no more than the following amounts:**~~

~~**(2) The attenuation characteristics of a visual transmitter shall be measured by application of a modulating signal to the transmitter input terminals in place of the normal composite television video signal. The signal applied shall be a composite signal composed of a synchronizing signal to establish peak output voltage plus a variable frequency sine wave voltage occupying the interval between synchronizing pulses. (The "synchronizing signal" referred to in this section means either a standard synchronizing wave form or any pulse that will properly set the peak.) The axis of the sine wave in the composite signal observed in the output monitor shall be maintained at an amplitude 0.5 of the voltage at synchronizing peaks. The amplitude of the sine wave input shall be held at a constant value. This constant value should be such that at no modulating frequency does the maximum excursion of the sine wave, observed in the composite output signal monitor, exceed the value 0.75 of peak output voltage. The amplitude of the 200 kHz sideband shall be measured and designated zero dB as a basis for comparison. The modulation signal frequency shall then be varied over the desired range and the field strength or signal voltage of the corresponding sidebands measured. As an alternate method of measuring, in those cases in which the automatic d-c insertion can be replaced by manual control, the above characteristic may be taken by the use of a video sweep generator and without the use of pedestal synchronizing pulses. The d-c level shall be set for midcharacteristic operation.**~~

~~**(3) A sine wave, introduced at those terminals of the transmitter which are normally fed the composite color picture signal, shall produce a radiated signal having an envelope delay, relative to the average envelope delay between 0.05 and 0.20 MHz, of zero microseconds up to a frequency of 3.0 MHz; and then linearly decreasing to 4.18 MHz so as to be equal to −0.17 μsecs at 3.58 MHz. The tolerance on the envelope delay shall be ±0.05 μsecs at 3.58 MHz. The tolerance shall increase linearly to ±0.1 μsec down to 2.1 MHz, and remain at ±0.1 μsec down to**~~

~~**0.2 MHz. (Tolerances for the interval of 0.0 to 0.2 MHz are not specified at the present time.) The tolerance shall also increase linearly to ±0.1 μsec at 4.18 MHz.**~~

~~**(4) The radio frequency signal, as radiated, shall have an envelope as would be produced by a modulating signal in conformity with § 73.682 and Figure 6 or 7 of § 73.699, as modified by vestigial sideband operation specified in Figure 5 of § 73.699. For stations operating on Channels 15-36 the radio frequency signal as radiated, shall have an envelope as would be produced by a modulating signal in conformity with § 73.682 and Figure 6 or 7 of § 73.699.**~~

~~**(5) The time interval between the leading edges of successive horizontal pulses shall vary less than one half of one percent of the average interval. However, for color transmissions, § 73.682(a) (5) and (6) shall be controlling.**~~

~~**(6) The rate of change of the frequency of recurrence of the leading edges of the horizontal synchronizing signals shall be not greater than 0.15 percent per second, the frequency to be determined by an averaging process carried out over a period of not less than 20, nor more than 100 lines, such lines not to include any portion of the blanking interval. However, for color transmissions, § 73.682(a) (5) and (6) shall be controlling.**~~

(b) ~~***Aural transmitter.***~~ [Reserved]

~~**(1) Pre-emphasis shall be employed as closely as practicable in accordance with the impedance-frequency characteristic of a series inductance-resistance network having a time constant of 75 microseconds. (See upper curve of Figure 12 § 73.699.)**~~

~~**(2) If a limiting or compression-amplifier is employed, precaution should be maintained in its connection in the circuit due to the use of pre-emphasis in the transmitting system.**~~

~~**(3) Aural modulation levels are specified in § 73.1570.**~~

(c) ***Requirements applicable to*** ~~***both visual and aural***~~ ***transmitters.***

(1) ~~**Automatic means shall be provided in the visual transmitter to maintain the carrier frequency within ±1 kHz of the authorized frequency; automatic means shall be provided in the aural transmitter to maintain the carrier frequency 4.5 MHz above the actual visual carrier frequency within ±1 kHz.**~~ [Reserved]

(2) * * *

(3) * * *

(4) * * *

* * * * *

(e) ~~***Operation***~~ **See § 73.617(b).**

~~**(1) Spurious emissions, including radio frequency harmonics, shall be maintained at as low a level as the state of the art permits. As measured at the output terminals of the transmitter (including harmonic filters, if required) all emissions removed in frequency in excess of 3 MHz above or below the respective channel edge shall be attenuated no less than 60 dB. below the**~~

~~visual transmitted power. (The 60 dB. value for television transmitters specified in this rule should be considered as a temporary requirement which may be increased at a later date, especially when more higher-powered equipment is utilized. Stations should, therefore, give consideration to the installation of equipment with greater attenuation than 60 dB.) In the event of interference caused to any service greater attenuation will be required.~~

~~(2) If a limiting or compression-amplifier is used in conjunction with the aural transmitter, due operating precautions should be maintained because of pre-emphasis in the transmitting system.~~

~~(3) TV broadcast stations operating on Channel 14 must take special precautions to avoid interference to adjacent spectrum land mobile radio service facilities. Where a TV station is authorized and operating prior to the authorization and operation of the land mobile facility, a Channel 14 station must attenuate its emissions within the frequency range 467 to 470 MHz if necessary to permit reasonable use of the adjacent frequencies by land mobile licensees.~~

~~(4) The requirements listed below apply to permittees authorized to construct a new station on TV Channel 14, and to licensees authorized to change the channel of an existing station to Channel 14, to increase effective radiated power (ERP) (including any change in directional antenna characteristics that results in an increase in ERP in any direction), or to change the transmitting location of an existing station.~~

~~(i) For the purposes of this paragraph (c), a protected land mobile facility is a receiver that is intended to receive transmissions from licensed land mobile stations within the frequency band below 470 MHz, and is associated with one or more land mobile stations for which a license has been issued by the Commission, or a proper application has been received by the Commission prior to the date of the filing of the TV construction permit application. However, a land mobile facility will not be protected if it is proposed in an application that is denied or dismissed and that action is no longer subject to Commission review. Further, if the land mobile station is not operating when the TV facility commences operation and it does not commence operation within the time permitted by its authorization in accordance with part 90 of this chapter, it will not be protected.~~

~~(ii) A TV permittee must take steps before construction to identify potential interference to normal land mobile operation that could be caused by TV emissions outside the authorized channel, land mobile receiver desensitization or intermodulation. It must install filters and take other precautions as necessary, and submit evidence that no interference is being caused before it will be permitted to transmit programming on the new facilities pursuant to the provisions of § 73.1615 or § 73.1620 of this part. A TV permittee must reduce its emissions within the land mobile channel of a protected land mobile facility that is receiving interference caused by the TV emission producing a vertically polarized signal and a field strength in excess of 17 dBu at the land mobile receiver site on the land mobile frequency. The TV emission should be measured with equipment set to a 30 kHz measurement bandwidth including the entire applicable land mobile channel. A TV permittee must correct a desensitization problem if its occurrence can be directly linked to the start of the TV operation and the land mobile station is using facilities with typical desensitization rejection characteristics. A TV permittee must identify the source of an intermodulation product that is generated when the TV operation commences. If the intermodulation source is under its control, the TV permittee must correct the problem. If the intermodulation source is beyond the TV permittee's control, it must cooperate in the resolution of the problem and should provide whatever technical assistance it can.~~

40. Section 73.688 is amended by revising paragraph (a) to read as follows:

(a) Each TV broadcast station shall be equipped with indicating instruments which conform with the specifications described in § 73.1215 for measuring the operating parameters of the last radio stage of the ~~visual~~ transmitter, and with such other instruments as are necessary for the proper adjustment, operation, and maintenance of the ~~visual~~ transmitting system.

* * * * *

41. § 73.691 [Removed and Reserved]

§ 73.691 ~~**Visual modulation monitoring.**~~ [Reserved]

~~**(a) Each TV station must have measuring equipment for determining that the transmitted visual signal conforms to the provisions of this subpart. The licensee shall decide the monitoring and measurement methods or procedures for indicating and controlling the visual signal.**~~

~~**(b) In the event technical problems make it impossible to operate in accordance with the timing and carrier level tolerance requirements of § 73.682 (a)(9)(i), (a)(9)(ii), (a)(12), (a)(13), and (a)(17), a TV broadcast station may operate at variance for a period of not more than 30 days without specific authority from the FCC: *provided that*, the date and time of the initial out-of-tolerance condition has been entered in the station log. If the operation at variance will exceed 10 consecutive days, a notification must be sent to the FCC in Washington, D.C., not later than the 10th day of such operation. In the event normal operation is resumed prior to the end of the 30 day period, the licensee must notify the FCC upon restoration of normal operation. If causes beyond the control of the licensee prevent restoration of normal operation within 30 days, a written request must be made to the FCC in Washington, D.C., no later than the 30th day for such additional time as may be necessary.**~~

42. § 73.698 [Removed and Reserved]

§ 73.698 ~~**Tables.**~~ [Reserved]

~~**Table I [Reserved]**~~

~~**Table II**~~

~~(1) – Channel~~	~~(2) – 31.4 kilometers (19.5 miles) If beat~~	~~(3) – 31.4 kilometers (19.5 miles) intermodulation~~	~~(4) – 87.7 kilometers (54.5 miles) adjacent channel~~	~~(5) – 95.7 kilometers (59.5 miles) oscillator~~	~~(6) – 95.7 kilometers (59.5 miles) sound image~~	~~(7) – 119.9 kilometers (74.5 miles) picture image~~
~~14~~	~~22~~	~~16-19~~	~~15~~	~~21~~	~~28~~	~~29~~
~~15~~	~~23~~	~~17-20~~	~~14, 16~~	~~22~~	~~29~~	~~30~~
~~16~~	~~24~~	~~14, 18-21~~	~~15, 17~~	~~23~~	~~30~~	~~31~~
~~17~~	~~25~~	~~14-15, 19-22~~	~~16, 18~~	~~24~~	~~31~~	~~32~~

~~(1) – Channel~~	~~(2) - 31.4 kilometers (19.5 miles) If beat~~	~~(3) - 31.4 kilometers (19.5 miles) intermodulation~~	~~(4) - 87.7 kilometers (54.5 miles) adjacent channel~~	~~(5) - 95.7 kilometers (59.5 miles) oscillator~~	~~(6) - 95.7 kilometers (59.5 miles) sound image~~	~~(7) - 119.9 kilometers (74.5 miles) picture image~~
~~18~~	~~26~~	~~14-16, 20-23~~	~~17, 19~~	~~25~~	~~32~~	~~33~~
~~19~~	~~27~~	~~14-17, 21-24~~	~~18, 20~~	~~26~~	~~33~~	~~34~~
~~20~~	~~28~~	~~15-18, 22-25~~	~~19, 21~~	~~27~~	~~34~~	~~35~~
~~21~~	~~29~~	~~16-19, 23-26~~	~~20, 22~~	~~28, 14~~	~~35~~	~~36~~
~~22~~	~~30, 14~~	~~17-20, 24-27~~	~~21, 23~~	~~29, 15~~	~~36~~	~~37~~
~~23~~	~~31, 15~~	~~18-21, 25-28~~	~~22, 24~~	~~30, 16~~	~~37~~	~~38~~
~~24~~	~~32, 16~~	~~19-22, 26-29~~	~~23, 25~~	~~31, 17~~	~~38~~	~~39~~
~~25~~	~~33, 17~~	~~20-23, 27-30~~	~~24, 26~~	~~32, 18~~	~~39~~	~~40~~
~~26~~	~~34, 18~~	~~21-24, 28-31~~	~~25, 27~~	~~33, 19~~	~~40~~	~~41~~
~~27~~	~~35, 19~~	~~22-25, 29-32~~	~~26, 28~~	~~34, 20~~	~~41~~	~~42~~
~~28~~	~~36, 20~~	~~23-26, 30-33~~	~~27, 29~~	~~35, 21~~	~~42, 14~~	~~43~~
~~29~~	~~37, 21~~	~~24-27, 31-34~~	~~28, 30~~	~~36, 22~~	~~43, 15~~	~~44, 14~~
~~30~~	~~38, 22~~	~~25-28, 32-35~~	~~29, 31~~	~~37, 23~~	~~44, 16~~	~~45, 15~~
~~31~~	~~39, 23~~	~~26-29, 33-36~~	~~30, 32~~	~~38, 24~~	~~45, 17~~	~~46, 16~~
~~32~~	~~40, 24~~	~~27-30, 34-37~~	~~31, 33~~	~~39, 25~~	~~46, 18~~	~~47, 17~~
~~33~~	~~41, 25~~	~~28-31, 35-38~~	~~32, 34~~	~~40, 26~~	~~47, 19~~	~~48, 18~~
~~34~~	~~42, 26~~	~~29-32, 36-39~~	~~33, 35~~	~~41, 27~~	~~48, 20~~	~~49, 19~~
~~35~~	~~43, 27~~	~~30-33, 37-40~~	~~34, 36~~	~~42, 28~~	~~49, 21~~	~~50, 20~~
~~36~~	~~44, 28~~	~~31-34, 38-41~~	~~35, 37~~	~~43, 29~~	~~50, 22~~	~~51, 21~~
~~37~~	~~45, 29~~	~~32-35, 39-42~~	~~36, 38~~	~~44, 30~~	~~51, 23~~	~~52, 22~~
~~38~~	~~46, 30~~	~~33-36, 40-43~~	~~37, 39~~	~~45, 31~~	~~52, 24~~	~~53, 23~~
~~39~~	~~47, 31~~	~~34-37, 41-44~~	~~38, 40~~	~~46, 32~~	~~53, 25~~	~~54, 24~~
~~40~~	~~48, 32~~	~~35-38, 42-45~~	~~39, 41~~	~~47, 33~~	~~54, 26~~	~~55, 25~~

~~(1) – Channel~~	~~(2) - 31.4 kilometers (19.5 miles) If beat~~	~~(3) - 31.4 kilometers (19.5 miles) intermodulation~~	~~(4) - 87.7 kilometers (54.5 miles) adjacent channel~~	~~(5) - 95.7 kilometers (59.5 miles) oscillator~~	~~(6) - 95.7 kilometers (59.5 miles) sound image~~	~~(7) - 119.9 kilometers (74.5 miles) picture image~~
~~41~~	~~49, 33~~	~~36-39, 43-46~~	~~40, 42~~	~~48, 34~~	~~55, 27~~	~~56, 26~~
~~42~~	~~50, 34~~	~~37-40, 44-47~~	~~41, 43~~	~~49, 35~~	~~56, 28~~	~~57, 27~~
~~43~~	~~51, 35~~	~~38-41, 45-48~~	~~42, 44~~	~~50, 36~~	~~57, 29~~	~~58, 28~~
~~44~~	~~52, 36~~	~~39-42, 46-49~~	~~43, 45~~	~~51, 37~~	~~58, 30~~	~~59, 29~~
~~45~~	~~53, 37~~	~~40-43, 47-50~~	~~44, 46~~	~~52, 38~~	~~59, 31~~	~~60, 30~~
~~46~~	~~54, 38~~	~~41-44, 48-51~~	~~45, 47~~	~~53, 39~~	~~60, 32~~	~~61, 31~~
~~47~~	~~55, 39~~	~~42-45, 49-52~~	~~46, 48~~	~~54, 40~~	~~61, 33~~	~~62, 32~~
~~48~~	~~56, 40~~	~~43-46, 50-53~~	~~47, 49~~	~~55, 41~~	~~62, 34~~	~~63, 33~~
~~49~~	~~57, 41~~	~~44-47, 51-54~~	~~48, 50~~	~~56, 42~~	~~63, 35~~	~~64, 34~~
~~50~~	~~58, 42~~	~~45-48, 52-55~~	~~49, 51~~	~~57, 43~~	~~64, 36~~	~~65, 35~~
~~51~~	~~59, 43~~	~~46-49, 53-56~~	~~50, 52~~	~~58, 44~~	~~65, 37~~	~~66, 36~~
~~52~~	~~60, 44~~	~~47-50, 54-57~~	~~51, 53~~	~~59, 45~~	~~66, 38~~	~~67, 37~~
~~53~~	~~61, 45~~	~~48-51, 55-58~~	~~52, 54~~	~~60, 46~~	~~67, 39~~	~~68, 38~~
~~54~~	~~62, 46~~	~~49-52, 56-59~~	~~53, 55~~	~~61, 47~~	~~68, 40~~	~~69, 39~~
~~55~~	~~63, 47~~	~~50-53, 57-60~~	~~54, 56~~	~~62, 48~~	~~69, 41~~	~~70, 40~~
~~56~~	~~64, 48~~	~~51-54, 58-61~~	~~55, 57~~	~~63, 49~~	~~70, 42~~	~~71, 41~~
~~57~~	~~65, 49~~	~~52-55, 59-62~~	~~56, 58~~	~~64, 50~~	~~71, 43~~	~~72, 42~~
~~58~~	~~66, 50~~	~~53-56, 60-63~~	~~57, 59~~	~~65, 51~~	~~72, 44~~	~~73, 43~~
~~59~~	~~67, 51~~	~~54-57, 61-64~~	~~58, 60~~	~~66, 52~~	~~73, 45~~	~~74, 44~~
~~60~~	~~68, 52~~	~~55-58, 62-65~~	~~59, 61~~	~~67, 53~~	~~74, 46~~	~~75, 45~~
~~61~~	~~69, 53~~	~~56-59, 63-66~~	~~60, 62~~	~~68, 54~~	~~75, 47~~	~~76, 46~~
~~62~~	~~70, 54~~	~~57-60, 64-67~~	~~61, 63~~	~~69, 55~~	~~76, 48~~	~~77, 47~~
~~63~~	~~71, 55~~	~~58-61, 65-68~~	~~62, 64~~	~~70, 56~~	~~77, 49~~	~~78, 48~~

~~(1) – Channel~~	~~(2) - 31.4 kilometers (19.5 miles) If beat~~	~~(3) - 31.4 kilometers (19.5 miles) intermodulation~~	~~(4) - 87.7 kilometers (54.5 miles) adjacent channel~~	~~(5) - 95.7 kilometers (59.5 miles) oscillator~~	~~(6) - 95.7 kilometers (59.5 miles) sound image~~	~~(7) - 119.9 kilometers (74.5 miles) picture image~~
~~64~~	~~72, 56~~	~~59-62, 66-69~~	~~63, 65~~	~~71, 57~~	~~78, 50~~	~~79, 49~~
~~65~~	~~73, 57~~	~~60-63, 67-70~~	~~64, 66~~	~~72, 58~~	~~79, 51~~	~~80, 50~~
~~66~~	~~74, 58~~	~~61-64, 68-71~~	~~65, 67~~	~~73, 59~~	~~80, 52~~	~~81, 51~~
~~67~~	~~75, 59~~	~~62-65, 69-72~~	~~66, 68~~	~~74, 60~~	~~81, 53~~	~~82, 52~~
~~68~~	~~76, 60~~	~~63-66, 70-73~~	~~67, 69~~	~~75, 61~~	~~82, 54~~	~~83, 53~~
~~69~~	~~77, 61~~	~~64-67, 71-74~~	~~68, 70~~	~~76, 62~~	~~83, 55~~	~~54~~

~~**Note: The parenthetical reference beneath the mileage figures in columns 2 through 7, inclusive, indicate, in abbreviated form, the bases for the required mileage separations. For a discussion of these bases, see the "Sixth Report and Order" of the Commission (FCC 52-294; 17 FR 3905, May 2, 1952). The hyphenated numbers listed in column (3) are both inclusive.**~~

43. Section 73.699 is amended to delete Figures 5, 5(a), 6, 7, 8, 11, 12, 13, 14, 15, 16, and 17.

44. Section 73.1001 is amended to revise paragraph (c) to read as follows:

* * * * *

(c) Certain provisions of this subpart apply to International Broadcast Stations (subpart F, part 73), LPFM (subpart G, part 73), and Low Power TV**, and** TV Translator ~~**and TV Booster**~~ Stations (subpart G, part 74) where the rules for those services so provide.

* * * * *

45. Revise section 73.1015 to read as follows:

The Commission or its representatives may, in writing, require from any applicant, permittee, or licensee written statements of fact relevant to a determination whether an application should be granted or denied, or to a determination whether a license should be revoked, or to any other matter within the jurisdiction of the Commission, or, in the case of a proceeding to amend the **Table of** FM **Allotments** or ~~**Television**~~ Table of **TV** Allotments, require from any person filing an expression of interest, written statements of fact relevant to that allotment proceeding. Any such statements of fact are subject to the provisions of § 1.17 of this chapter.

46. Section 73.1020 is amended by revising paragraphs (a) and (b) to read as follows:

(a) * * *

(1) * * *

(i) Radio stations, October 1, 20~~11~~**27**.

(ii) Television stations, October 1, 20~~12~~**28**.

(2) * * *

(i) Radio stations, December 1, 20~~11~~**27**.

(ii) Television stations, December 1, 20~~12~~**28**.

(3) * * *

(i) Radio stations, February 1, 20~~12~~**28**.

(ii) Television stations, February 1, 20~~13~~**29**.

(4) * * *

(i) Radio stations, April 1, 20~~12~~**28**.

(ii) Television stations, April 1, 20~~13~~**29**.

(5) * * *

(i) Radio stations, June 1, 20~~12~~**28**.

(ii) Television stations, June 1, 20~~13~~**29**.

(6) * * *

(i) Radio stations, August 1, 20~~12~~**28**.

(ii) Television stations, August 1, 20~~13~~**29**.

(7) * * *

(i) Radio stations, October 1, 20~~12~~**28**.

(ii) Television stations, October 1, 20~~13~~**29**.

(8) * * *

(i) Radio stations, December 1, 20~~12~~**28**.

(ii) Television stations, December 1, 20~~13~~**29**.

(9) * * *

(i) Radio stations, February 1, 20~~13~~**29**.

(ii) Television stations, February 1, 20~~14~~**30**.

(10) * * *

(i) Radio stations, April 1, 20~~13~~**29**.

(ii) Television stations, April 1, 20~~14~~**30**.

(11) * * *

(i) Radio stations, June 1, 20~~13~~**29**.

(ii) Television stations, June 1, 20~~14~~**30**.

(12) * * *

(i) Radio stations, August 1, 20~~13~~**29**.

(ii) Television stations, August 1, 20~~14~~**30**.

(13) * * *

(i) Radio stations, October 1, 20~~13~~**29**.

(ii) Television stations, October 1, 20~~14~~**22**.

(14) * * *

(i) Radio stations, December 1, 20~~13~~**29**.

(ii) Television stations, December 1, 20~~14~~**22**.

(15) * * *

(i) Radio stations, February 1, 20~~14~~**30**.

(ii) Television stations, February 1, 20~~15~~**23**.

(16) * * *

(i) Radio stations, April 1, 20~~14~~**30**.

(ii) Television stations, April 1, 20~~15~~**23**.

(17) * * *

(i) Radio stations, June 1, 20~~14~~**30**.

(ii) Television stations, June 1, 20~~15~~**23**.

(18) * * *

(i) Radio stations, August 1, 20~~14~~**30**.

(ii) Television stations, August 1, 20~~15~~**23**.

(b) ~~**For the cutoff date for the filing of applications mutually exclusive with renewal applications that are filed on or before May 1, 1995 and f**~~For the deadline for filing petitions to deny renewal applications, see § 73.3516(e).

* * * * *

47. Section 73.1030 is amended by revising paragraphs (a)(1) and (b)(2) to read as follows:

(a)

(1) ***Radio astronomy and radio research installations.*** In order to minimize harmful interference at the National Radio Astronomy Observatory site located at Green, Pocahontas County, West Virginia, and at the Naval Radio Research Observatory at Sugar Grove, Pendleton County, West Virginia, a licensee proposing to operate a short-term broadcast auxiliary station pursuant to § 74.24, and any applicant for authority to construct a new broadcast station, or for authority to make changes in the frequency, power, antenna height, or antenna directivity of an existing station within the area bounded by 39°15′ N on the north, 78°30′ W on the east, 37°30′ N on the south, and 80°30′ W on the west, shall notify the Interference Office, National Radio Astronomy Observatory, P.O. Box 2, Green Bank, West Virginia 24944. Telephone: (304) 456-2011**; E-mail: nrqz@nrao.edu**. * * *

(2) * * *

(i) * * *

* * *

(ii) * * *

(b) * * *

(2) Applicants concerned are urged to communicate with the Radio Frequency Management Coordinator, **Institute for Telecommunication Sciences, 325 Broadway,** ~~**Department of Commerce, Research Support Services, NOAA R/E5X2, Boulder Laboratories,**~~ Boulder, CO 8030~~**53**~~; telephone (303) 497-~~**6548**~~**4220, e-mail frequencymanager@ntia.gov,** in advance of filing their applications with the Commission.

48. Section 73.1201 is amended by revising paragraph (b)(1) to read as follows, adding paragraph (e), and removing and reserving paragraph (d) to read as follows:

* * * * *

(b) * * *

(1) Official station identification shall consist of the station's call letters immediately followed by the community or communities specified in its license as the station's location; Provided, That the name

of the licensee, the station's frequency, the station's channel number, as stated on the station's license, and/or the station's network affiliation may be inserted between the call letters and station location. ~~D~~TV stations, or DAB Stations, choosing to include the station's channel number in the station identification must use the station's major channel number and may distinguish multicast program streams. For example, a ~~D~~TV station with major channel number 26 may use 26.1 to identify an HDTV program service and 26.2 to identify an SDTV program service. A ~~D~~TV station that is devoting one of its multicast streams to transmit the programming of another television licensee must identify itself and may also identify the licensee that it is transmitting. If a ~~D~~TV station in this situation chooses to identify the station that is the source of the programming it is transmitting, it must use the following format: Station WYYY~~-DT~~, community of license (call sign and community of license of the station whose multicast stream is transmitting the programming), bringing you WXXX, community of license (call sign and community of license of the licensee providing the programming). The transmitting station may insert between its call letters and its community of license the following information: the frequency of the transmitting station, the channel number of the transmitting station, the name of the licensee of the transmitting station and the licensee providing the programming, and/or the name of the network of either station. Where a multicast station is carrying the programming of another station and is identifying that station as the source of the programming, using the format described above, the identification may not include the frequency or channel number of the program source. A radio station operating in DAB hybrid mode or extended hybrid mode shall identify its digital signal, including any free multicast audio programming streams, in a manner that appropriately alerts its audience to the fact that it is listening to a digital audio broadcast. No other insertion between the station's call letters and the community or communities specified in its license is permissible.

(2) * * *

* * * * *

(d) ~~***Subscription television stations (STV).* The requirements for official station identification applicable to TV stations will apply to Subscription TV stations except, during STV-encoded programming such station identification is not required. However, a station identification announcement will be made immediately prior to and following the encoded Subscription TV program period.***~~ [Reserved]

(e) Transport Stream ID (TSID) values are identification numbers assigned to stations by the FCC and stored in the Commission's online database. Two sequential values are assigned to each station.

(1) All TV and Class A TV stations shall transmit their assigned odd-numbered TSID.

(2) In ATSC 3.0, a similar value is used called a Bit Stream ID (BSID). Stations operating in ATSC 3.0 mode shall utilize their assigned even-numbered TSID as their BSID, consistent with paragraph (1) of this section.

49. Section 73.1207 is amended by revising paragraph (b)(2) to read as follows:

* * * * *

(b) * * *

(1) * * *

(2) Permission must be obtained from the originating station to rebroadcast any subsidiary communications transmitted by means of a multiplex subcarrier ~~**or telecommunications service on the vertical blanking interval or in the visual signal of a television signal**~~.

(3) * * *

(4) * * *

* * * * *

50. Section 73.1216 is amended by adding paragraphs (a)(1) through (a)(3) and (d), removing the Notes to read as follows:

(a) * * *

(1) A contest is a scheme in which a prize is offered or awarded, based upon chance, diligence, knowledge or skill, to members of the public;

(2) Material terms include those factors which define the operation of the contest and which affect participation therein. Although the material terms may vary widely depending upon the exact nature of the contest, they will generally include: How to enter or participate; eligibility restrictions; entry deadline dates; whether prizes can be won; when prizes can be won; the extent, nature and value of prizes; basis for valuation of prizes; time and means of selection of winners; and/or tie-breaking procedures.

(3) In general, the time and manner of disclosure of the material terms of a contest are within the licensee's discretion. However, the obligation to disclose the material terms arises at the time the audience is first told how to enter or participate and continues thereafter.

* * * * *

(d) This section is not applicable to licensee-conducted contests not broadcast or advertised to the general public or to a substantial segment thereof, to contests in which the general public is not requested or permitted to participate, to the commercial advertisement of non-licensee-conducted contests, or to a contest conducted by a non-broadcast division of the licensee or by a non-broadcast company related to the licensee.

~~**Note 1 to § 73.1216:**~~

~~**For the purposes of this section:**~~

~~**(a) A contest is a scheme in which a prize is offered or awarded, based upon chance, diligence, knowledge or skill, to members of the public.**~~

~~**(b) Material terms include those factors which define the operation of the contest and which affect participation therein. Although the material terms may vary widely depending upon the exact nature of the contest, they will generally include: How to enter or participate; eligibility restrictions; entry deadline dates; whether prizes can be won; when prizes can be won; the extent, nature and value of prizes; basis for valuation of prizes; time and means of selection of winners; and/or tie-breaking procedures.**~~

~~**Note 2 to § 73.1216:**~~

~~**In general, the time and manner of disclosure of the material terms of a contest are within the licensee's discretion. However, the obligation to disclose the material terms arises at the time the audience is first told how to enter or participate and continues thereafter.**~~

~~**Note 3 to § 73.1216:**~~

~~**This section is not applicable to licensee-conducted contests not broadcast or advertised to the general public or to a substantial segment thereof, to contests in which the general public is not requested or permitted to participate, to the commercial advertisement of non-licensee-conducted contests, or to a contest conducted by a non-broadcast division of the licensee or by a non-broadcast company related to the licensee.**~~

51. Revise 73.1217 to read as follows:

(a) No licensee or permittee of any broadcast station shall broadcast false information concerning a crime or a catastrophe if:

(~~**a**~~1) The licensee knows this information is false;

(~~**b**~~2) It is fore**s**eeable that broadcast of the information will cause substantial public harm, and

(~~**c**~~3) Broadcast of the information does in fact directly cause substantial public harm.

(b) Any programming accompanied by a disclaimer will be presumed not to pose foreseeable harm if the disclaimer clearly characterizes the program as a fiction and is presented in a way that is reasonable under the circumstances.

(c) For purposes of this rule, "public harm" must begin immediately, and cause direct and actual damage to property or to the health or safety of the general public, or diversion of law enforcement or other public health and safety authorities from their duties. The public harm will be deemed foreseeable if the licensee could expect with a significant degree of certainty that public harm would occur. A "crime" is any act or omission that makes the offender subject to criminal punishment by law. A "catastrophe" is a disaster or imminent disaster involving violent or sudden event affecting the public.

~~**Note:**~~

~~**For purposes of this rule, "public harm" must begin immediately, and cause direct and actual damage to property or to the health or safety of the general public, or diversion of law enforcement or other public health and safety authorities from their duties. The public harm will be deemed foreseeable if the licensee could expect with a significant degree of certainty that public harm would occur. A "crime" is any act or omission that makes the offender subject to criminal punishment by law. A "catastrophe" is a disaster or imminent disaster involving violent or sudden event affecting the public.**~~

52. Section 73.1250 is amended by revising paragraph (e) to read as follows:

* * * * *

(e) Immediately upon cessation of an emergency during which broadcast facilities were used for the transmission of point-to-point messages under paragraph (b) of this section, or when daytime facilities were used during nighttime hours by an AM station in accordance with paragraph (f) of this section, a report in letter form shall be forwarded to the FCC**'s main office indicated in 47 CFR 0.401(a)** ~~**in Washington, DC,**~~ setting forth the nature of the emergency, the dates and hours of the broadcasting of emergency information, and a brief description of the material carried during the emergency. A certification of compliance with the noncommercialization provision of paragraph (f) of this section must accompany the report where daytime facilities are used during nighttime hours by an AM station, together with a detailed showing, under the provisi~~s~~ons of that paragraph, that no other broadcast service existed or was adequate.

* * * * *

53. Section 73.1350 is amended by revising paragraph (h), and removing and reserving paragraph (f)(3) to read as follows:

* * * * *

(f) * * *

(1) * * *

(2) * * *

(3) ~~**TV visual waveform,** ***see*** **§ 73.691(b);**~~ [Reserved]

(4) * * *

(5) * * *

(6) * * *

* * * * *

(h) Whenever a transmission system control point is established at a location other than the main studio or transmitter, a letter of notification of that location must be sent to the FCC ~~**in Washington, DC, Attention: Audio Division (radio) or Video Division (television), Media Bureau**~~ **via a Change of Control Point Notice in LMS**, within 3 days of the initial use of that point. The letter should include a list of all control points in use, for clarity. This notification is not required if responsible station personnel can be contacted at the transmitter or studio site during hours of operation.

* * * * *

54. Section 73.1540 is amended by revising paragraph (a) to read as follows:

(a) The carrier frequency of each AM and FM station ~~**and the visual carrier frequency and the difference between the visual carrier and the aural carrier or center frequency of each TV and Class A TV station**~~ shall be measured or determined as often as necessary to ensure that they are maintained within the prescribed tolerances.

* * * * *

55. Section 73.1545 is amended by removing and reserving paragraph (c), and removing paragraph (e) and the Note to paragraph (e) to read as follows:

* * * * *

(c) ~~***TV stations.***~~ [Reserved]

~~**(1) The departure of the visual carrier frequency of a TV station may not exceed ±1000 Hz from the assigned visual carrier frequency.**~~ [Reserved]

~~**(2) The departure of the aural carrier frequency of a TV station may not exceed ±1000 Hz from the actual visual carrier frequency plus exactly 4.5 MHz.**~~ [Reserved]

* * * * *

~~**(e) *Class A TV stations.* The departure of the carrier frequency of Class A TV stations may not exceed the values specified in § 74.761 of this chapter. Provided, however, that Class A TV stations licensed to operate with a carrier offset, including those stations licensed with a maximum effective radiated power and/or antenna height greater than the values specified in their initial Class A TV station authorization, must comply with paragraph (e) of this section.**~~

~~**Note to paragraph (e):**~~

~~**At a date not later than nine months after release of the Memorandum Opinion and Order on Reconsideration in MM Docket No. 00-10 (the proceeding that established the Class A TV service), all licensed Class A stations must operate with a carrier frequency offset. See *Memorandum Opinion and Order on Reconsideration*, In the Matter of Establishment of a Class A Television Service, MM Docket No. 00-10, released April 13, 2001.**~~

56. Section 73.1560 is amended by revising paragraphs (a)(1), (c)(1) and (d), and removing and reserving paragraph (c)(2) to read as follows:

(a) * * *

(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 **2100 Schedule** 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.

(2) * * *

* * * * *

(c) * * *

(1) Except as provided in paragraph (d) of this section, the ~~**visual**~~ output power of a TV or Class A TV transmitter, as determined by the procedures specified in ~~**See.**~~ **§** 73.664, must be maintained as near as is practicable to the authorized transmitter output power and may not be less than 80% nor more than 110% of the authorized power.

(2) ~~**The output power of the aural transmitter shall be maintained to provide an aural carrier ERP not to exceed 22% of the peak authorized visual ERP.**~~ [Reserved]

(3) * * *

(d) ***Reduced power operation.*** In the event it becomes technically impossible to operate at authorized power, a broadcast station may operate at reduced power for a period of not more than 30 days without specific authority from the FCC. If operation at reduced power will exceed 10 consecutive days, notification must be made to the FCC ~~**in Washington, DC, Attention: Audio Division (radio) or Video Division (television), Media Bureau**~~ **in a Reduced Power Notification via LMS**, not later than the 10th day of the lower power operation. In the event that normal power is restored within the 30 day period, the licensee must notify the FCC of the date that normal operation was restored. If causes beyond the control of the licensee prevent restoration of the authorized power within 30 days, a request for Special Temporary Authority (see § 73.1635) must be made to the FCC ~~**in Washington, DC**~~ **via LMS** for additional time as may be necessary.

57. Section 73.1570 is amended by revising the section heading, and removing and reserving paragraph (b)(3) to read as follows:

§ 73.1570 Modulation levels: AM~~**,**~~ and FM~~**, TV and Class A TV aural.**~~

* * * * *

(b) * * *

(1) * * *

(i) * * *

(ii) * * *

(2) * * *

(i) * * *

(ii) * * *

(3) ~~***TV and Class A TV stations.*** **In no case shall the total modulation of the aural carrier exceed 100% on peaks of frequent recurrence, unless some other peak modulation level is specified in an instrument of authorization. For monophonic transmissions, 100% modulation is defined as ±25 kHz.**~~ [Reserved]

* * * * *

58. Section 73.1590 is amended by removing and reserving paragraphs (a)(5), (c)(1), and (c)(3) to read as follows:

(a) * * *

(1) * * *

(2) * * *

(3) * * *

(4) * * *

(5) ~~**Installation of TV stereophonic or subcarrier transmission equipment pursuant to §§ 73.669 and 73.1690.**~~ [Reserved]

(6) * * *

(7) * * *

* * * * *

(c) * * *

(1) ~~**Field strength or voltage of the lower side-band for a modulating frequency of 1.25 MHz or greater, (including 3.58 MHz for color), and of the upper side-band for a modulating frequency of 4.75 MHz or greater.**~~ [Reserved]

(2) * * *

(3) ~~**Photographs of a test pattern taken from a receiver or monitor connected to the transmitter output.**~~ [Reserved]

(4) * * *

(5) * * *

* * * * *

59. Section 73.1615 is amended by revising paragraphs (b)(3) and (c)(1) to read as follows:

* * * * *

(b) * * *

(1) * * *

(2) * * *

(3) Operate in a nondirectional mode during the presently licensed hours of directional operation with power reduced to 25% or less of the nominal licensed power, or whatever higher power, not exceeding licensed power, will insure that the radiated field strength specified by the license is not exceeded at any given a**s**zimuth for the corresponding hours of directional operation, or

(4) * * *

(5) * * *

(6) * * *

(c) * * *

(1) Should it be necessary to continue the procedures in either paragraph (a) or (b) of this section beyond 30 days, **a Silent STA application or an Engineering STA application must be filed via LMS.** ~~**an informal letter request signed by the licensee or the licensee's representative must be sent to the FCC in Washington, DC. prior to the 30th day.**~~

(2) * * *

* * * * *

60. Section 73.1620 is amended by revising paragraphs (a)(1) through (a)(3), and removing paragraphs (f) and (g) to read as follows:

(a) * * *

(1) The permittee of a nondirectional AM or FM station, or a nondirectional or directional TV or Class A TV station, may begin program tests upon notification to the FCC in **a "Program Test Authority" filing via LMS** ~~**Washington, DC**~~ provided that within 10 days thereafter, an application for a license is filed with the FCC in Washington, DC. **Television, Class A, TV translator, and low power television broadcast stations authorized on channel 14 must comply with § 73.617(b)(2)(ii).**

(2) The permittee of an FM station with a directional antenna system must file an application for license on FCC Form **2100 Schedule** 302-FM **in LMS** requesting authority to commence program test operations at full power ~~**with the FCC in Washington, D.C**~~. This license application must be filed at least 10 days prior to the date on which full power operations are desired to commence. The application for license must contain any exhibits called for by conditions on the construction permit. The staff will review the license application and the request for program test authority and issue a letter notifying the applicant whether full power operation has been approved. Upon filing of the license application and related exhibits, and while awaiting approval of full power operation, the FM permittee may operate the directional antenna at one half (50%) of the authorized effective radiated power. Alternatively, the permittee may continue operation with its existing licensed facilities pending the issuance of program test authority at the full effective radiated power by the staff.

(3) FM licensees replacing a directional antenna pursuant to § 73.1690 (c)(2) without changes which require a construction permit (*see* § 73.1690(b)) may immediately commence program test operations with the new antenna at one half (50%) of the authorized ERP upon installation. If the directional antenna replacement is an EXACT duplicate of the antenna being replaced (*i.e.*, same manufacturer, antenna model number, and measured composite pattern), program tests may commence with the new

antenna at the full authorized power upon installation. The licensee must file a modification of license application on FCC Form **2100 Schedule** 302-FM within 10 days of commencing operations with the newly installed antenna, and the license application must contain all of the exhibits required by § 73.1690(c)(2). After review of the modification-of-license application to cover the antenna change, the Commission will issue a letter notifying the applicant whether program test operation at the full authorized power has been approved for the replacement directional antenna.

(4) * * *

(5) * * *

* * * * *

~~**(f) The licensee of a UHF TV station which is not in operation on, but assigned to, the same allocated channel which a 1000 watt UHF translator station is authorized to use (see § 73.3516, "Specification of facilities"), shall notify the licensee of the translator station, in writing, at least 10 days prior to commencing or resuming operation. The TV station licensee shall also certify to the FCC in Washington, DC that such advance notice has been given to the translator station licensee.**~~

~~**(g)** ***Reports required.*** **In their application for a license to cover a construction permit and on the first anniversary of the commencement of program tests, applicants for new broadcast facilities that were granted after designation for a comparative hearing as a result of a post designation settlement or a decision favoring them after comparative consideration must report.**~~

~~**(1) Any deviations from comparative proposals relating to integration of ownership and management and diversification of the media of mass communciation contained in their application for a construction permit at the time such application was granted; and**~~

~~**(2) Any deviations from an active/passive ownership structure proposed in their application for a construction permit at the time such application was granted.**~~

~~**(3) The reports referred to in paragraphs (g)(1) and (2) of this section shall not be required in any case in which the order granting the application relieved the applicant of the obligation to adhere to such proposals.**~~

61. Section 73.1635 is amended by revising paragraphs (a)(2), (a)(3), and (a)(5) to read as follows:

(a) * * *

(1) * * *

(2) The request is to be **filed electronically in LMS using the "Engineering STA Application"** ~~**made by letter**~~ and shall fully describe the proposed operation and the necessity for the requested STA. Such letter requests shall be signed by the licensee or the licensee's representative.

(3) A request for a STA necessitated by unforeseen equipment damage or failure may be made without regard to the procedural requirements of this section (e.g. via ~~**telegram**~~ **e-mail** or telephone). Any request made pursuant to this paragraph shall be followed by a written confirmation request conforming to the requirements of paragraph (a)(2) of this section. Confirmation requests shall be submitted within 24 hours. (See also § 73.1680 Emergency Antennas).

(4) * * *

(5) Certain rules specify special considerations and procedures in situations requiring an STA or permit temporary operation at variance without prior authorization from the FCC when notification is filed as prescribed in the particular rules. See § 73.62, Directional antenna system tolerances; § 73.157, Antenna testing during daytime; § 73.158, Directional antenna monitoring points~~; § 73.691, Visual modulation monitoring~~; § 73.1250, Broadcasting emergency information; § 73.1350, Transmission system operation; § 73.1560, Operating power and mode tolerances; § 73.1570, Modulation levels: AM, **and** FM~~, TV and Class A TV aural~~; § 73.1615, Operation during modification of facilities; § 73.1680, Emergency antennas; and § 73.1740, Minimum operating schedule.

* * * * *

62. Section 73.1675 is amended by revising paragraphs (a)(1)(iii) and (b) to read as follows:

(a)

(1) * * *

(i) * * *

(ii) * * *

(iii) TV stations: ~~The Grade B coverage contours.~~ **The noise limited contour as defined in §73.619(c).**

(iv) * * *

(2) * * *

(b) An application for a construction permit to install a new auxiliary antenna, or to make changes in an existing auxiliary antenna for which prior FCC authorization is required (see § 73.1690), must be filed **electronically in LMS using FCC Form 2100 (see § 73.3500 for Schedules) for TV and FM stations, or** on **FCC Form 2100, Schedule 340** for noncommercial educational **FM** stations**, and on FCC Form 301 for AM stations**.

* * * * *

63. Section 73.1690 is amended by revising paragraphs (b) introductory text, (b)(3), and (c)(3) to read as follows:

* * * * *

(b) The following changes may be made only after the grant of a construction permit application on FCC **Form 2100 (see § 73.3500 for Schedules) for TV and FM stations,** Form 301 for **AM** ~~**commercial**~~ stations**,** or Form **2100, Schedule** 340 for noncommercial educational stations:

(1) * * *

(2) * * *

(3) Any change which would require an increase along any azimuth in the composite directional antenna pattern of an FM station from the composite directional antenna pattern authorized (see § 73.316), or any increase from the authorized directional antenna pattern for a TV broadcast (see § 73.6**28**5) or Class A TV station (see § 73.6025).

(4) * * *

(5) * * *

(6) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(7) * * *

(8) * * *

(9) * * *

(c) * * *

(1) * * *

(2) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(v) * * *

(3) A directional TV on Channels 2 through 13 or 22 through 36 or a directional Class A TV on Channels 2 through 13 or 22 through 36, or a directional TV or Class A TV station on Channels 15 through 21 which is in excess of 341 km (212 miles) from a cochannel land mobile operation or in excess of 225 km (140 miles) from a first-adjacent channel land mobile operation (*see* § 74.709(a) and (b) of this chapter for tables of urban areas and reference coordinates of potentially affected land mobile operations), may replace a directional TV or Class A TV antenna by a license modification application, if the proposed horizontal theoretical directional antenna pattern does not exceed the licensed horizontal directional antenna pattern at any azimuth and where no change in effective radiated power will result. The modification of license application on **Form 2100 (see § 73.3500 for**

Schedules) ~~**Form 302-TV or Form 302-CA**~~ must contain all of the data set forth in § 73.**625(c)(3)**~~**685(f)**~~ or § 73.6025(a), as applicable.

(4) * * *

(5) * * *

(6) * * *

(7) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(8) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(v) * * *

(9) * * *

(10) * * *

(11) * * *

* * * * *

64. Section 73.1740 is amended by revising paragraph (a)(4) to read as follows:

(a) * * *

(1) * * *

(i) * * *

(2) * * *

(i) * * *

(A) * * *

(B) * * *

(C) * * *

(D) * * *

(ii) * * *

(iii) * * *

(3) * * *

(4) In the event that causes beyond the control of a licensee make it impossible to adhere to the operating schedule of this section or to continue operating, the station may limit or discontinue operation for a period of not more than 30 days without further authority from the FCC. **A "Reduced Power" or "Suspension of Operation"** Notification must be **made via LMS** ~~**sent to the FCC in Washington, D.C.**~~ not later than the 10th day of limited or discontinued operation. During such period, the licensee shall continue to adhere to the requirements in the station license pertaining to the lighting of antenna structures. In the event normal operation is restored prior to the expiration of the 30 day period, the licensee will so notify the FCC of this date. If the causes beyond the control of the licensee make it impossible to comply within the allowed period, informal written request shall be made to the FCC no later than the 30th day for such additional time as may be deemed necessary.

(5) * * *

* * * * *

65. Revise section 73.1750 to read as follows:

The licensee of each station shall **provide notification to the FCC in a "Cancellation Application" via LMS** ~~**notify by letter the FCC in Washington, DC, Attention: Audio Division (radio) or Video Division (television), Media Bureau**~~, of the permanent discontinuance of operation at least two days before operation is discontinued. Immediately after discontinuance of operation, the licensee shall forward the station license and other instruments of authorization to the FCC, Attention: Audio Division (radio) or Video Division (television), Media Bureau, for cancellation. The license of any station that fails to transmit broadcast signals for any consecutive 12 month period expires as a matter of law at the end of that period, notwithstanding any provision, term, or condition of the license to the contrary. If a licensee surrenders its license pursuant to an interference reduction agreement, and its surrender is contingent on the grant of another application, the licensee must identify in its notification the contingencies involved.

66. Section 73.2080 is amended by revising paragraphs (c)(6) and (f)(1) through (f)(5) to read as follows:

* * * * *

(c) * * *

(1) * * *

(i) * * *

(ii) * * *

(2) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(v) * * *

(vi) * * *

(vii) * * *

(viii) * * *

(ix) * * *

(x) * * *

(xi) * * *

(xii) * * *

(xiii) * * *

(xiv) * * *

(xv) * * *

(xvi) * * *

(3) * * *

(4) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(v) * * *

(vi) * * *

(vii) * * *

(5) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(v) * * *

(vi) * * *

(6) Annually, on the anniversary of the date a station is due to file its renewal application, the station shall place in its public file, maintained pursuant to § 73.3526 or § 73.3527, and on its web site, if it has one, an EEO public file report containing the following information (although if any broadcast licensee acquires a station pursuant to FCC **Form 2100 Schedule** 314 or FCC **Form 2100 Schedule** 315 during the twelve months covered by the EEO public file report, its EEO public file report shall cover the period starting with the date it acquired the station):

* * * * *

(f) * * *

(1) All broadcast stations, including those that are part of an employment unit with fewer than five full-time employees, shall file a Broadcast Equal Employment Opportunity Program Report (Form **2100 Schedule** 396) with their renewal application. Form **2100 Schedule** 396 is filed on the date the station is due to file its application for renewal of license. If a broadcast licensee acquires a station pursuant to FCC Form **2100 Schedule** 314 or FCC Form **2100 Schedule** 315 during the period that is to form the basis for the Form **2100 Schedule** 396, information provided on its Form **2100 Schedule** 396 should cover the licensee's EEO recruitment activity during the period starting with the date it acquired the station. Stations are required to maintain a copy of their Form **2100 Schedule** 396 in the station's public file in accordance with the provisions of §§ 73.3526 and 73.3527.

(2) The Commission will conduct a mid-term review of the employment practices of each broadcast television station that is part of an employment unit of five or more full-time employees and each radio station that is part of an employment unit of eleven or more full-time employees, four years following the station's most recent license expiration date as specified in § 73.1020. If a broadcast licensee acquires a station pursuant to FCC Form **2100 Schedule** 314 or FCC Form **2100 Schedule** 315 during the period that is to form the basis for the mid-term review, that review will cover the licensee's EEO recruitment activity during the period starting with the date it acquired the station.

(3) If a station is subject to a time brokerage agreement, the licensee shall file Form**s 2100 Schedule** 396~~**, Forms 397,**~~ and EEO public file reports concerning only its own recruitment activity. If a

licensee is a broker of another station or stations, the licensee-broker shall include its recruitment activity for the brokered station(s) in determining the bases of Form**s 2100 Schedule** 396~~**, Forms 397**~~ and the EEO public file reports for its own station. If a licensee-broker owns more than one station, it shall include its recruitment activity for the brokered station in the Form**s 2100 Schedule** 396~~**, Forms 397,**~~ and EEO public file reports filed for its own station that is most closely affiliated with, and in the same market as, the brokered station. If a licensee-broker does not own a station in the same market as the brokered station, then it shall include its recruitment activity for the brokered station in the Form**s 2100 Schedule** 396~~**, Forms 397,**~~ and EEO public file reports filed for its own station that is geographically closest to the brokered station.

(4) Broadcast stations subject to this section shall maintain records of their recruitment activity necessary to demonstrate that they are in compliance with the EEO rule. Stations shall ensure that they maintain records sufficient to verify the accuracy of information provided in Form**s 2100 Schedule** 396~~**, Forms 397,**~~ and EEO public file reports. To determine compliance with the EEO rule, the Commission may conduct inquiries of licensees at random or if it has evidence of a possible violation of the EEO rule. In addition, the Commission will conduct random audits. Specifically, each year approximately five percent of all licensees in the television and radio services will be randomly selected for audit, ensuring that, even though the number of radio licensees is significantly larger than television licensees, both services are represented in the audit process. Upon request, stations shall make records available to the Commission for its review.

(5) The public may file complaints throughout the license term based on ~~**a station's Form 397 or**~~ the contents of a station's public file. Provisions concerning filing, withdrawing, or non-filing of informal objections or petitions to deny license renewal, assignment, or transfer applications are delineated in §§ 73.3584 and 73.3587-3589 of the Commission's rules.

* * * * *

67. Section 73.3500 is amended by revising paragraphs (a) and (b) and removing paragraph (b)(1) to read as follows:

(a) Following are the FCC broadcast application and report forms, listed by number.

Form number	Title
175	Application to Participate in an FCC Auction
301	Application for **Construction Permit for** ~~**Authority to Construct or Make Changes in**~~ a Commercial Broadcast Station. **(the Form 301 is used for new AM construction permits or AM station modifications).**
~~**302-FM**~~	~~**Application for FM Broadcast Station License.**~~
~~**302-TV**~~	~~**Application for Television Broadcast Station License.**~~
~~**303-S Application for Renewal of License for AM, FM, TV, Translator, or LPTV Station.**~~	

Form number	Title
2100 Schedule A	**Application for Authority to Construct or Make Changes in a TV Commercial Broadcast/Noncommercial Educational Broadcast Station.**
2100 Schedule 301-FM	**Application for Commercial FM Station Construction Permit**
~~**301-A**~~	~~**Application for Authority to Operate a Broadcast Station by Remote Control or to Make Changes in a Remote Control Authorization.**~~
302-AM	Application for AM Broadcast Station License.
~~**302-CA**~~	~~**Application for Class A Television Broadcasting Station Construction Permit or License.**~~
2100 Schedule E	**Application for Class A Television Broadcasting Station Construction Permit.**
2100 Schedule 302-FM	**Application for FM Station License.**
2100 Schedule B	**Application for Television Broadcast Station License.**
2100 Schedule F	**Application for Class A Television Broadcast Station License**
2100 Schedule 303-S	**Application for Renewal of License for Commercial or Noncommercial AM, FM, TV, Class A TV, FM Translator, TV Translator, LPTV, or LPFM Station**
~~**307**~~	~~**Application for Extension of Broadcast Construction Permit or to Replace Expired Construction Permit.**~~
308	Application for Permit to Deliver Programs to Foreign Broadcast Stations.
309	Application for Authority to Construct or Make Changes in an International or Experimental Broadcast Station.
310	Application for an International or Experimental Broadcast Station License.
311	Application for Renewal of an International or Experimental Broadcast Station License.
~~**314**~~	~~**Application for Consent to Assignment of Broadcast Station Construction Permit or License.**~~
2100 Schedule 314	**Application for Consent to Assignment of Broadcast Station Construction Permit or License.**
~~**315**~~	~~**Application for Consent to Transfer of Control of Corporation Holding Broadcast Station Construction Permit or License.**~~

Form number	Title
2100 Schedule 315	Application for Consent to Transfer of Control of Entity Holding Broadcast Station Construction Permit or License.
~~316~~	~~Application for Consent to Assignment of Broadcast Station Construction Permit or License or Transfer of Control of Corporation Holding Broadcast Station Construction Permit or License.~~
2100 Schedule 316	Application for Consent to Assign Broadcast Station Construction Permit or License or Transfer Control of Entity Holding Broadcast Station Construction Permit or License.
2100 Schedule 318	Application for Low Power FM Station Construction Permit.
2100 Schedule 319	Application for Low Power FM Station License.
323	Ownership Report for Commercial Broadcast Stations.
323-E	Ownership Report for Noncommercial Educational Broadcast Stations.
~~340~~	~~Application for Authority to Construct or Make Changes in a Noncommercial Educational Broadcast Station.~~
2100 Schedule 340	Application for Noncommercial Educational FM Station Construction Permit.
~~345~~	~~Application for Consent to Assignment of a TV or FM Translator Station Construction Permit or License.~~
2100 Schedule 345	Application for Consent to Assign Construction Permit or License for TV or FM Translator or Low Power TV Station, or to Transfer Control of Entity Holding TV or FM Translator or Low Power TV Station.
2100 Schedule C	Application for Authority to Construct or Make Changes in a Low Power TV or TV Translator ~~TV Booster~~ Station.
2100 Schedule D	Application for a Low Power TV or TV Translator ~~or TV Booster~~ Station License.
~~346~~	~~Application for Authority to Construct or Make Changes in a Low Power TV, TV Translator or TV Booster Station.~~
~~347~~	~~Application for a Low Power TV, TV Translator or TV Booster Station License.~~
~~349~~	~~Application for Authority to Construct or Make Changes in an FM Translator or FM Booster Station.~~
2100 Schedule 349	Application for FM Translator or FM Booster Station Construction Permit.

Form number	Title
~~**350**~~	~~**Application for an FM Translator or FM Booster Station License.**~~
2100 Schedule 350	**Application for FM Translator or FM Booster Station License.**
395-B	Annual Employment Report and instructions.
~~**396**~~	~~**Broadcast Equal Employment Opportunity Program Report.**~~
2100 Schedule 396	**Broadcast Equal Employment Opportunity Program Report.**
~~**396-A**~~	~~**Broadcast Equal Employment Opportunity Model Program Report.**~~
2100 Schedule 396-A	**Broadcast Equal Employment Opportunity Model Program Report.**
~~**398**~~	~~**Children's Television Programming Report**~~
2100 Schedule H	**Children's Television Programming Report.**
601	FCC Application for Wireless Telecommunications Bureau Radio Service Authorization.
603	FCC Wireless Telecommunications Bureau Application for Assignments of Authorization and Transfers of Control.

(b) **Any application on Form 2100 must be filed electronically.** ~~**Following are the FCC broadcast application and report forms, listed by number, that must be filed electronically in accordance with the filing instructions set forth in the application and report form.**~~

~~**(1) Form 398, in electronic form as of January 10, 1999.**~~

68. Section 73.3516 is amended by revising paragraphs (e) introductory text and (e)(1) to read as follows:

* * * * *

(e) ~~**An application for construction permit for a new broadcast station or for modification of construction permit or license of a previously authorized broadcast station will not be accepted for filing if it is mutually exclusive with an application for renewal of license of an existing broadcast station unless the application for renewal of license is filed on or before May 1, 1995 and unless the mutually exclusive construction permit application is tendered for filing by the end of the first day of the last full calendar month of the expiring license term.**~~ A petition to deny an application for renewal of license of an existing broadcast station will be considered as timely filed if it is tendered for filing by the end of the first day of the last full calendar month of the expiring license term.

(1) If the license renewal application is not timely filed as prescribed in § 73.3539, the deadline for filing petitions to deny thereto is the 90th day after the FCC gives public notice that it has accepted the late-filed renewal application for filing. ~~**In the case of a renewal application filed on or before May 1, 1995, if the license renewal application is not timely filed as prescribed in § 73.3539, the**~~

~~**deadline for filing applications mutually exclusive therewith is the 90th day after the FCC gives public notice that it has accepted the late-filed renewal application for filing.**~~

(2) * * *

(3) * * *

69. Section 73.3519 is amended by revising paragraph (a) to read as follows::

(a) Where the FCC has denied an application for a new station or for any modification of services or facilities, or dismissed such application with prejudice, no like application involving service of the same kind for substantially the same area by substantially the same applicant, or his successor or assignee, or on behalf or for the benefit of the original parties in interest, may be filed within 12 months from the effective date of the FCC's action. ~~**However, applicants whose applications have been denied in a comparative hearing may apply immediately for another available facility.**~~

* * * * *

70. Revise section 73.3521 to read as follows:

§ 73.3521 Mutually exclusive applications for low power television~~,~~ and television translator~~**s and television booster**~~ **stations**.

When there is a pending application for a new low power television~~**,**~~ **or** television translator~~**, or television booster**~~ station, or for major changes in an existing station, no other application which would be directly mutually exclusive with the pending application may be filed by the same applicant or by any applicant in which any individual in common with the pending application has any interest, direct or indirect, except that interests or less than 1% will not be considered.

71. § 73.3523 [Removed and Reserved]

§ 73.3523 ~~**Dismissal of applications in renewal proceedings.**~~ [Reserved]

~~**(a) An applicant for construction permit, that has filed an application that is mutually exclusive with an application for renewal of a license of an AM, FM or television station (hereinafter competing applicant") filed on or before May 1, 1995, and seeks to dismiss or withdraw its application and thereby remove a conflict between applications pending before the Commission, must obtain the approval of the Commission.**~~

~~**(b) If a competing applicant seeks to dismiss or withdraw its application prior to the Initial Decision stage of the hearing on its application, it must submit to the Commission a request for approval of the dismissal or withdrawal of its application, a copy of any written agreement related to the dismissal or withdrawal of its application, and an affidavit setting forth:**~~

~~**(1) A certification that neither the applicant nor its principals has received or will receive any money or other consideration in exchange for dismissing or withdrawing its application;**~~

~~**(2) A statement that its application was not filed for the purpose of reaching or carrying out an agreement with any other applicant regarding the dismissal or withdrawal of its application; and**~~

~~(3) The terms of any oral agreement relating to the dismissal or withdrawal of its application.~~

~~In addition, within 5 days of the applicant's request for approval, each remaining competing applicant and the renewal applicant must submit an affidavit setting forth:~~

~~(4) A certification that neither the applicant nor its principals has paid or will pay any money or other consideration in exchange for the dismissal or withdrawal of the application; and~~

~~(5) The terms of any oral agreement relating to the dismissal or withdrawal of the application.~~

~~(c) If a competing applicant seeks to dismiss or withdraw its application after the Initial Decision stage of the hearing on its application, it must submit to the Commission a request for approval of the dismissal or withdrawal of its application, a copy of the any written agreement related to the dismissal or withdrawal, and an affidavit setting forth:~~

~~(1) A certification that neither the applicant nor its principals has received or will receive any money or other consideration in excess of the legitimate and prudent expenses of the applicant;~~

~~(2) The exact nature and amount of any consideration paid or promised;~~

~~(3) An itemized accounting of the expenses for which it seeks reimbursement;~~

~~(4) A statement that its application was not filed for the purpose of reaching or carrying out an agreement with any other applicant regarding the dismissal or withdrawal of its application; and~~

~~(5) The terms of any oral agreement relating to the dismissal or withdrawal of its application.~~

~~In addition, within 5 days of the applicant's request for approval, each remaining party to any written or oral agreement must submit an affidavit setting forth:~~

~~(6) A certification that neither the applicant nor its principals has paid or will pay money or other consideration in excess of the legitimate and prudent expenses of the withdrawing applicant in exchange for the dismissal or withdrawal of the application; and~~

~~(7) The terms of any oral agreement relating the dismissal or withdrawal of the application.~~

~~(d) For the purpose of this section:~~

~~(1) Affidavits filed pursuant to this section shall be executed by the applicant, permittee or licensee, if an individual; a partner having personal knowledge of the facts, if a partnership; or an officer having personal knowledge of the facts, if a corporation or association.~~

~~(2) An application shall be deemed to be pending before the Commission from the time an application is filed with Commission until an order of the Commission granting or denying the application is no longer subject to reconsideration by the Commission or to review by any court.~~

~~(3) "Legitimate and prudent expenses" are those expenses reasonably incurred by an applicant in preparing, filing, and prosecuting its application.~~

~~**(4) "Other consideration" consists of financial concessions, including but not limited to the transfer of assets or the provision of tangible pecuniary benefit, as well as nonfinancial concessions that confer any type of benefit on the recipient.**~~

72. Section 73.3525 is amended by revising paragraphs (a) introductory text and (b) and removing the Note to read as follows.

(a) ~~**Except as provided in § 73.3523 regarding dismissal of applications in comparative renewal proceedings, w**~~**W**henever applicants for a construction permit for a broadcast station enter into an agreement to procure the removal of a conflict between applications pending before the FCC by withdrawal or amendment of an application or by its dismissal pursuant to § 73.3568, all parties thereto shall, within 5 days after entering into the agreement, file with the FCC a joint request for approval of such agreement. The joint request shall be accompanied by a copy of the agreement, including any ancillary agreements, and an affidavit of each party to the agreement setting forth:

(1) * * *

(2) * * *

(3) * * *

(4) * * *

(5) * * *

(6) * * *

(b) Except where a joint request is filed pursuant to paragraph (a) of this section, any applicant filing an amendment pursuant to § 73.3522 (b)(1) and (c), or a request for dismissal pursuant to § 73.3568 (b)(1) and (c), which would remove a conflict with another pending application; or a petition for leave to amend pursuant to § 73.3522(b)(2) which would permit a grant of the amended application or an application previously in conflict with the amended application; or a request for dismissal pursuant to § 73.3568(b)(2), shall file with it an affidavit as to whether or not consideration (including an agreement for merger of interests) has been promised to or received by such applicant, directly or indirectly, in connection with the amendment, petition or request. **Although § 74.780 of the Rules makes this section generally applicable to low power TV and TV translators stations, paragraph (b) of this section shall not be applicable to such stations.**

* * * * *

~~**Note:**~~

~~**Although § 74.780 of the Rules makes this section generally applicable to low power TV, and TV translators, and TV booster stations, paragraph (b) of this section shall not be applicable to such stations.**~~

73. Section 73.3533 is amended by revising paragraphs (a)(1), (a)(4) through (a)(7), and (b), and adding paragraph (a)(8) to read as follows:

(a) * * *

(1) FCC Form ~~301~~**2100**, **Schedule A (TV); FCC Form 2100, Schedule 301-FM (FM),** "Application for Authority to Construct or Make Changes in an Existing Commercial Broadcast Station."

(2) * * *

(3) * * *

(4) FCC Form ~~340~~**2100**, **Schedule A (TV); FCC Form 2100, Schedule 340 (FM),** "Application for Authority to Construct or Make Changes in a Noncommercial Educational Broadcast Station."

(5) FCC Form ~~346~~**2100**, **Schedule C,** "Application for Authority to Construct or Make Changes in a Low Power TV~~,~~ **or** TV Translator ~~**or TV Booster**~~ Station."

(6) FCC Form ~~349~~**2100**, **Schedule 349,** "Application for Authority to Construct or Make Changes in an FM Translator or FM Booster Station."

(7) FCC Form ~~318~~**2100**, **Schedule 318,** "Application for Construction Permit for a Low Power FM Broadcast Station."

(8) FCC Form 2100, Schedule E, "Application for Authority to Make Changes in a Class A TV Station."

(b) The filing of an application for modification of construction permit does not extend the expiration date of the construction permit. ~~**Extension of the expiration date must be applied for on FCC Form 307, in accordance with the provisions of § 73.3534.**~~

* * * * *

74. Section 73.3536 is amended by revising paragraphs (b)(1)(ii) through (b)(1)(iii), (b)(4) through (b)(6), and (c) to read as follows:

* * * * *

(b) * * *

(1)

(i) * * *

(ii) Form ~~**302-FM**~~ **2100, Schedule 302-FM** for FM stations, "Application for FM Station License."

(iii) Form ~~**302-TV**~~ **2100, Schedule B** for television stations, "Application for TV Station Broadcast License."

(2) * * *

(3) * * *

(4) FCC Form ~~**347**~~ **2100**, **Schedule D,** "Application for a Low Power TV~~,~~ **or** TV Translator ~~**or TV Booster**~~ Station License."

(5) FCC Form ~~350~~ **2100**, **Schedule 350,** "Application for an FM Translator or FM Booster Station License."

(6) FCC Form ~~319~~ **2100**, **Schedule 319,** "Application for a Low Power FM Broadcast Station License."

(c) Eligible low power television stations which have been granted a certificate of eligibility may file FCC Form ~~302-CA~~ **2100**, **Schedule F,** "Application for Class A Television Broadcast Station ~~Construction Permit Or~~ License."

75. Section 73.3540 is amended by revising paragraphs (c), (d), (e), and (f) introductory text to read as follows:

* * * * * *

(c) Application for consent to the assignment of construction permit or license must be filed on FCC Form **2100 Schedule** 314 "Assignment of ~~l~~License **or Construction Permit**" or FCC Form **2100 Schedule** 316 ~~**"Short form"**~~ (See paragraph (f) of this section). For International Broadcast Stations, the application shall be filed electronically in the International Bureau Filing System (IBFS).

(d) Application for consent to the transfer of control of a**n entity** ~~**corporation**~~ holding a construction permit or license must be filed on FCC Form **2100 Schedule** 315 "Transfer of Control" or FCC Form **2100 Schedule** 316 ~~**"Short form"**~~ (see paragraph (f) of this section). For International Broadcast Stations, applications shall be filed electronically in IBFS.

(e) Application for consent to the assignment of construction permit or license or to the transfer of control of a**n entity** ~~**corporate**~~ licensee or permittee for an FM or TV translator station, a low power TV station and any associated auxiliary station, such as translator microwave relay stations and UHF translator booster stations, only must be filed on FCC Form **2100 Schedule** 345 "Application for **Consent to Assign Construction Permit or License for TV or FM Translator or Low Power TV Station or to** Transfer ~~**of**~~ Control of **Entity Holding TV or FM Translator** ~~**Corporate Licensee or Permittee, or Assignment of License or Permit for an FM or TV translator Station**~~, or a Low Power TV Station."

(f) The following assignment or transfer applications may be filed on FCC **Form 2100 Schedule 316** ~~**"Short form" 316**~~:

(1) * * *

(2) * * *

(3) * * *

(4) * * *

(5) * * *

(6) * * *

76. Section 73.3541 is amended by revising paragraph (b) to read as follows:

* * * * *

(b) Within 30 days after the occurrence of such death or legal disability, an application on FCC Form **2100 Schedule** 316 shall be filed requesting consent to involuntary assignment of such permit or license or for involuntary transfer of control of ~~**such corporation**~~ **the entity holding such permit or license,** to a person or entity legally qualified to succeed to the foregoing interests under the laws of the place having jurisdiction over the estate involved.

77. § 73.3543 [Removed]

~~**§ 73.3543 Application for renewal or modification of special service authorization.**~~

~~**(a) No new special service authorization will be issued. However, consideration will be given to renewal or modification of a special service authorization which was outstanding on February 3, 1958, providing a satisfactory showing has been made in regard to the following, among others:**~~

~~**(1) That the requested operation may not be granted on a regular basis under the existing rules governing the operation of AM stations;**~~

~~**(2) That experimental operation is not involved as provided for by § 73.1510 (Experimental authorizations); and**~~

~~**(3) That public interest, convenience and necessity will be served by the authorization requested.**~~

78. Section 73.3544 is amended by revising paragraphs (b) introductory text and (c) to read as follows:

* * * * *

(b) An ~~**informal application**~~ **electronic filing via LMS of an Administrative Update**, see § 73.3511(b), may be filed with the FCC ~~**in Washington, DC, Attention: Audio Division (radio) or Video Services Division (television), Media Bureau**~~, to cover the following changes:

(1) * * *

(2) * * *

(3) * * *

(c) A change in the name of the licensee where no change in ownership or control is involved may be accomplished by **electronically filing via LMS an Administrative Update** ~~**written notification by the licensee to the Commission**~~**.**

79. Revise section 73.3549 to read as follows:

Requests for extension of authority to operate without required monitors, transmission system indicating instruments, or encoders and decoders for monitoring and generating the EAS codes and Attention Signal should be made to the FCC **by electronically filing via LMS a STA** ~~**in Washington, DC, Attention: Audio Division (radio) or Video Division (television), Media Bureau**~~. Such requests must contain

information as to when and what steps were taken to repair or replace the defective equipment and a brief description of the alternative procedures being used while the equipment is out of service.

80. Section 73.3550 is amended by revising paragraphs (a), (b), (f), (i), (j), (k), and (m) to read as follows:

(a) All requests for new or modified call sign assignments for radio and television broadcast stations shall be made via **LMS with the FCC** ~~**the FCC's on-line call sign reservation and authorization system accessible through the Internet's World Wide Web by specifying** ***http://www.fcc.gov***~~. Licensees and permittees may utilize **LMS** ~~**this on-line system**~~ to determine the availability and licensing status of any call sign; to select an initial call sign for a new station; to change a station's currently assigned call sign; to modify an existing call sign by adding or deleting an "-FM**,**" ~~**or**~~ "-TV**,**" **or "-DT"** suffix; to exchange call signs with another licensee or permittee in the same service; or to reserve a different call sign for a station being transferred or assigned.

(b) No request for an initial call sign assignment will be accepted from a permittee for a new radio or full-service television station until the FCC has granted a construction permit. Each such permittee shall request the assignment of its station's initial call sign expeditiously following the grant of its construction permit. All initial construction permits for low power TV stations will be issued with a ~~**five character**~~ low power TV call sign~~**,**~~ in accordance with § 74.~~**783(d)**~~**791(a)** of this chapter.

* * * * *

(f) Only four-letter call signs (plus an LP, FM, TV**, DT,** or CA suffix, if used) will be assigned. The four letter call sign for LPFM stations will be followed by the suffix "-LP." However, subject to the other provisions of this section, a call sign of a station may be conformed to a commonly owned station holding a three-letter call assignment (plus FM, TV, **DT,** CA or LP suffixes, if used).

* * * * *

(i) The provisions of this section shall not apply to International broadcast stations or to stations authorized under part 74 of this chapter (except as provided in § 74.~~**783**~~**791**).

(j) A change in call sign assignment will be made effective on the date specified in the ~~**postcard**~~ **Call Sign Request Authorization generated by LMS** acknowledging the assignment of the requested new call sign and authorizing the change. Unless the requested change in call sign assignment is subject to a pending transfer or assignment application, the requester is required to include in its on-line call sign request a specific effective date to take place within 45 days of the submission of its electronic call sign request. Postponement of the effective date will be granted only in response to a timely request and for only the most compelling reasons.

(k) Four-letter combinations commencing with "W" or "K" which are assigned as call signs to ships or to other radio services are not available for assignment to broadcast stations, with or without the "-FM**,**" ~~**or**~~ "-TV**,**" **or "-DT"** suffix.

* * * * *

(m) Where a requested call sign, without the "-FM,' "-TV," "-CA**,**" **"-DT,"** or "-LP" suffix, would conform to the call sign of any other non-commonly owned station(s) operating in a different service, an applicant utilizing the on-line reservation and authorization system will be required to certify that consent to use the secondary call sign has been obtained from the holder of the primary call sign.

81. Section 73.3555 is amended by revising paragraph (b)(1)(i) to read as follows:

* * * * *

(b) * * *

(1) * * *

(i) The digital noise limited service contours of the stations (computed in accordance with § 73.6~~22(e~~**19(c)**) do not overlap; or

(ii) * * *

* * * * *

82. Section 73.3572 is amended by revising the section heading, paragraphs (a)(2), (a)(3), (c), (f), removing paragraphs (g) and (h), and removing and reserving paragraph (a)(4) to read as follows:

§ 73.3572 Processing of TV broadcast, Class A TV broadcast, low power TV, and TV translator~~**s, and TV booster**~~ applications.

(a) * * *

(1) * * *

(2) In the case of Class A TV stations authorized under subpart J of this part and low power TV~~**,**~~ **and** TV translator~~**, and TV booster**~~ stations authorized under part 74 of this chapter, a major change is any change in:

(i) * * *

(ii) * * *

(3) Other changes will be considered minor**,** including changes made to implement a channel sharing arrangement**,** provided they comply with the other provisions of this section ~~**and provided, until October 1, 2000, proposed changes to the facilities of Class A TV, low power TV, TV translator and TV booster stations, other than a change in frequency, will be considered minor only if the change(s) will not increase the signal range of the Class A TV, low power TV or TV booster in any horizontal direction**~~.

(4) [Reserved] ~~**The following provisions apply to displaced Class A TV, low power TV, and TV translator and TV booster stations:**~~

~~**(i) In the case of an authorized low power TV, or TV translator or TV booster which is predicted to cause or receive interference to or from an authorized TV broadcast station pursuant to § 74.705 of this chapter or interference with broadcast or other services under § 74.703 or § 74.709 of this chapter, an application for a change in output channel, together with technical modifications which are necessary to avoid interference (including a change in antenna location of less than 16.1km), will not be considered as an application for a major change in those facilities.**~~

~~(ii) Provided further, that a low power TV or TV translator or TV booster station which is causing or receiving interference or is predicted to cause or receive interference to or from an authorized DTV station pursuant to § 74.706 of this chapter, or which is located within the distances specified in paragraph (a)(4)(iv) of this section to the coordinates of co-channel DTV authorizations (or allotment table coordinates if there are no authorized facilities at different coordinates), may at any time file a displacement relief application for a change in output channel, together with any technical modifications which are necessary to avoid interference or continue serving the station's protected service area. Such an application will not be considered as an application for a major change in those facilities. Where such an application is mutually exclusive with applications for new low power TV, or TV translator, or TV booster stations, or with other nondisplacement relief applications for facilities modifications of Class A TV, low power TV, or TV translator, or TV booster stations, priority will be afforded to the displacement application(s) to the exclusion of other applications.~~

~~(iii) A Class A TV station which is causing or receiving interference or is predicted to cause or receive interference to or from an authorized TV broadcast station pursuant to § 73.6011 or § 73.613; a DTV station or allotment pursuant to § 73.6013 or § 73.623, or which is located within the distances specified below in paragraph (iv) of this section to the coordinates of co-channel DTV authorizations (or allotment table coordinates if there are no authorized facilities at different coordinates); or other service that protects and/or is protected by Class A TV stations, may at any time file a displacement relief application for a change in channel, together with technical modifications that are necessary to avoid interference or continue serving the station's protected service area, provided the station's protected contour resulting from a relocation of the transmitting antenna is predicted to overlap some portion of the protected contour based on its authorized facilities. A Class A TV station displacement relief applications will be considered major change applications, and will be placed on public notice for a period of not less than 30 days to permit the filing of petitions to deny. However, these applications will not be subject to the filing of competing applications. Where a Class A displacement relief application becomes mutually exclusive with applications for new low power TV, TV translator or TV booster stations, or with other non-displacement relief applications for facilities modifications of Class A TV, low power TV, TV translator or TV booster stations, priority will be afforded to the Class A TV displacement relief application(s) to the exclusion of other applications. Mutually exclusive displacement relief applications of Class A TV, low power TV, TV translators or TV booster stations filed on the same day will be subject to competitive bidding procedures if the mutual exclusivity is not resolved by an engineering solution.~~

~~(iv)~~

~~(A) The geographic separations to co-channel DTV facilities or allotment reference coordinates, as applicable, within which to qualify for displacement relief are the following:~~

~~(*1*) Stations on UHF channels: 265 km (162 miles)~~

~~(*2*) Stations on VHF channels 2-6: 280 km (171 miles)~~

~~(*3*) Stations on VHF channels 7-13: 260 km (159 miles)~~

~~(B) Engineering showings of predicted interference may also be submitted to justify the need for displacement relief.~~

~~**(v) Provided further, that the FCC may, within 15 days after acceptance of any other application for modification of facilities, advise the applicant that such application is considered to be one for a major change and therefore subject to the provisions of §§ 73.3522, 73.3580, and 1.1111 of this chapter pertaining to major changes. Such major modification applications filed for Class A TV, low power TV, and TV translator, TV booster stations, and for a non-reserved television allotment, are subject to competitive bidding procedures and will be dismissed if filed outside a specified filing period. *See* 47 CFR 73.5002(a).**~~

* * * * *

(c) Amendments to Class A TV, low power TV~~,~~ **and** TV translator~~**, TV booster**~~ stations, or non-reserved television applications, which would require a new file number pursuant to paragraph (b) of this section, are subject to competitive bidding procedures and will be dismissed if filed outside a specified filing period. See 47 CFR 73.5002(a). When an amendment to an application for a reserved television allotment would require a new file number pursuant to paragraph (b) of this section, the applicant will have the opportunity to withdraw the amendment at any time prior to designation for a hearing if applicable; and may be afforded, subject to the discretion of the Administrative Law Judge, an opportunity to withdraw the amendment after designation for a hearing.

* * * * *

(f) Applications for minor modification of Class A TV, low power TV~~,~~ **and** TV translator ~~**and TV booster**~~ stations may be filed at any time, unless restricted by the FCC, and will be processed on a "first-come/first-served" basis, with the first acceptable application cutting off the filing rights of subsequent, competing applicants. Provided, however, that applications for minor modifications of Class A TV and those of TV broadcast stations may become mutually exclusive until grant of a pending Class A TV or TV broadcast minor modification application.

~~**(g) TV booster station applications may be filed at any time. Subsequent to filing, the FCC will release a Public Notice accepting for filing and proposing for grant those applications which are not mutually exclusive with any other TV translator, low power TV, TV booster, or Class A TV application, and providing for the filing of Petitions To Deny pursuant to § 73.3584.**~~

~~**(h) Class A TV station licensees shall file a license application for either the flash cut channel or the digital companion channel they choose to retain for post-transition digital operations. Class A TV stations will retain primary, protected regulatory status on their desired post-transition digital channel. Class A TV applicants must certify that their proposed post-transition digital facilities meet all Class A TV interference protection requirements.**~~

83. Section 73.3578 is amended by revising paragraph (b) to read as follows:

* * * * *

(b) Any amendment to an application for assignment of construction permit or license, or consent to the transfer of control of a**n entity** ~~**corporation**~~ holding such a construction permit or license, shall be considered to be a minor amendment, except that any amendment which seeks a change in the ownership interest of the proposed assignee or transferee which would result in a change in control, or any amendment which would require the filing of FCC Form 2100 Schedules 314, 315, or 345 (*see* § 73.3500), if the changes sought were made in an original application for assignment or transfer of control, shall be considered to be a major amendment. However, the FCC may, within 15 days after the

acceptance for filing of any other amendment, advise the applicant that the amendment is considered to be a major amendment and therefore is subject to the provisions of § 73.3580.

84. Section 73.3584 is amended by revising paragraphs (a) and (c) to read as follows:

(a) For mutually exclusive applications subject to selection by competitive bidding (non-reserved channels) or fair distribution/point system (reserved channels), petitions to deny may be filed only against the winning bidders or tentative selectee(s), and such petitions will be governed by §§ 73.5006 and 73.7004, respectively. For all other applications the following rules will govern. Except in the case of applications for new low power TV**, and** TV translator ~~**or TV booster**~~ stations, for major changes in the existing facilities of such stations, or for applications for a change in output channel tendered by displaced low power TV and TV translator stations pursuant to § 73.3572(a)(1), any party in interest may file with the Commission a Petition to Deny any application (whether as originally filed or if amended so as to require a new file number pursuant to § 73.3571(j), § 73.3572(b), § 73.3573(b), § 73.3574(b) or § 73.3578) for which local notice pursuant to § 73.3580 is required, provided such petitions are filed prior to the day such applications are granted or designated for hearing; but where the FCC issues a public notice pursuant to the provisions of § 73.3571(c), § 73.3572(c) or § 73.3573(d), establishing a "cut-off" date, such petitions must be filed by the date specified. In the case of applications for transfers and assignments of construction permits or station licenses, Petitions to Deny must be filed not later than 30 days after issuance of a public notice of the acceptance for filing of the applications. In the case of applications for renewal of license, Petitions to Deny may be filed at any time up to the deadline established in § 73.3516(e). Requests for extension of time to file Petitions to Deny applications for new broadcast stations or major changes in the facilities of existing stations or applications for renewal of license will not be granted unless all parties concerned, including the applicant, consent to such requests, or unless a compelling showing can be made that unusual circumstances make the filing of a timely petition impossible and the granting of an extension warranted.

* * * * *

(c) In the case of applications for new low power TV**, and** TV translator~~**, or TV booster**~~ stations, for major changes in the existing facilities of such stations, or for applications for a change in output channel tendered by displaced low power TV and TV translator stations pursuant to § 73.3572(a)(1), any party in interest may file with the FCC a Petition to Deny any application (whether as originally filed or if amended so as to require a new file number pursuant to § 73.3572(b)) for which local notice pursuant to § 73.3580 is required, provided such petitions are filed within 30 days of the FCC Public Notice proposing the application for grant (applicants may file oppositions within 15 days after the Petition to Deny is filed); but where the FCC selects a tentative permittee pursuant to Section 1.1601 *et seq.,* Petitions to Deny shall be accepted only if directed against the tentative selectee and filed after issuance of and within 15 days of FCC Public Notice announcing the tentative selectee. The applicant may file an opposition within 15 days after the Petition to Deny is filed. In cases in which the minimum diversity preference provided for in § 1.1623(f)(1) has been applied, an "objection to diversity claim" and opposition thereto, may be filed against any applicant receiving a diversity preference, within the same time period provided herein for Petitions and Oppositions. In all pleadings, allegations of fact or denials thereof shall be supported by appropriate certification. However, the FCC may announce, by the Public Notice announcing the acceptance of the last-filed mutually exclusive application, that a notice of Petition to Deny will be required to be filed no later than 30 days after issuance of the Public Notice.

* * * * *

85. Revise section 73.3587 to read as follows:

Before FCC action on any application for an instrument of authorization, any person may file informal objections to the grant **in LMS**. Such objections may be submitted in letter form (without extra copies) and shall be signed. The limitation on pleadings and time for filing pleadings provided for in § 1.45 of the rules shall not be applicable to any objections duly filed under this section.

86. Section 73.3598 is amended by revising paragraphs (a) introductory text and (c), and removing and reserving paragraph (b)(3) to read as follows:

(a) Except as provided in the last two sentences of this paragraph (a), each original construction permit for the construction of a new TV, AM, FM or International Broadcast; low power TV; low power FM; TV translator; ~~**TV booster;**~~ FM translator; or FM booster station, or to make changes in such existing stations, shall specify a period of three years from the date of issuance of the original construction permit within which construction shall be completed and application for license filed. An eligible entity that acquires an issued and outstanding construction permit for a station in any of the services listed in this paragraph (a) shall have the time remaining on the construction permit or eighteen months from the consummation of the assignment or transfer of control, whichever is longer, within which to complete construction and file an application for license. For purposes of the preceding sentence, an "eligible entity" shall include any entity that qualifies as a small business under the Small Business Administration's size standards for its industry grouping, as set forth in 13 CFR parts 121 through 201, at the time the transaction is approved by the FCC, and holds:

(1) * * *

(2) * * *

(3) * * *

(b) * * *

(1) * * *

(2) * * *

(3) ~~**A request for international coordination, with respect to an original construction permit for a new DTV station, has been sent to Canada or Mexico on behalf of the station and no response from the country affected has been received, or the licensee or permittee is challenging the response from Canada or Mexico on the grounds that the facility as approved would not permit the station to serve the population that is both approved by the Commission and served by the station's TV (analog) facility to be vacated by June 12, 2009;**~~ [Reserved]

(4) * * *

(5) * * *

(c) A permittee must notify the Commission as promptly as possible and, in any event, within 30 days, of any pertinent event covered by paragraph (b) of this section, and provide supporting documentation. All notifications must be filed ~~**in triplicate with the Secretary**~~ **in LMS** and must be placed in the station's local public file. For authorizations to construct stations in the Low Power FM service, on FM channels reserved for noncommercial educational use, and for noncommercial educational full power television stations, the Commission will identify and grant an initial period of tolling when the grant of

a construction permit is encumbered by administrative or judicial review under the Commission's direct purview (e.g., petitions for reconsideration and applications for review of the grant of a construction permit pending before the Commission and any judicial appeal of any Commission action thereon), a request for international coordination under paragraph (b)(4) of this section, or failure of a condition under paragraph (b)(5) of this section. When a permit is encumbered by administrative or judicial review outside of the Commission's direct purview (e.g., local, state, or non-FCC Federal requirements), the permittee is required to notify the Commission of such tolling events.

* * * * *

87. Section 73.3700 is amended by revising paragraphs (a)(2) and removing and reserving paragraphs (a)(6), (a)(7), (a)(17), (b)(1), (b)(2), (b)(3), (b)(4), (d), (g)(1), (g)(2), and (g)(3), and removing paragraph (c)(6) to read as follows:

(a) * * *

(1) * * *

(2) ***Channel reassignment public notice.*** For purposes of this section, *Channel Reassignment Public Notice* means the public notice ~~**to be**~~ released upon the completion of the broadcast television spectrum incentive auction conducted under section 6403 of the *Spectrum* Act specifying the new channel assignments and technical parameters of any broadcast television stations that are reassigned to new channels. ***Incentive Auction Closing and Channel Reassignment Public Notice: The Broadcast Television Incentive Auction Closes; Reverse Auction and Forward Auction Results Announced; Final Television Band Channel Assignments Announced; Post-Auction Deadlines Announced*, GN Docket No. 12-268, Public Notice, 32 FCC Rcd 2786 (WTB/MB 2017).**

(3) * * *

(4) * * *

(5) * * *

(6) ~~***High-VHF-to-Low-VHF station*. For purposes of this section, *High-VHF-to-Low-VHF station* means a broadcast television station for which a winning high-VHF-to-low-VHF bid, as defined in § 1.2200(f) of this chapter, was submitted.***~~ [Reserved]

(7) ~~***License relinquishment station*. For purposes of this section, *license relinquishment station* means a broadcast television station for which a winning license relinquishment bid, as defined in § 1.2200(g) of this chapter, was submitted.***~~ [Reserved]

(8) * * *

(9) * * *

(10) * * *

(11) * * *

(12) * * *

(13) * * *

(14) * * *

(15) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(v) * * *

(16) * * *

(17) ~~***UHF-to-VHF station.*** **For purposes of this section, *UHF-to-VHF station* means a television station for which a winning UHF-to-VHF bid, as defined in § 1.2200(l) of this chapter, was submitted.**~~ [Reserved]

(b) * * *

(1) ~~***Construction permit applications.***~~ [Reserved]

~~**(i) Licensees of reassigned stations, UHF-to-VHF stations, and High-VHF-to-Low-VHF stations must file a minor change application for a construction permit for the channel specified in the Channel Reassignment Public Notice using FCC Form 2100 Schedule A (for a full power station) or E (for a Class A station) within three months of the release date of the Channel Reassignment Public Notice. Licensees that are unable to meet this filing deadline may request a waiver of the deadline no later than 30 days prior to the deadline.**~~

~~**(ii) A licensee of a reassigned station that is reassigned from one channel to a different channel within its existing band will be permitted to propose transmission facilities in its construction permit application that will extend its coverage contour, as defined by the technical parameters specified in the Channel Reassignment Public Notice, if such facilities:**~~

~~**(A) Are necessary to achieve the coverage contour specified in the Channel Reassignment Public Notice or to address loss of coverage area resulting from the new channel assignment;**~~

~~**(B) Will not extend a full power television station's noise limited contour or a Class A television station's protected contour by more than one percent in any direction; and**~~

~~**(C) Will not cause new interference, other than a rounding tolerance of 0.5 percent, to any other broadcast television station.**~~

~~**(iii) The licensee of a UHF-to-VHF station or High-VHF-to-Low-VHF station will be permitted to propose transmission facilities in its construction permit application that will extend its coverage contour, as defined by the technical parameters specified in the Channel**~~

~~Reassignment Public Notice, if the proposed facility will not cause new interference, other than a rounding tolerance of 0.5 percent, to any other broadcast television station.~~

~~(iv) *Priority filing window.*~~

~~(A) The licensee of a reassigned station, a UHF-to-VHF station, or a High-VHF-to-Low-VHF station that, for reasons beyond its control, is unable to construct facilities that meet the technical parameters specified in the Channel Reassignment Public Notice, or the permissible contour coverage variance from those technical parameters specified in paragraph (b)(1)(ii) or (iii) of this section, may request a waiver of the construction permit application deadline specified in paragraph (b)(1)(i) no later than 30 days prior to the deadline. If its waiver request is granted, the licensee will be afforded an opportunity to submit an application for a construction permit pursuant to paragraph (b)(2)(i) or (ii) of this section in a priority filing window to be announced by the Media Bureau by public notice.~~

~~(B) The licensee of any broadcast television station that the Commission makes all reasonable efforts to preserve pursuant to section 6403(b)(2) of the Spectrum Act that is predicted to experience a loss in population served in excess of one percent as a result of the repacking process, either because of new station-to-station interference or terrain loss resulting from a new channel assignment (or a combination of both), will be afforded an opportunity to submit an application for a construction permit pursuant to paragraph (b)(2)(i) or (ii) of this section in the priority filing window required by paragraph (b)(1)(iv)(A) of this section.~~

~~(v) Construction permit applications filed pursuant to paragraph (b)(1)(i) of this section will be afforded expedited processing if the application:~~

~~(A) Does not seek to expand the coverage area, as defined by the technical parameters specified in the Channel Reassignment Public Notice, in any direction;~~

~~(B) Seeks authorization for facilities that are no more than five percent smaller than those specified in the Channel Reassignment Public Notice with respect to predicted population served; and~~

~~(C) Is filed within the three-month deadline specified in paragraph (b)(1)(i) of this section.~~

~~(vi) *Delegation of authority.* The Commission delegates authority to the Chief, Media Bureau to establish construction periods for reassigned stations, UHF-to-VHF stations, and High-VHF-to-Low-VHF stations.~~

~~(vii) Channel sharee stations must file a minor change application for a construction permit for the channel on which the channel sharer operates at least sixty (60) days prior to the date by which it must terminate operations on its pre-auction channel pursuant to paragraphs (b)(4)(i) and (ii) of this section. The application must include a copy of the executed channel sharing agreement.~~

(2) ~~*Applications for alternate channels and expanded facilities*~~ [Reserved]

~~(i) *Alternate channels.* The licensee of a reassigned station, a UHF-to-VHF station, or a High-VHF-to-Low-VHF station, or a broadcast television station described in paragraph~~

~~**(b)(1)(iv)(B) of this section will be permitted to file a major change application for a construction permit for an alternate channel on FCC Form 2100 Schedules A (for a full power station) and E (for a Class A station) during a filing window to be announced by the Media Bureau by public notice, provided that:**~~

~~**(A) The licensee of a UHF-to-VHF station cannot request an alternate UHF channel;**~~

~~**(B) The licensee of a UHF-to-VHF station that specified the high-VHF band or the low-VHF band in its UHF-to-VHF bid cannot request a VHF channel outside of the assigned band; and**~~

~~**(C) The licensee of a High-VHF-to-Low-VHF station cannot request an alternate high-VHF channel.**~~

~~**(ii) *Expanded facilities.* The licensee of a reassigned station, a UHF-to-VHF station, or a High-VHF-to-Low-VHF station, or a broadcast television station described in paragraph (b)(1)(iv)(B) of this section will be permitted to file a minor change application for a construction permit on FCC Form 2100 Schedules A (for a full power station) and E (for a Class A station) during a filing window to be announced by the Media Bureau by public notice, in order to request a change in the technical parameters specified in the Channel Reassignment Public Notice (or, in the case of a broadcast television station described in paragraph (b)(1)(iv)(B) of this section that is not reassigned to a new channel, a change in its authorized technical parameters) with respect to height above average terrain (HAAT), effective radiated power (ERP), or transmitter location that would be considered a minor change under § 73.3572(a)(1) and (2) or § 74.787(b) of this chapter.**~~

~~**(iii) *Delegation of authority.* The Commission delegates authority to the Chief, Media Bureau to:**~~

~~**(A) Announce filing opportunities for alternate channels and expanded facilities applications and specifying appropriate processing guidelines, including the standards to qualify for priority filing, cut-off protections, and means to avoid or resolve mutual exclusivity between applications; and**~~

~~**(B) Establish construction periods for permits authorizing alternate channels or expanded facilities.**~~

(3) ~~***License applications for channel sharing stations.* The licensee of each channel sharee station and channel sharer station must file an application for a license for the shared channel using FCC Form 2100 Schedule B (for a full power station) or F (for a Class A station) within six months of the date that the channel sharee station licensee receives its incentive payment pursuant to section 6403(a)(1) of the *Spectrum Act.***~~ [Reserved]

(4) ~~***Deadlines to terminate operations on pre-auction channels.***~~ [Reserved]

~~**(i) The licensee of a license relinquishment station must comply with the notification and cancellation procedures in § 73.1750 and terminate operations on its pre-auction channel within three months of the date that the licensee receives its incentive payment pursuant to section 6403(a)(1) of the *Spectrum Act.***~~

~~**(ii) The licensee of a channel sharee station and a licensee of a license relinquishment station that has indicated in its Form 177 an intent to enter into a post-auction channel sharing agreement must comply with the notification and cancellation procedures in § 73.1750 and terminate operations on its pre-auction channel within six months of the date that the licensee receives its incentive payment pursuant to section 6403(a)(1) of the Spectrum Act.**~~

~~**(iii) All reassigned stations, UHF-to-VHF stations, and High-VHF-to-Low-VHF stations must cease operating on their pre-auction channel once such station begins operating on its post-auction channel or by the deadline specified in its construction permit for its post-auction channel, whichever occurs earlier, and in no event later than the end of the post-auction transition period as defined in § 27.4 of this chapter.**~~

(5) * * *

(i) * * *

(ii) * * *

(A) * * *

(B) * * *

(C) * * *

(D) * * *

(E) * * *

(iii) * * *

(iv) * * *

(c) * * *

(1) * * *

(2) * * *

(3) * * *

(4) * * *

(i) * * *

(ii) * * *

(5) * * *

(i) * * *

(ii) * * *

~~**(6) Licensees of transitioning stations, except for license relinquishment stations, must place a certification of compliance with the requirements in paragraph (c) of this section in their online public file within 30 days after beginning operations on their post-auction channels. Licensees of license relinquishment stations must include the certification in their notification of discontinuation of service pursuant to § 73.1750 of this chapter.**~~

(d) ~~***Notice to MVPDs.***~~ [Reserved]

~~**(1) Licensees of transitioning stations must provide notice to MVPDs that:**~~

~~**(i) No longer will be required to carry the station because it will cease operations or because of the relocation of a channel sharee station;**~~

~~**(ii) Currently carry and will continue to be obligated to carry a station that will have a new post-auction channel assignment; or**~~

~~**(iii) Will become obligated to carry a station due to the relocation of a channel sharee station.**~~

~~**(2) The notice to MVPDs must be provided in the form of a letter notification and must contain the following information:**~~

~~**(i) Date and time of any channel changes;**~~

~~**(ii) Pre-auction and post-auction channels;**~~

~~**(iii) Modification (if any) to antenna position, location or power levels;**~~

~~**(iv) Stream identification information for channel sharing stations; and**~~

~~**(v) Engineering staff contact information.**~~

~~**(3) Should any of the information in (d)(2) of this section change during the time that the station is transitioning from its pre-auction to its post-auction channel, an amended notification must be sent.**~~

~~**(4) For cable systems, the notification letter must be addressed to the system's official address of record provided in the cable system's most recent filing in the Commission's Cable Operations and Licensing System (COALS) Form 322. For all other MVPDs, the notification letter must be addressed to the official corporate address registered with their State of incorporation.**~~

~~**(5) Notification letters must be sent within the following time frames:**~~

~~**(i) For license relinquishment stations, not less than 30 days prior to terminating operations;**~~

~~**(ii) For channel sharee stations, not less than 30 days prior to terminating operations of the pre-auction channel;**~~

~~**(iii) For channel sharee and channel sharer stations, not less than 30 days prior to initiation of operations on the shared channel; and**~~

~~**(iv) For reassigned stations, UHF-to-VHF stations, and High-VHF-to-Low-VHF stations, not less than 90 days prior to the date on which they will begin operations on their post-auction channel.**~~

~~**(v) If a station's anticipated transition date changes due to an unforeseen delay or change in transition plan, the licensee must send a further notice to affected MVPDs informing them of the new anticipated transition date.**~~

* * * * *

(g) * * *

(1) ~~**Licensees of operating low power TV and TV translator stations that are displaced by a broadcast television station or a wireless service provider or whose channel is reserved as a guard band as a result of the broadcast television spectrum incentive auction conducted under section 6403 of the *Spectrum Act* shall be permitted to submit an application for displacement relief in a restricted filing window to be announced by the Media Bureau by public notice. Except as otherwise indicated in this section, such applications will be subject to the rules governing displacement applications set forth in §§ 73.3572(a)(4) and 74.787(a)(4) of this chapter.**~~ [Reserved]

(2) ~~**In addition to other interference protection requirements set forth in the rules, when requesting a new channel in a displacement application, licensees of operating low power TV and TV translator stations will be required to demonstrate that the station would not cause interference to the predicted service of broadcast television stations on:**~~ [Reserved]

~~**(i) Pre-auction channels;**~~

~~**(ii) Channels assigned in the Channel Reassignment Public Notice; or**~~

~~**(iii) Alternative channels or expanded facilities broadcast television station licensees have applied for pursuant to paragraph (b)(2) of this section.**~~

(3) ~~***Mutually exclusive displacement applications.*** **Licensees of low power TV and TV translator stations that file mutually exclusive displacement applications will be permitted to resolve the mutual exclusivity through an engineering solution or settlement agreement. If no resolution of mutually exclusive displacement applications occurs, a selection priority will be granted to the licensee of a displaced digital replacement translator.**~~ [Reserved]

(4) * * *

(i) * * *

(ii) * * *

(A) * * *

(B) * * *

(C) * * *

(iii) * * *

(iv) * * *

(v) * * *

* * * * *

88. Revise section 73.4000 to read as follows:

The following sections list, solely for the purpose of reference and convenience, certain Policies of the FCC. The present listing of FCC policies and citations thereto should not be relied upon as an all-inclusive list. ~~**, and the**~~ **F**ailure to include a policy in this list does not affect its validity. **In addition, documents listed may be revised by subsequent decisions and the inclusion of a document on this list does not necessarily reflect that it is currently valid**. Each section bears the title of one Policy and the citations which will direct the user to the specific document(s) pertaining to that Policy.

89. Revise section 73.4017 to read as follows:

§ 73.4017 Application processing: Commercial FM stations.

See §§ 73.5000 et seq. ~~**See Report and Order, MM Docket 84-750, FCC 85-125, adopted March 4, 1985. 50 FR 19936, May 13, 1985.**~~

90. Revise section 73.4055 to read as follows:

§ 73.4055 Cigarette advertising.

See 15 U.S.C. **§** 1335~~.~~**; 15 U.S.C. § 4402(c).**

91. Revise section 73.4060 to read as follows:

§ 73.4060 Citizens agreements.

(a) See Report and Order, Docket 20495, FCC 75-1359, adopted December 10, 1975. 57 F.C.C. 2d 42; 40 F.R. **45**9730, December 30, 1975.

* * * * *

92. § 73.4082 [Removed and Reserved].

§ 73.4082 ~~**Comparative broadcast hearings - specialized programming formats.**~~ [Reserved]

~~**(a) See Memorandum Opinion and Order, FCC 80-33, adopted January 30, 1980. 75 FCC 2d 721.**~~

~~**(b) See Report and Order, Docket 79-137, FCC 79-331, adopted June 1, 1979. 72 FCC 2d 202.**~~

~~**(c) See Memorandum Opinion and Order, FCC 79-206, adopted March 30, 1979. 71 FCC 2d 460.**~~

93. Revise section 73.4100 to read as follows:

§ 73.4100 Financial qualifications; new AM and FM stations.

See Public Notice, FCC 78-556, dated August 2, 1978. 69 FCC 2d 407; 43 FR 34841, August 7, 1978. ***See also Revision of Application for Construction Permit for Commercial Broadcast Station (FCC Form 301)*, Memorandum Opinion and Order, 50 R.R.2d 381, para. 6 (1981) and *Certification of Financial Qualification by Applicants for Broadcast Station Construction Permits*, Public Notice, 2 FCC Rcd 2122 (1987).**

94. Revise section 73.4101 to read as follows:

§ 73.4101 Financial qualifications, TV stations.

See Public Notice, FCC 79-299, dated May 11, 1979. 72 F.C.C. 2d 784; 44 FR 29160, May 18, 1979. ***See also Revision of Application for Construction Permit for Commercial Broadcast Station (FCC Form 301)*, Memorandum Opinion and Order, 50 R.R.2d 381, para. 6 (1981) and *Certification of Financial Qualification by Applicants for Broadcast Station Construction Permits*, Public Notice, 2 FCC Rcd 2122 (1987).**

95. § 73.4107 [Removed and Reserved]

§ 73.4107 ~~**FM broadcast assignments, increasing availability of.**~~ [Reserved]

~~**(a) See, First Report and Order MM Docket 84-231, FCC 84-640, adopted December 19, 1984. 100 FCC 2d 1332; 50 FR 3514, January 25, 1994.**~~

~~**(b) See, Second Report and Order, MM Docket 84-231, FCC 85-124, adopted March 14, 1985. 101 FCC 2d 630; 50 FR 15558, April 19, 1985.**~~

~~**(c) See, Memorandum Opinion and Order, MM Docket 84-231, FCC 86-76, adopted February 10, 1986. 51 FR 9210, March 18, 1986.**~~

~~**(d) See Public Notice, 51 FR 26009, July 18, 1986.**~~

96. § 73.4108 [Removed and Reserved]

§ 73.4108 ~~**FM transmitter site map submissions.**~~ [Reserved]

~~**See Memorandum Opinion and Order and Public Notice, adopted October 24, 1986. 1 FCC Rcd 381 (1986); 51 FR 45945, December 23, 1986.**~~

97. Revise section 73.4210 to read as follows:

§ 73.4210 Procedure Manual: “The Public and Broadcasting”.

See ~~**FCC 74-942, dated September 5, 1974. 49 FCC 2d 1; 39 FR 32288, dated September 5, 1974.**~~ ***The Public and Broadcasting*, a copy of which is available at: https://www.fcc.gov/media/radio/public-and-broadcasting**.

98. Section 73.4267 is amending by revising paragraphs (a) and (b) and removing paragraph (c) to read as follows:

§ 73.4267 Time brokerage.

(a) ~~**See Policy Statement, Docket 78-355, FCC 80-621, adopted October 21, 1980. 82 FCC 2d 107.**~~ **See Report and Order, MM Docket Nos. 94-150, 92-51, 87-154, FCC 99-207, adopted August 5, 1999.**

(b) ~~**See Report and Order, MM Docket 91-140, FCC 92-97, adopted March 12, 1992. 7 FCC Rcd 2755; 57 FR 18089, April 29, 1992.**~~ **See Section 73.3555, Note 2(j).**

~~**(c) See Memorandum Opinion and Order and Further Notice of Proposed Rule Making, MM Docket 91-140, FCC 92-361, adopted August 5, 1992. 7 FCC Rcd 6387; 57 FR 42701, September 16, 1992.**~~

99. § 73.4247 [Removed and Reserved]

§ 73.4247 ~~**STV: Competing applications.**~~ [Reserved]

~~**See Second Report and Order, Docket 21502, FCC 81-13, adopted January 8, 1981. 85 FCC 2d 631; 46 FR 19937, April 2, 1981.**~~

100. Section 73.5000 is amended by revising paragraph (a) to read as follows:

(a) Mutually exclusive applications for new facilities and for major changes to existing facilities in the following broadcast services are subject to competitive bidding: AM; FM; FM translator;~~ **analog**~~ television; low-power television; television translator; and Class A television. Mutually exclusive applications for minor modifications of Class A television and television broadcast are also subject to competitive bidding. The general competitive bidding procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in part 73 or part 74 of this chapter.

* * * * *

101. Section 73.5005 is amended by revising paragraph (a) to read as follows:

(a) Within thirty (30) days following the close of bidding and notification to the winning bidders, unless a longer period is specified by public notice, each winning bidder must submit an appropriate long-form application (FCC Form 2100~~**301, FCC Form 346, or FCC Form 349**~~) for each construction permit or license for which it was the high bidder. Long-form applications filed by winning bidders shall include the exhibits required by § 1.2107(d) of this chapter (concerning any bidding consortia or joint bidding arrangements); § 1.2110(j) of this chapter (concerning designated entity status, if applicable); and § 1.2112 of this chapter (concerning disclosure of ownership and real party in interest information, and, if applicable, disclosure of gross revenue information for small business applicants).

* * * * *

102. Section 73.5006 is amended by revising paragraph (b) to read as follows:

* * * * *

(b) Within ten (10) days following the issuance of a public notice announcing that a long-form application for an AM, FM or television construction permit has been accepted for filing, petitions to deny that application may be filed **in LMS**. Within fifteen (15) days following the issuance of a public notice announcing that a long-form application for a low-power television, television translator or FM translator construction permit has been accepted for filing, petitions to deny that application may be filed. Any such petitions must contain allegations of fact supported by affidavit of a person or persons with personal knowledge thereof.

103. Section 73.5007 is amended by revising paragraph (b)(2)(iii), (b)(3)(iv), and (b)(3)(v) to read as follows:

* * * * *

(b) * * *

(1) * * *

(2) * * *

(i) * * *

(ii) * * *

(iii) Television broadcast station – **the noise limited contour** ~~**television Grade B or equivalent contour (*see* § 73.683(a) for analog TV and**~~ (*see* § 73.**619(c)**~~**622(c) for DTV**~~);

(iv) * * *

(v) * * *

(3) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) Television broadcast station – **the noise limited contour** ~~**television Grade B or equivalent contour (*see* § 73.683(a) for analog TV and**~~ (*see* § 73.**619(c)**~~**622(c) for DTV**~~).

(v) Low power television or television translator station - predicted, protected contour (see § 74.~~**70**~~**792**(a) of this chapter).

104. Revise section 73.6000 to read as follows:

For the purpose of this subpart, the following definition applies:

Locally produced programming is programming~~:~~

~~**(1) Produced within the predicted Grade B contour of the station broadcasting the program or within the contiguous predicted Grade B contours of any of the stations in a commonly owned group; or**~~

~~(2) P~~**p**roduced within the predicted ~~**DTV**~~ noise-limited contour (*see* § 73.**619(c)**~~**622(c)**~~) of a ~~**digital**~~ Class A station broadcasting the program or within the contiguous predicted ~~**DTV**~~ noise-limited contours of any of the ~~**digital**~~ Class A stations in a commonly owned group.

* * * * *

105. Section 73.6010 is amended by revising paragraph (d) and removing and reserving paragraph (b) to read as follows:

* * * * *

(b) ~~**The Class A TV station protected contour is calculated from the effective radiated power and antenna height above average terrain, using the F(50,50) charts of Figure 9, 10 or 10b of § 73.699 of this part.**~~ [Reserved]

* * * * *

(d) The ~~**digital**~~ Class A TV station protected contour is calculated from the effective radiated power and antenna height above average terrain, using the F(50,90) signal propagation method specified in § 73.6~~**25**~~**19**(b)(1) of this part.

106. § 73.6012 [Removed and Reserved]

§ 73.6012 ~~**Protection of Class A TV, low power TV and TV translator stations.**~~ [Reserved]

~~**An application to change the facilities of an existing Class A TV station will not be accepted if it fails to protect other authorized Class A TV, low power TV and TV translator stations and applications for changes in such stations filed prior to the date the Class A application is filed, pursuant to the requirements specified in § 74.707 of this chapter. The protection of other authorized low power TV and TV translator stations and applications for changes in such stations shall not apply in connection with any application filed by a Class A TV station pursuant to § 73.3700(b)(1).**~~

107. § 73.6013 [Removed and Reserved]

§ 73.6013 ~~**Protection of DTV stations.**~~ [Reserved]

~~**Class A TV stations must protect the DTV service that would be provided by the facilities specified in the DTV Table of Allotments in § 73.622 of this part, by authorized DTV stations and by applications that propose to expand DTV stations' allotted or authorized coverage contour in any direction, if such applications either were filed before December 31, 1999 or were filed between December 31, 1999 and May 1, 2000 by a DTV station licensee or permittee that had notified the Commission of its intent to "maximize" by December 31, 1999. Protection of these allotments,**~~

~~**stations and applications must be based on not causing predicted interference within the service area described in § 73.622(e) of this part. The interference analysis is based on the methods described in § 73.623(c)(2) through (c)(4) of this part, except that a Class A TV station must not cause a loss of service to 0.5 percent or more of the population predicted to receive service from the DTV allotment, station or application. An application to change the facilities of an existing Class A TV station will not be accepted if it fails to protect these DTV allotments, stations and applications in accordance with this section.**~~

108. § 73.6014 [Removed and Reserved]

§ 73.6014 ~~**Protection of digital Class A TV stations.**~~ [Reserved]

~~**An application to change the facilities of an existing Class A TV station will not be accepted if it fails to protect authorized digital Class A TV stations and applications for changes in such stations filed prior to the date the Class A application is filed, pursuant to the requirements specified in § 74.706 of this chapter.**~~

109. Revise section 73.6017 to read as follows:

§ 73.6017 ~~**Digital**~~ Class A TV station protection of Class A TV ~~**and digital Class A TV**~~ stations.

An application ~~**for digital operation of an existing Class A TV station or**~~ to change the facilities of a ~~digital~~ Class A TV station will not be accepted if it fails to protect authorized ~~**Class A and digital**~~ Class A stations in accordance with the requirements of § 74.793 (b) through (d) and § 74.793(g) of this chapter. This protection must be afforded to applications for changes in other authorized Class A ~~**and digital Class A**~~ stations filed prior to the date the ~~**digital**~~ Class A application is filed.

110. Revise section 73.6018 to read as follows:

§ 73.6018 ~~**Digital**~~ Class A TV station protection of ~~**D**~~**TV** stations.

~~**Digital**~~ Class A TV stations must protect the ~~**D**~~TV service that would be provided by the facilities specified in the ~~**DTV**~~ Table of **TV** Allotments in § 73.622**(j),** by authorized ~~**D**~~TV stations, and by applications that propose to expand ~~**D**~~TV stations' allotted or authorized coverage contour in any direction~~**, if such applications either were filed before December 31, 1999 or were filed between December 31, 1999 and May 1, 2000 by a DTV station licensee or permittee that had notified the Commission of its intent to "maximize" by December 31, 1999**~~. Protection of these allotments, stations, and applications must be based on meeting the requirements of § 74.793 (b) through (e) of this chapter. An application ~~**for digital operation of an existing Class A TV station or**~~ to change the facilities of a ~~**digital**~~ Class A TV station will not be accepted if it fails to protect these ~~**D**~~TV allotments, stations, and applications in accordance with this section.

111. Revise section 73.6019 to read as follows:

§ 73.6019 ~~**Digital**~~ Class A TV station protection of low power TV~~**,**~~ and ~~**TV translator, digital low power TV and digital**~~ TV translator stations.

An application ~~**for digital operation of an existing Class A TV station or**~~ to change the facilities of a ~~digital~~ Class A TV station will not be accepted if it fails to protect authorized low power TV~~**, TV translator, digital low power TV**~~ and ~~**digital**~~ TV translator stations in accordance with the requirements of § 74.793(b) through (d) and (h) of this chapter. This protection must be afforded to applications for

changes filed prior to the date the ~~**digital**~~ Class A station application is filed. ~~**The protection of other authorized low power TV, TV translator, digital low power TV and digital TV translator stations shall not apply in connection with any application filed by a Class A TV station pursuant to § 73.3700(b)(1).**~~

112. Revise section 73.6020 to read as follows:

An application ~~**for digital operation of an existing Class A TV station or**~~ to change the facilities of an existing Class A TV ~~**or digital Class A TV**~~ station will not be accepted if it fails to protect stations in the land mobile radio service pursuant to the requirements specified in § 74.709 of this chapter. ~~**In addition to the protection requirements specified in § 74.709(a) of this chapter, Class A TV and digital Class A TV stations must not cause interference to land mobile stations operating on channel 16 in New York, NY.**~~

113. Section 73.6022 is amended by revising the section heading and paragraph (a), and removing paragraph (b) to read as follows:

§ 73.6022 Negotiated interference ~~**and relocation agreements**~~.

(a) Notwithstanding the technical criteria in this subpart, Subpart E of this part, and Subpart G of part 74 of this chapter regarding interference protection to and from Class A TV stations, Class A TV stations may negotiate agreements with parties of authorized and proposed ~~**analog**~~ TV~~**, DTV**~~, LPTV, TV translator, Class A TV stations or other affected parties to resolve interference concerns; *provided,* however, other relevant requirements are met with respect to the parties to the agreement. A written and signed agreement must be submitted with each application or other request for action by the Commission. Negotiated agreements under this paragraph can include the exchange of money or other considerations from one entity to another. Applications submitted pursuant to the provisions of this paragraph will be granted only if the Commission finds that such action is consistent with the public interest.

~~**(b) A Class A TV station displaced in channel by a channel allotment change for a DTV station may seek to exchange channels with the DTV station, provided both parties consent in writing to the change and that the Class A station meets all applicable interference protection requirements on the new channel. Such requests will be treated on a case-by-case basis and, if approved, will not subject the Class A station to the filing of competing applications for the exchanged channel.**~~

114. Revise section 73.6023 to read as follows:

Station licensees may operate a commonly owned group of digital Class A stations with contiguous predicted ~~**D**~~TV noise-limited contours (pursuant to § 73.6~~**22**~~**19**(**ec**)) on a common television channel in a distributed transmission system.

115. Section 73.6024 is amended by revising paragraphs (b) and (d) and removing and reserving paragraph (c) to read as follows:

* * * * *

(b) A Class A TV station may continue to operate with the transmitter operated under its previous LPTV license, provided such operation does not cause any condition of uncorrectable interference due to radiation of radio frequency energy outside of the assigned channel. Such operation must continue to meet the requirements of §~~**§ 74.736 and**~~ 74.750 of this chapter.

(c) ~~**A Class A TV station must meet the offset carrier frequency and frequency tolerance provisions of § 73.1545 of this part.**~~ [Reserved]

(d) A ~~**digital**~~ Class A station must meet the emission requirements of § 74.794 of this chapter. **Stations within 275 kilometers of the US-Mexico border shall specify the full-service emission mask.**

116. Section 73.6025 is amended by revising paragraphs (a) introductory text and (d), removing paragraphs (a)(1), (a)(2), (a)(3), (a)(4), and (a)(5), and removing and reserving paragraph (b) to read as follows:

(a) Applications for modified Class A TV facilities proposing the use of directional antenna systems must ~~**be accompanied by the following:**~~ **include all appropriate documentation specified in § 73.625(c)(3).**

~~**(1) Complete description of the proposed antenna system, including the manufacturer and model number of the proposed directional antenna. In the case of a composite antenna composed of two or more individual antennas, the antenna should be described as a "composite" antenna. A full description of the design of the antenna should also be submitted.**~~

~~**(2) Relative field horizontal plane pattern (horizontal polarization only) of the proposed directional antenna. A value of 1.0 should be used for the maximum radiation. The plot of the pattern should be oriented so that 0 degrees (True North) corresponds to the maximum radiation of the directional antenna or, alternatively in the case of a symmetrical pattern, the line of symmetry. Where mechanical beam tilt is intended, the amount of tilt in degrees of the antenna vertical axis and the orientation of the downward tilt with respect to true North must be specified, and the horizontal plane pattern must reflect the use of mechanical beam tilt.**~~

~~**(3) A tabulation of the relative field pattern required in paragraph (a)(2), of this section. The tabulation should use the same zero degree reference as the plotted pattern, and be tabulated at least every 10 degrees. In addition, tabulated values of all maxima and minima, with their corresponding azimuths, should be submitted.**~~

~~**(4) Horizontal and vertical plane radiation patterns showing the effective radiated power, in dBk, for each direction. Sufficient vertical plane patterns must be included to indicate clearly the radiation characteristics of the antenna above and below the horizontal plane. In cases where the angles at which the maximum vertical radiation varies with azimuth, a separate vertical radiation pattern must be provided for each pertinent radial direction.**~~

~~**(5) The horizontal and vertical plane patterns that are required are the patterns for the complete directional antenna system. In the case of a composite antenna composed of two or more individual antennas, this means that the patterns for the composite antenna, not the patterns for each of the individual antennas, must be submitted.**~~

(b) ~~**Applications for modified Class A TV facilities proposing to locate antennas within 61.0 meters (200 feet) of other Class A TV or TV broadcast antennas operating on a channel within 20 percent in frequency of FM broadcast antennas, must include a showing as to the expected effect, if any, of such proximate operation.**~~ [Reserved]

* * * * *

(d) Class A TV stations are subject to the provisions in § 73.6~~**85**~~**17**(d) regarding blanketing interference.

117. In Section 73.6026, revise section headings to read as follows:

The following rules are applicable to Class A television stations:

§ 73.603 Numerical designation of television channels.

§ 73.624(b), (c) and (g) ~~**Digital t**~~**T**elevision broadcast stations. ~~**Section 73.624(b) will apply only to the extent that such stations must also transmit at least one over-the-air video program signal at no direct charge to viewers of the digital Class A station.**~~

~~**§ 73.635 Use of common-antenna site.**~~

~~**§ 73.642 Subscription TV service.**~~

~~**§ 73.643 Subscription TV operating requirements.**~~

~~**§ 73.644 Subscription TV transmission systems.**~~

~~**§ 73.646 Telecommunications Service on the Vertical Blanking Interval and in the Visual Signal.**~~

~~**§ 73.653 Operation of TV aural and visual transmitters.**~~

§ 73.658 Affiliation agreements and network program practice; territorial exclusivity in non-network program arrangements.

§ 73.664 Determining operating power.

~~**§ 73.665 Use of TV aural baseband subcarriers.**~~

~~**§ 73.667 TV subsidiary communications services.**~~

~~**§ 73.669 TV stereophonic aural and multiplex subcarrier operation.**~~

§ 73.670 Commercial limits in children's programs.

§ 73.671 Educational and informational programming for children.

§ 73.673 Public information initiatives regarding educational and informational programming for children.

§ 73.688 Indicating instruments.

~~**§ 73.691 Visual modulation monitoring.**~~

§ 73.1030 Notifications concerning interference to radio astronomy, research and receiving installations.

§ 73.3615(a) and (g) Ownership reports.

118. § 73.6027 [Removed and Reserved]

§ 73.6027 ~~**Class A TV notifications concerning interference to radio astronomy, research and receiving installations.**~~ [Reserved]

~~**An applicant for digital operation of an existing Class A TV station or to change the facilities of an existing Class A TV or digital Class A TV station shall be subject to the requirements of § 73.1030 - Notifications concerning interference to radio astronomy, research and receiving installations.**~~

119. Section 73.8000 is amended by revising paragraph (b) introductory text to read as follows:

* * * * *

(b) The following materials are available from Advanced Television Systems Committee (ATSC), ~~**1776 K Street NW., 8th Floor, Washington, DC 20006; or**~~ at the ATSC Web site: *http://www.atsc.org/standards.html.*

(1) * * *

(2) * * *

(i) * * *

(ii) * * *

(iii) * * *

(iv) * * *

(v) * * *

(vi) * * *

(3) * * *

(4) * * *

(5) * * *

(6) * * *

(7) * * *

* * * * *

Part 74 of Title 47 of the U.S. Code of Federal Regulations is proposed to be amended to read as follows:

PART 74 – EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTIONAL SERVICES

120. The authority for Part 74 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 302a, 303, 307, 309, 310, 336, and 554.

121. Section 74.701 is amended by revising paragraph (f) to read as follows:

* * * * *

(f) ***Low power TV station.*** A station authorized under the provisions of this subpart that may retransmit the programs and signals of a TV broadcast station and that may originate programming in any amount greater than 30 seconds per hour ~~**and/or operates a subscription service**~~. ~~**(See § 73.641 of part 73 of this chapter.)**~~

* * * * *

122. Section 74.732 is amended by revising paragraph (e) to read as follows:

* * * * *

(e) A proposal to change the primary TV station being retransmitted or an application of a licensed translator station to include low power TV station operation, *i.e.*, program origination ~~**or subscription service**~~ will be subject only to a notification requirement.

* * * * *

123. Section 74.787 is amended by revising paragraph (a)(5)(v) to read as follows:

(a) * * *

(5) * * *

* * * * *

(v) *Pre-auction digital service area* is ~~**defined as**~~ the geographic area within the full power station's noise-limited contour **that was protected in the incentive auction repacking process** ~~**(as set forth in Public Notice DA 15-1296, released November 12, 2015).**~~ The service area of the digital-to-digital replacement translator shall be limited to only the demonstrated loss area within the full power station's pre-auction digital service area, provided that an applicant for a digital-to-digital replacement television translator may propose a *de minimis* expansion of its full power pre-auction digital service area upon demonstrating that the expansion is necessary to replace a loss in its pre-auction digital service area.

* * * * *

124. Section 74.792 is amended by revising paragraph (b) to read as follows:

* * * * *

(b) The ~~**digital**~~ low power TV or TV translator protected contour is calculated from the authorized effective radiated power and antenna height above average terrain, using the F(50,90) signal propagation method specified in § 73.6~~**25**~~**19**(b)(1) of this chapter.

125. Section 74.793 is amended by revising paragraphs (b), (e), (g), and (h) to read as follows:

* * * * *

(b) Except as provided in this section, interference prediction analysis is based on the interference thresholds (D/U signal strength ratios) and other criteria and methods specified in § 73.62**03**~~**(e)(2) through (e)(4)**~~ of this chapter. ~~**Predictions of interference to co-channel TV broadcast, Class A TV, LPTV and TV translator stations will be based on the interference thresholds specified therein for "DTV-into-DTV."**~~

* * * * *

(e) Protection to the authorized facilities of ~~**D**~~TV broadcast stations shall be based on not causing predicted interference to the population within the service area defined and described in § 73.**619(c)**~~**622(e)**~~ of this chapter, except that a ~~**digital**~~ low power TV or TV translator station must not cause a loss of service to 0.5 percent or more of the population predicted to receive service from the authorized ~~**D**~~TV facilities.

* * * * *

(g) Protection to the authorized facilities of Class A ~~**and digital Class A**~~ TV stations shall be based on not causing predicted interference to the population within the service area defined and described in § 73.6010~~**(a) through (d)**~~ of this chapter, respectively, except that a ~~**digital**~~ low power TV or TV translator station must not cause a loss of service to 0.5 percent or more of the population predicted to receive service from the authorized Class A TV ~~**or digital Class A TV**~~ facilities.

(h) Protection to the authorized facilities of low power TV and TV translator stations shall be based on not causing predicted interference to the population within the service area defined and described in §74.792, except that a ~~**digital**~~ low power TV or TV translator station must not cause a loss of service to 2.0 percent or more of the population predicted to receive service from the authorized low power TV or TV translator station.

* * * * *

126. Section 74.794 is amended by revising the section heading, paragraphs (b) introductory text, (b)(1), and (b)(2) to read as follows:

§ 74.794 ~~**Digital e**~~**E**missions.

* * * * *

(b) In addition to meeting the emission attenuation requirements of the simple or stringent mask (including attenuation of radio frequency harmonics), ~~**digital**~~ low power TV and TV translator stations authorized to operate on TV channels 22-24, (518-536 MHz), 32-36 (578-608 MHz), 38 (614-620 MHz), and 65-69 (776-806 MHz) must provide specific "out of band" protection to Radio Navigation Satellite Services in the bands: L5 (1164-1215 MHz); L2 (1215-1240 MHz) and L1 (1559-1610 MHz).

(1) An FCC-certificated transmitter specifically certified for use on one or more of the above channels must include filtering with an attenuation of not less than 85 dB in the GPS bands, which will have

the effect of reducing harmonics in the GPS bands from what is produced by the ~~**digital**~~ transmitter, and this attenuation must be demonstrated as part of the certification application to the Commission.

(2) For an installation on one of the above channels with a ~~**digital**~~ transmitter not specifically FCC-certificated for the channel, a low pass filter or equivalent device rated by its manufacturer to have an attenuation of at least 85 dB in the GPS bands, which will have the effect of reducing harmonics in the GPS bands from what is produced by the ~~**digital**~~ transmitter, and must be installed in a manner that will prevent the harmonic emission content from reaching the antenna. A description of the low pass filter or equivalent device with the manufacturer's rating or a report of measurements by a qualified individual shall be retained with the station license. Field measurements of the second or third harmonic output of a transmitter so equipped are not required.

APPENDIX B

Initial Regulatory Flexibility Act Analysis

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

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

2. The NPRM seeks comment on a number of proposals as part of the Commission's effort to update its rules following the transition from analog to digital-only operations and the post-incentive auction transition to a smaller television band with fewer channels. The NPRM proposes to delete, update, or otherwise revise Commission rules that no longer have any practical effect given these historic changes. The NPRM also seeks to restructure subpart E of part 73 of the Commission's rules (47 CFR subchapter C, part 73), which largely consists of the technical licensing, operating, and interference rules for full power television. Finally, the NPRM proposes additional amendments to the full power and Class A rules, including technical updates and proposals to delete, update, and/or amend outdated rules.

3. The NPRM proposes to adopt revisions to part 73 to reflect that all television services have ceased analog operations, and the conversion to digital television technology. Similarly, the NPRM proposes to amend rule section headings and language in part 73 to remove references to DTV and digital television service since all television services have transitioned from analog to digital operations and thus, there is no further need to differentiate between two separate kinds of service. In addition, the NPRM proposes to delete outdated rules that are no longer valid given changes in Commission-adopted policy. The NPRM also proposes to update Commission rules to reference the current designation for form numbers, require electronic filing in LMS, and remove obsolete forms. In addition, the NPRM proposes to make a number of other corrections and updates to the full power television and Class A rules, including to correct inadvertent oversights in prior rulemakings.

4. In addition, the NPRM seeks to add an explanatory note to section 73.623 to reference and explain the existence of a granted waiver with respect to the community of Los Angeles, California. Section 73.623 of the rules requires television stations to protect certain channels for use by the land mobile radio service in thirteen U.S. cities listed in the rule. In 2008, the Commission's Public Safety and Homeland Security Bureau granted a waiver pursuant to section 337(c) of the Communications Act, as amended, allowing the County of Los Angeles to use channel 15 in Los Angeles for public safety communications. Because this channel is adjacent to two channels contained in section 73.623, the NPRM asserts that the public interest is served by including a Note explaining the existence of the 2008 waiver.

5. To reflect the fact that the post-incentive auction closed on April 13, 2017, the NPRM proposes to amend section 73.3700(a)(2) to add the citation to the *Channel Reassignment Public Notice* that was released by the Commission's Media and Wireless Telecommunications Bureaus and Incentive Auction Task Force announcing the completion of the auction and deadlines for stations assigned new

[1] 5 U.S.C. § 603. The RFA, 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). The SBREFA was enacted as Title II of the Contract with America Advancement Act of 1996 (CWAAA).

[2] 5 U.S.C. § 603(a).

[3] *Id*.

channels through the repacking process to terminate operations on pre-auction channels. The NPRM also proposes to delete as obsolete certain definitions that relate to the bid options that were available to full power and Class A television broadcasters eligible to participate in the incentive auction. The NPRM proposes to delete as obsolete procedural rules that governed the post-incentive auction period for stations to transition off their pre-auction channel, which ended on July 13, 2020, including the portions of the rule pertaining to the special post-incentive auction displacement filing window which closed on June 1, 2018, and applied to low power television and television translator stations ("LPTV/TV translators") displaced by the auction.

6. Regarding the listing of FCC policies in section 73.4000 *et seq*, which provide certain FCC policies and citations related to all broadcast stations for the purpose of reference and convenience, the NPRM proposes to amend a number of rules that are now otherwise obsolete or require updates. For example, the NPRM proposes to update rules to reflect the availability of newer versions of procedures and Commission orders such as the "The Public and Broadcasting" procedure manual.

7. The NPRM proposes to delete obsolete language due to the passage of time and other changes in Commission policy, including language related to the protection of pre-transition DTV applications filed before December 31, 1999, or between December 31, 1999, and May 1, 2000, certain waiver requests related to the incentive auction, displacements of Class A stations due to digital channel allotment changes by full power television stations that have since been resolved, the period of construction for an original construction permit which tolled for certain reasons of international coordination during the DTV transition, the certification of equipment that the Commission no longer accepts, and references to mutually exclusive renewal proceedings for applications filed prior to May 1, 1995. The NPRM also proposes to delete past license renewal application filing dates for all radio and television broadcast stations, and provide updated dates.

8. During the course of the transition to from analog to digital television, the Commission adopted a number of rules, many of which were temporary and meant to be effective only during the transition. Others, however, had more long term application to digital operations. Because the more long term rules were adopted at the same time as temporary rules, the long term rules are currently not organized in a straight forward or user-friendly manner. As a result, the NPRM seeks to reorganize subpart E of part 73, including creating cross-references to the rules reorganized for ease, in order to make the rules more practical and easier to find.

9. The NPRM also seeks comment on updating the coordinates found in section 73.623(e) from North American Datum ("NAD") 27 to NAD 83 and otherwise conforming the values with the coordinate system used in the Commission's Licensing and Management System ("LMS") database and with those found in section 90.303(b) of the rules, which define the service that section 73.623(e) protects.

10. In addition, the NPRM proposes to amend section 73.1620(a)(1) to remind full power and Class A television stations on channel 14 of the requirement found in section 73.687(e)(4)(iii) that they request Program Test Authority ("PTA") prior to commencing operation of new or modified facilities. The NPRM also proposes to amend the rule to require LPTV and translator stations on channel 14 to request PTA prior to beginning operation of new or modified facilities.

11. The NPRM also proposes a number of changes to the rules which are obsolete, unnecessary, and are otherwise superseded by the software based tools that the Commission and industry use to prepare and process applications. Also, section 73.625 specifies a number of paper maps which should be used to prepare the profile graphs and to determine the location and height above sea level of the antenna height. The NPRM proposes to remove those references to outmoded paper maps and replace them with a reference to the National Elevation Dataset and other similar bald earth terrain datasets which are used by modern automated software currently used by the Commission and industry. The NPRM proposes to clarify that Commission staff generally expects these calculations to be done via computer, versus the preference for paper calculations that was specified previously, and then indicate that to the

extent a submission to the Commission uses sources different from those officially reflected in the Commission's rules, those sources should be clearly identified in the submission.

12. The NPRM proposes to clarify, in section 73.625(c)(3)(ii) of the rules, that the horizontal power is to be higher than or equal to the vertical power in all directions, and require documentation that the antenna meets this requirement. The NPRM also proposes to update the rule to reflect that the LMS filing system permits an alternate method of specifying mechanically beam tilted facilities. The proposed rule indicates the alternate method is preferable because it provides a three-dimensional representation of the antenna, allowing for more accurate predictions with OET Bulletin No. 69. But the Commission continues to allow the previous method in order to avoid imposing any additional burden on stations that were previously authorized using the previous mechanical beam tilt method.

13. Section 73.625(c)(3)(v) currently requires that horizontal plane patterns be plotted "to the largest scale possible on unglazed letter-size polar coordinate paper." This requirement is outdated and not consistent with current licensee and Commission staff practices. The NPRM proposes to instead require licensees to submit patterns in the form of a .pdf attachment to an application filed in LMS, and propose to clarify that similar plots are required for elevation or matrix patterns submitted in the LMS form. This approach would provide flexibility to applicants and conform to modern practices.

14. With the elimination of analog service, there are no full power television stations operating pursuant to the subscription television ("STV") rules, which allowed analog stations to offer a subscription television service "for a fee or charge" given that there are no full power television stations operating pursuant to the STV rules and digital television stations are permitted to provide STV-type services on an ancillary or supplementary basis to their primary digital television service, and LMS does not permit the filing of applications or requests to operate in an STV mode. Accordingly, sections 73.641 through 73.644, 73.4247, 73.6026, and 74.732(e) are obsolete and we propose to eliminate them.

15. In 2000, the Commission adopted a needs based test in section 73.622(a) for future rulemakings allowing noncommercial educational (NCE) entities to request that "non-reserved channels not already in the Table of Allotments be added and reserved for NCE use." The NPRM proposes to amend section 73.622(a) to remove this language as Commission staff does not believe it serves a practical purpose in the current environment. Commission staff does not intend, however, to eliminate the ability of an NCE entity to reserve one of the few vacant television channels currently in the Table of TV Allotments. An NCE entity may still file a rulemaking petition to request that the Commission reserve the channel for noncommercial educational use, without being required to rely on the special process enumerated in section 73.622(a).

16. Section 73.3543 provides that no new special service authorizations may be issued after 1958, however, renewals or modifications will be considered in certain circumstances. The Commission staff is unaware of any such authorizations today, and the Commission tentatively concludes the rule is obsolete and can be deleted. The NPRM proposes to delete the rule and seeks comment on this proposal.

17. Section 0.434 refers to the Broadcast Application Processing System (BAPS), which is a legacy database system that has not been in use at the Commission for many years. The NPRM proposes to update the rule to reflect the current application television filing and processing databases and methods for viewing the databases.

18. In January 2021, the Commission adopted updated rules in section 73.626 relating to Distributed Transmission Systems ("DTS"). Since that time, questions have arisen about how the rules are to be applied. To make the intent and application of the rule less ambiguous, the NPRM proposes to modify language in 73.626(b) and (f)(2) to define certain terms and make clarifications that will better reflect the method described in the *2021 DTS Order* and used in processing such applications.

19. All full-power and Class A TV stations are assigned a transport stream ID ("TSID"), which is required to be transmitted in order to provide the Program and System Information Protocol ("PSIP") data required by section 73.682(d). Consistent with that rule, the NPRM proposes to clarify that all such stations must broadcast with their assigned TSID during their hours of operation. For the same

reason, the NPRM proposes the same requirement with respect to a station's bit stream ID ("BSID"), which has the same function as the TSID, but in the ATSC 3.0 context.

20. The Commission's rules require coordination of applications in border regions with the neighboring countries' appropriate regulatory officials. Under the *Exchange of Coordination Letters with IFT Regarding DTV Transition and Reconfiguration of 600 MHz Spectrum,* signed between the FCC and Mexico's Instituto Federal de Telecomunicaciones ("IFT") in July 2015, Class A stations approved by Mexico are grouped with full-service stations. It is the Media Bureau staff's experience that IFT routinely requests that applications submitted for coordination of Class A stations specify a full-service emission mask, and if such applications do not initially specify the full-service emission mask, IFT asks for it to be included in an amendment. This two-step process increases the processing burdens on the FCC, IFT, and stations, and results in delays in granting applications. Therefore, the NPRM proposes to amend Section 73.6024(d) to require Class A stations within 275 kilometers of the US-Mexico border to specify a full-service emission mask in any modification application.

21. The NPRM proposes to delete language in section 73.6025(a) that is almost identical to that in section 73.625(c)(3). These rule sections provide similar requirements regarding how applicants should describe and document antenna patterns submitted in their applications. The NPRM proposes to cross-reference section 73.625(c)(3) in section 73.6025(a), eliminating the duplication but making clear that the requirements in section 73.625(c)(3) continue to apply to Class A television stations. We seek comment on this proposal.

22. Section 73.6026 lists section 73.624 as a rule applicable to Class A stations. It also includes a note stating that "Section 73.624(b) will apply only to the extent that such stations must also transmit at least one over-the-air video program signal at no direct charge to viewers of the digital Class A station." Such language is also included in section 73.624(b) and so the NPRM proposes to remove that text in section 73.6026 as duplicative. The NPRM also proposes to clarify that this change would mandate the use of a minimum 480i video resolution by Class A stations, consistent with our proposal with respect to full power and LPTV/translator stations in our earlier adopted *Part 74 NPRM,* FCC 22-58, (rel. July 13, 2022).

B. Legal Basis

23. The proposed action is authorized under sections 1, 4, 301, 303, 307, 308, 309, 310, 316, 319, and 336 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154, 301, 303, 307, 308, 309, 310, 316, 319, 336.

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

24. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.[4] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[5] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act (SBA).[6] A small

[4] 5 U.S.C. § 603(b)(3).

[5] 5 U.S.C. § 601(6).

[6] *See id.* § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632(a)(1)). 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." *Id.*

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 SBA.[7]

25. Below, we provide a description of the impacted small entities, as well as an estimate of the number of such small entities, where feasible.

26. *Television Broadcasting.* This industry is comprised of "establishments primarily engaged in broadcasting images together with sound."[8] These establishments operate television broadcast studios and facilities for the programming and transmission of programs to the public.[9] These establishments also produce or transmit visual programming to affiliated broadcast television stations, which in turn broadcast the programs to the public on a predetermined schedule. Programming may originate in their own studio, from an affiliated network, or from external sources. The SBA small business size standard for this industry classifies businesses having $41.5 million or less in annual receipts as small.[10] 2017 U.S. Census Bureau data indicate that 744 firms in this industry operated for the entire year.[11] Of that number, 657 firms had revenue of less than $25,000,000.[12] Based on this data we estimate that the majority of television broadcasters are small entities under the SBA small business size standard.

27. The Commission estimates that as of June 2022, there were 1,372 licensed commercial television stations.[13] Of this total, 1,280 stations (or 93.2%) had revenues of $41.5 million or less in 2021, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Television Database (BIA) on June 1, 2022, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates that as of June 2022, there were 384 licensed noncommercial educational (NCE) television stations, 383 Class A TV stations, 1,865 LPTV stations and 3,224 TV translator stations.[14] The Commission, however, does not compile and otherwise does not have access to financial information for these television broadcast stations that would permit it to determine how many of these stations qualify as small entities under the SBA small business size standard. Nevertheless, given the SBA's large annual receipts threshold for this industry and the nature of these television station licensees, we presume that all of these entities qualify as small entities under the above SBA small business size standard.

28. *Radio Stations.* This industry is comprised of "establishments primarily engaged in broadcasting aural programs by radio to the public."[15] Programming may originate in their own studio,

---

[7] 15 U.S.C. § 632.

[8] *See* U.S. Census Bureau, *2017 NAICS Definition, "515120 Television Broadcasting,"* https://www.census.gov/naics/?input=515120&year=2017&details=515120.

[9] *Id.*

[10] *See* 13 CFR § 121.201, NAICS Code 515120.

[11] *See* U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEREVFIRM, NAICS Code 515120, https://data.census.gov/cedsci/table?y=2017&n=515120&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false.

[12] *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

[13] Broadcast Station Totals as of June 30, 2022, Public Notice, DA 22-721 (rel. July 7, 2022) (*June 2022 Broadcast Station Totals PN*), https://www.fcc.gov/document/broadcast-station-totals-june-30-2022).

[14] *Id.*

[15] *See* U.S. Census Bureau, *2017 NAICS Definition, "515112 Radio Stations,"* https://www.census.gov/naics/?input=515112&year=2017&details=515112.

from an affiliated network, or from external sources.[16] The SBA small business size standard for this industry classifies firms having $41.5 million or less in annual receipts as small.[17] U.S. Census Bureau data for 2017 show that 2,963 firms operated in this industry during that year.[18] Of this number, 1,879 firms operated with revenue of less than $25 million per year.[19] Based on this data and the SBA's small business size standard, we estimate a majority of such entities are small entities.

29. The Commission estimates that as of June 30, 2022, there were 4,498 licensed commercial AM radio stations and 6,689 licensed commercial FM radio stations, for a combined total of 11,187 commercial radio stations.[20] Of this total, 11,185 stations (or 99.98 %) had revenues of $41.5 million or less in 2021, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Database (BIA) on June 1, 2022, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates that as of June 30, 2022, there were 4,184 licensed noncommercial (NCE) FM radio stations, 2,034 low power FM (LPFM) stations, and 8,951 FM translators and boosters.[21] The Commission however does not compile, and otherwise does not have access to financial information for these radio stations that would permit it to determine how many of these stations qualify as small entities under the SBA small business size standard. Nevertheless, given the SBA's large annual receipts threshold for this industry and the nature of radio station licensees, we presume that all of these entities qualify as small entities under the above SBA small business size standard.

30. We note, however, that in assessing whether a business concern qualifies as "small" under the above definition, business (control) affiliations[22] 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. In addition, another element of the definition of "small business" requires that an 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 or television broadcast station is dominant in its field of operation. Accordingly, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the definition of a small business on this basis and is therefore possibly over-inclusive. An additional element of the definition of "small business" is that the entity must be independently owned and operated. Because it is difficult to assess these criteria in the context of media entities, the estimate of

---

[16] *Id.*

[17] *See* 13 CFR § 121.201, NAICS Code 515112.

[18] *See* U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017,* Table ID: EC1700SIZEREVFIRM, NAICS Code 515112,

https://data.census.gov/cedsci/table?y=2017&n=515112&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false. We note that the US Census Bureau withheld publication of the number of firms that operated for the entire year.

[19] *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in the individual categories for less than $100,000, and $100,000 to $249,999 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher that noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, *see* https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

[20] *Broadcast Station Totals as of June 30, 2022*, Public Notice, DA 22-721 (rel. July 7, 2022) (*July 2022 Broadcast Station Totals PN*), https://www.fcc.gov/document/broadcast-station-totals-june-30-2022.

[21] *Id.*

[22] "[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 the power to control both." 13 CFR § 21.103(a)(1).

small businesses to which the rules may apply does not exclude any radio or television station from the definition of a small business on this basis and similarly may be over-inclusive.

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

31. The NPRM proposes modified reporting requirements. The Commission seeks comment on whether television stations should be able to now make certain required notifications through filings procedures in LMS as opposed to by letter, as has been the case. Similarly, the Commission seeks comment on its proposals to update Commission rules to reference the current designation for form numbers, require electronic filing in LMS, and remove obsolete forms. Should the Commission ultimately decide to adopt these requirements, they would result in a modified paperwork obligation. The Commission anticipates that this option will lessen the physical burden on small entities. The Commission will have to consider the benefits and costs of allowing television stations to submit certain notifications in LMS. If adopted, the Commission will seek approval and the corresponding burdens to account for this modified reporting requirement. We expect the comments we receive from the parties in the proceeding, including cost and benefit analyses, will help the Commission to identify and evaluate compliance costs and burdens for small businesses that may result from the matters discussed in the NPRM.

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

32. The RFA requires an agency to describe any significant alternatives, specifically small business, 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 such 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 such small entities. [23]

33. The NPRM seeks comment on a number of proposals that would codify Commission staff's current practices or better reflect technological advancements in the industry. The Commission does not have supporting data at this time to determine if there will or will not be an economic impact on small businesses as a result of the proposed rule amendments and/or deletions. However, the Commission anticipates that the proposed rule updates and reorganization generally will lessen the burdens on small entities. For example, section 73.625(b)(5) specifies a number of paper maps which should be used to prepare the profile graphs described in paragraph (b)(4), and to determine the location and height above sea level of the antenna height. Commission staff believes that multiple references to various sources of paper maps contained in the rule are outdated methods to make these types of calculations. The NPRM therefore proposes to remove those references to outmoded paper maps and replace them with a reference to the National Elevation Dataset and other similar bald earth terrain datasets which are used by modern automated software currently used by the Commission and industry. Moreover, section 73.625(b)(4) describes how to plot certain radials on a graph and provides a range of options for the number of points of elevation to use in each radial. The NPRM proposes to conform the requirement to reference the TVStudy software currently used for preparing and processing applications, and specify the use of 10 points per kilometer in all circumstances consistent with present practice found in the TVStudy software used by the Commission and licensees to process and prepare applications. These proposals are an attempt to simplify, streamline, and modernize existing rules and procedures that will enable television stations to more easily comply with licensing requirements through familiar and low cost measures.

[23] *See* 5 U.S.C. § 603(c)(1)–(4).

34. In addition, the NPRM seeks to avoid imposing additional burdens on television stations where practicable. For example, the NPRM proposes to update section 73.625(c)(3)(ii) to reflect that the LMS filing system permits an alternate method of specifying mechanically beam tilted facilities. The proposed rule indicates the alternate method is preferable because it provides a three-dimensional representation of the antenna, allowing for more accurate predictions with OET Bulletin No. 69. But Commission staff continues to allow the previous method in order to avoid imposing any additional burden on stations that were previously authorized using the previous mechanical beam tilt method.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rule

35. None.