

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of
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

Adopted: February 17, 1998 ; Released: February 23, 1998

By the Commission: Commissioner Ness issuing a separate statement; Commissioner
Furchtgott-Roth dissenting in part and issuing a statement.

TABLE OF CONTENTS

Table with 2 columns: Section Title and Para. No.
I. INTRODUCTION 1
II. BACKGROUND 5
III. DTV ALLOTMENT ISSUES 12
A. General DTV Allotment Plan 12
B. Selection of the DTV Core Spectrum 34
C. Out-of-Core Allotments 47
D. DTV Power 59
E. DTV Adjacent Channel Operation 87
F. Low Power TV and TV Translator Stations 96
G. Land Mobile Sharing Issues 128
H. Use of Existing Transmitter Sites 131
I. Noncommercial Allotments and NTSC Station Modifications 133
J. International Coordination 138
K. Negotiations and Frequency Coordinators 141
L. Other Allotment Issues 148
M. Technical Issues 159

IV. REQUESTS FOR MODIFICATION OF INITIAL ALLOTMENTS	
A. General Treatment of Allotment Change Requests	187
B. Petitions Granted or Made Moot	193
C. Requests for Changes by Low Power Interests	312
D. Petitions Addressing Service Replication and Maximization Issues	362
E. Petitions Requesting Unspecified Alternative Channels	402
F. Petitions Objecting to Allotment of Channels Outside the Core Spectrum	413
G. Other Petitions Requesting Specific Changes to the DTV Table of Allotments	442
V. PROCEDURAL MATTERS	672
APPENDIX A- Petitioning and Commenting/Opposing Parties	
APPENDIX B- DTV Table of Allotments	
APPENDIX C- DTV Allotment Changes to Avoid Adjacent Channel Interference	
APPENDIX D- Final Regulatory Flexibility Analysis	
APPENDIX E- Amendments to the Rules	

## I. INTRODUCTION

6. In this Memorandum Opinion and Order, the Commission addresses the petitions for reconsideration of the Sixth Report and Order in this proceeding.<sup>1</sup> In that action, we adopted a Table of Allotments for digital television (DTV),<sup>2</sup> policies and rules for the initial DTV allotments, procedures for assigning those allotted channels,<sup>3</sup> and plans for spectrum recovery. We received 231 petitions requesting reconsideration of various aspects of this decision.<sup>4</sup>

1. With this action, we complete the final steps in our plan for the implementation of DTV service.<sup>5</sup> After a long and cooperative effort by industry and this Commission, all of the elements necessary for broadcasters and related industries to begin the conversion from the existing analog television technology to the new digital technology are now in place. The Commission has adopted a DTV transmission standard, service and application rules, channel allotments/assignments, and technical parameters for station operation. Broadcasters now have the administrative and technical certainty they need to proceed with this historic change. In accordance with this plan, broadcasters are preparing to construct and operate their DTV facilities and consumer equipment manufacturers will soon market the first generation of the new DTV receivers and related devices.

2. With the introduction of DTV technology we are now on the threshold of major changes in broadcast television. This new technology will open the door to dramatic changes in the nature of broadcast television, allowing broadcasters to offer high definition television service, with major improvements in picture quality, compact-disc quality audio signals,

---

<sup>1</sup> See Sixth Report and Order, MM Docket No. 87-268, 12 FCC Rcd 14588 (1997). In the associated Fifth Report and Order in MM Docket No. 87-268, 12 FCC Rcd 12809 (1997), we established service rules relating to the implementation of DTV service.

<sup>2</sup> DTV refers to any technology that uses digital techniques to provide advanced television services such as high definition TV (HDTV), multiple standard definition TV (SDTV) and other advanced features and services.

<sup>3</sup> As used herein, the term "channel" generally refers to the 6 MHz spectrum block currently used to provide a single NTSC television service or to the equivalent 6 MHz spectrum block to be used for DTV services. In each case, the NTSC and DTV channel numbers used herein correspond to the same frequency bands. For example, NTSC channel 2 and DTV channel 2 both correspond to the frequency band 54-60 MHz. It should be noted, however, that whereas an NTSC frequency or channel is used to provide a single television program service, digital technology permits DTV frequencies or channels to be used to provide a wide variety of services, such as HDTV, multiple SDTV programs, audio, data and other types of communications.

<sup>4</sup> In addition, we received a substantial number of oppositions/comments, replies, supplemental filings and related filings. Listings of the parties submitting petitions and related filings are provided in Appendix A.

<sup>5</sup> Our DTV implementation plan is finalized through this Memorandum, Opinion and Order and our related Memorandum Opinion and Order addressing petitions for reconsideration of our DTV service rules, FCC 98-23, adopted February 17, 1998.

simultaneous multiple program services (“multicasting”), and data services. Broadcasters will also have the flexibility to switch easily and quickly the types of services they provide and amount of their total digital bit stream that is used for each type of service. These new capabilities will allow broadcasters to offer immediate and significant improvements in the service they provide to the public and provide them the flexibility to alter their mix of services or add new services in response to viewer demand and future technical advances. The advent of digital television service will also promote greater competition within the broadcast industry by providing individual broadcasters with greater ability to differentiate their services from those of other broadcasters. In addition, the expanded service capabilities provided by the new DTV system will enhance the ability of broadcasters to compete with other video services such as cable television, direct broadcast satellite service and others.

3. In our action herein, we are generally maintaining the DTV allotment principles and policies set forth in the Sixth Report and Order. We are, however, making a number of revisions in response to the petitions for reconsideration. These include: 1) amending and expanding the DTV core spectrum approach, which establishes a plan for recovery of a portion of the television spectrum after the transition, to include channels 2-6, so that the final DTV core spectrum will be channels 2-51; 2) permitting increased power for UHF DTV stations through use of antenna beam-tilting techniques; 3) adopting a *de minimis* interference standard for changes to the DTV Table; 4) clarifying a number of rules and procedures for modifying the DTV Table; and 5) providing more specific guidance and procedures for low power stations that may be displaced or otherwise impacted by DTV operations. In addition, we are revising a number of the DTV allotments to address new test data on DTV-to-DTV adjacent channel performance; to reduce interference problems such as in the Southern California region; and to respond to requests from petitioners. The discussion herein first addresses the petitioners’ requests for reconsideration of our DTV allotment policies and rules and then addresses requests for modification of specific allotments included in the DTV Table in light of the revisions to our policies and rules.

## II. BACKGROUND

4. In the Sixth Report and Order, we adopted: 1) a comprehensive plan for the establishment of an initial DTV Table of Allotments and assigning those allotments to eligible broadcasters; 2) an initial DTV Table that was developed using those policies and a sophisticated computer allotment system; and 3) plans for spectrum recovery. In allotting DTV channels, we first sought to accommodate all eligible broadcasters with a second channel for DTV service. We indicated that this approach will promote an orderly transition to the new service by ensuring that all eligible full service broadcasters are able to provide digital service. Eligible broadcasters include all parties that, as of the date of issuance of the initial DTV licenses, are licensed to operate a television station or hold a permit to construct such a station, or both.<sup>6</sup> The DTV Table

---

<sup>6</sup> In the Fifth Report and Order, in this proceeding, we adopted eligibility criteria for the initial DTV allotments that conform with the guidance set forth in Section 201 of the Telecommunications Act of 1996 (1996 Telecommunications Act). Section 201 of the 1996 Telecommunications Act amends the Communications Act of

of Allotments adopted in the Sixth Report and Order provides a channel for all such eligible broadcasters. In addition, we attempted, to the extent possible, to provide each broadcaster with a new channel that will allow them to “replicate” the service areas of their existing NTSC operations, *i.e.*, to provide DTV service to areas that are generally comparable to their existing NTSC service areas. Thus, broadcasters were assigned DTV channels that would best allow them to match their stations’ existing service areas. The DTV Table was also designed to minimize all unavoidable interference to both existing analog TV and new DTV service.

5. In addition, we provided for recovery of a portion of the spectrum now used by television broadcasting. In particular, the DTV Table allows for early recovery of the 60 MHz of spectrum now used for TV channels 60-69 (746-806 MHz), and also provides for recovery of up to an additional 78 MHz at the end of the DTV transition period, for a total recovery of up to 138 MHz of spectrum. Under this plan, all DTV channels will eventually be located in a core spectrum of VHF and UHF TV channels that are technically most suited to DTV operation. The DTV Table adopted was based on use of channels 2-51. However, we also stated that in the future we would specify a core spectrum of either channels 7-51 or 2-46, and that in deciding this issue we would consider whether the lower VHF channels 2-6 prove acceptable for DTV use.

6. In the Sixth Report and Order, we continued the secondary status of low power television (LPTV) and TV translator stations.<sup>7</sup> However, we adopted a number of administrative and technical measures to minimize the impact of DTV implementation on low power operations. We also adopted policies and rules with respect to a number of other issues related to the DTV allotments and to the implementation of this new service. Other issues addressed include DTV transmitter sites, existing vacant NTSC allotments, applications for new NTSC stations and NTSC station modifications, sharing with land mobile operations, a DTV frequency labeling plan, negotiations among broadcasters for allotment and assignment changes, and the use of industry frequency coordinators in developing allotment changes. We generally used the technical and interference characteristics of the ATSC DTV Standard in developing the DTV allotments and in specifying the criteria for determining the technical acceptability of requests

---

1934 to add a new Section 336 that provides, inter alia, that “[i]f the Commission determines to issue additional licenses for advanced television services, the Commission ... should limit the initial eligibility for such licenses to persons that, as of the date of such issuance, are licensed to operate a television broadcast station or hold a permit to construct such a station.” We therefore limited the initial eligibility for DTV licenses to persons that, as of the date of such issuance, are licensed to operate a television station or hold a permit to construct such a station, or both. See Fifth Report and Order, at Section III. B.; see also Telecommunications Act of 1996, Pub. L. No. 104-104, Section 201, 110 Stat. 56 (1996), and 47 U.S.C. 336. Consistent with our decision in the Fifth Report and Order in this proceeding, the date of issuance of the initial DTV licenses is April 3, 1997, the date of the adoption of both the Fifth Report and Order and the Sixth Report and Order.

7 In light of their similar status and treatment under our rules, we often use the term “LPTV” herein to refer both to low power television and TV translator stations.

for modification of the Table.<sup>8</sup> Finally, we set forth technical criteria for the allotment of additional DTV frequencies and the modification of allotments included in the initial Table.

7. We received 231 petitions for reconsideration of issues addressed in the Sixth Report and Order. At the time the petitions were first received, our staff observed that many of the petitioners expressed concern that OET Bulletin No. 69, which is referenced in the new rules as a source of guidance for evaluating DTV coverage areas, was not available and that they therefore had not been able to fully evaluate the DTV channels that were paired with existing stations.<sup>9</sup> They generally argued that without the technical guidance of OET Bulletin No. 69, they were unable to fully evaluate either the acceptability of the DTV allotments provided for their existing stations or the suitability of alternative channels. These parties also generally requested that we provide additional time after the issuance of OET Bulletin No. 69 to evaluate their allotments and then supplement their petitions with additional information relating to specific changes in the DTV Table.

8. On July 2, 1997, our Office of Engineering and Technology issued an Order, DA 97-1377, clarifying the Sixth Report and Order with respect to OET Bulletin No. 69 and providing an additional period of time for parties requesting reconsideration of additional DTV allotments to submit supplemental information relating to their petitions. OET Bulletin No. 69 was released concurrent with that Order. The Order clarified that OET Bulletin No. 69 provides guidance on the implementation and use of the Longley-Rice methodology for evaluating DTV and NTSC coverage and interference. It further clarified that this guidance is generally intended to be used for the purposes of preparing applications requesting facilities that do not conform to the DTV Table, petitions to amend the DTV Table, applications for new DTV stations, changes in authorized DTV stations, and evaluating the impact of low power TV and TV translator stations on DTV service areas. In short, the Order explained that the purpose of OET Bulletin No. 69 is to serve as a guide for parties preparing submissions for possible actions that we might take subsequent to the development of the initial DTV Table. It also explained that the information in OET Bulletin No. 69 is not essential for evaluation of the DTV allotments adopted in the Sixth Report and Order. It noted that the terrain dependent Longley-Rice propagation model and the methodologies used in evaluating DTV coverage and interference are well known to the broadcast industry. Nonetheless, in view of the concern that occurred with regard to this Bulletin, the Order provided the parties that requested reconsideration of their DTV allotments an additional opportunity to supplement their petitions. We received 65

---

8 "ATSC" is the Advanced Television Systems Committee, an industry organization whose members include television networks, motion picture and television program producers, trade associations, television and other electronic equipment manufacturers and segments of the academic community. In the Fourth Report and Order in MM Docket No. 87-268, 11 FCC Rcd 17771 (1996), we adopted a modification of the ATSC DTV Standard as the standard for transmission of digital television. This modification is consistent with a consensus agreement voluntarily developed by a broad cross-section of parties, including the broadcasting, consumer equipment manufacturing and computer industries. The standard we adopted differs from the ATSC DTV Standard in that it does not include the ATSC specifications with respect to scanning formats, aspect ratios, and lines of resolution.

9 See 47 CFR 73.622(e), 73.623(c), 74.703(a), 74.705(e), and 74.707(e).

supplements to petitions for reconsideration pursuant to this opportunity.<sup>10</sup>

9. On November 20, 1997, the Association for Maximum Service Broadcasters, Inc. and other broadcasters (MSTV) submitted an *ex parte* filing that presents suggestions for addressing two issues relating to the DTV Table of Allotments. The first of these issues concerns DTV-to-DTV adjacent channel assignments. The second concerns assignments in the most congested areas of the country -- the Northeast, the Great Lakes region, and the California coastal area. MSTV's filing suggests making 357 changes to the DTV Table in the continental United States. Then, on November 25, 1997, the Association of Local Television Stations, Inc. (ALTV) submitted a proposal, by letter, for addressing the disparity in the authorized power between the DTV channels of existing UHF stations that will operate on UHF DTV channels (U-to-U stations) and the DTV channels of existing VHF stations that will operate on UHF channels. ALTV's proposal would permit DTV stations to increase power to 1000 kW, provided tilt-beam antennas and/or other technologies are employed to prevent any incremental visible interference. In a Public Notice released December 2, 1997, the Chief of the Commission's Office of Engineering and Technology provided an opportunity for parties to respond to these filings by MSTV and ALTV.

10. On July 9, 1997, we adopted a Notice of Proposed Rule Making in ET Docket No. 97-157, FCC 97-245 (released July 10, 1997), proposing to reallocate channels 60-69. Specifically, we proposed to allocate 24 MHz at 764-776 MHz and 794-806 MHz to the fixed and land mobile services and to designate this spectrum for public safety use. We proposed to allocate the remaining 36 MHz at 746-764 MHz and 776-794 MHz to the fixed, mobile and broadcasting services, and anticipated that licenses in this band may be assigned through competitive bidding. Subsequent to this Notice, on August 5, 1997, the Balanced Budget Act of 1997, Pub. L. 105-33, 111 Stat 251 (1997), was enacted. It added a new Section 337(a) to the Communications Act requiring that, by January 1, 1998, the Commission must reallocate 24 MHz of the channel 60-69 spectrum for public safety use, and that it reallocate the remaining 36 MHz of that spectrum for commercial use to be assigned by competitive bidding. Under the provisions of Section 337(a) the Commission is to commence licensing of the public safety portion of this reallocation by September 30, 1998 and is to commence competitive bidding for the commercial licenses after January 1, 2001. A Report and Order in ET Docket No. 97-157 completing this reallocation was adopted on December 31, 1997, FCC 97-421, released January 6, 1998.

### III. DTV ALLOTMENT ISSUES

#### A. General DTV Allotment Plan

---

<sup>10</sup> As indicated above, the parties filing supplements to their petitions for reconsideration and the parties filing related responses are listed in Appendix A.

11. The Association for Maximum Service Television, Inc., the Broadcasters' Caucus and other broadcasters (Joint MSTV Petitioners) request that we reconsider and clarify certain aspects of the Sixth Report and Order.<sup>11</sup> The Joint MSTV Petitioners submit that the DTV allotments/assignments are premised on many of the principles supported by a majority of broadcasters and that they do not seek to alter the basic priorities and principles on which the DTV allotments/assignments are based. They recognize that the DTV allotments are the product of a balancing among many different interests and goals, such as the recovery of channels 60-69, protection of land mobile service, replication of NTSC service, minimization of interference, etc. They state that in most cases the results of this balancing are acceptable, but in certain limited cases they are not. For example, the Joint MSTV Petitioners contend that in a few parts of the country, *i.e.* the Northeast Corridor, Great Lakes, and California Coastal regions, interference and replication remain concerns. They argue that given the congestion in these areas, stations have few, and in many cases no, options to improve their service via channel or facility changes. Accordingly, they seek "targeted and limited adjustments" to the DTV allotments/assignments, so as to prevent the loss of DTV and NTSC service. In particular, they request that we allow a limited number of exceptions to the restriction with regard to use of channels 60-69, among other things.<sup>12</sup> They argue that our priority to keep channels 60-69 free of DTV allotments has resulted in increased interference, and that limited exceptions to the channel 60-69 bar must be made to correct some of the most troublesome allotments in the congested areas.<sup>13</sup>

12. ALTV and a number of other parties representing UHF interests oppose the Joint

---

11 The Broadcasters' Caucus is an ad hoc group of broadcast organizations (ABC, Inc, the Association of Local Television Stations, Inc. (ALTV), the Association of America's Public Television Stations and the Public Broadcasting Service (AAPT/PBS), CBS, Inc., Chris Craft, Fox Television Stations, Inc. (Fox), the Association for Maximum Service Television, Inc. (MSTV), the National Association of Broadcasters (NAB), the National Broadcasting Company (NBC), the Public Broadcasting Service (PBS), and Tribune Broadcasting Company (Tribune)) that was formed in 1990 as part of the Advanced Television Systems Committee (ATSC) to represent broadcasters on DTV issues. The Joint MSTV Petitioners' petition indicates that AAPT/PBS supports the 50 kW power minimum and the 1000 kW power maximum and urges that exceptions be made to this maximum only in limited cases to correct the most severe replication problems. It further indicates that ALTV and Fox are not signatories to this petition. Joint MSTV Petitioners' petition, footnote 3. A number of other petitioners express support for the Joint MSTV Petitioners' filing in their individual petitions. These parties include, for example, California Oregon Broadcasting Inc. (COBI), Cosmos Broadcasting Corporation (Cosmos), Golden Empire Television Corporation (GETC), JDG Television Incorporated (JDG), Lee Enterprises, Inc. (Lee), Lincoln Broadcasting Company (Lincoln), Retlaw Enterprises, Inc. (Retlaw) and Television Wisconsin, Inc. (TV Wisconsin).

12 For example, the Joint MSTV Petitioners also request limited exceptions with regard to the land mobile spacing protections and the 1000 kW cap on DTV power, as discussed below.

13 For example, they observe that DTV channel 6 in Washington, D.C. is paired with NTSC channel 5. They note that we originally proposed to use channel 6, which poses potential for interference to FM radio service, only when there is no other readily available allotment opportunity that would provide for adequate replication of an existing station's service area. The Joint MSTV Petitioners submit that in this case, channel 69 was available for use in Washington. They further note that use of channel 6 for DTV in Washington will cause interference to other NTSC stations in Philadelphia, Pennsylvania and Richmond, Virginia.



MSTV Petitioners' petition to the extent that it seeks to solve some problems without addressing the UHF power issue.<sup>14</sup> They submit that the Joint MSTV Petitioners fail to address the power problem facing existing UHF stations that are assigned UHF DTV channels (U-to-U stations). ALTV, for example, states that in several specific respects their failure to address the UHF power problem is glaring. For example, ALTV notes that the Joint MSTV Petitioners assert that "many of the stations subject to the UHF power minimum have DTV service that extends significantly beyond their Grade B contours."<sup>15</sup> ALTV argues that such statements obscure the concerns that such stations may fail to provide reliable service even within their NTSC Grade A contours.

13. DeSoto Broadcasting, Inc. (DeSoto), the Minnesota Broadcasting Association (MBA), Mountain Broadcasting Corporation (MBC), and WWAC, Inc., argue that the DTV core spectrum plan will solidify the disparities in service between VHF and UHF stations and forever relegate UHF stations to second-class citizenship in the broadcast spectrum. These petitioners submit that under the core spectrum plan, it is very difficult to find available spectrum for the expansion of a station's service area. They state that if the entire existing broadcast spectrum was available, there would be little problem allowing smaller UHF stations to expand their reach, and LPTV and TV translators to find spectrum. Expressing the views of these parties, MBC requests that we eliminate the core spectrum and spectrum recovery policies and extend to broadcasters the choice to retain channel 60 to 69 assignments on a permanent basis.

14. Hardy & Carey LLP argue that a new DTV Table should be developed that will ensure that the ability of underdeveloped stations to grow will not be hampered. To facilitate this revision, they state that any spectrum recovery should be deferred until after DTV is fully implemented. Tribune contends that because we did not make full use of the entire existing TV spectrum, we were unable to adhere to our own minimum separation standards. It states that this results in a number of short spaced situations that will ultimately result in unacceptable interference to existing NTSC service or to new DTV service. It therefore submits that we should re-do the DTV Table, adhering more closely to our spacing requirements, even if in doing so we must allot channels outside the DTV core spectrum. It states that the objectives underlying the core spectrum can be realized when the television bands are re-packed after the transition. In its supplemental filing, Tribune urges that we eliminate any NTSC/VHF to DTV/UHF assignments on channels 60-69 in the DTV Table of Allotments in light of the recent Congressional action requiring that we reallocate 24 MHz in this band for public safety.

15. The Association of Public-Safety Communications Officials-International, Inc. (APCO) and the Land Mobile Coordinating Committee (LMCC) seek reconsideration of the 15 DTV allotments on TV channels 60-69. These petitioners are concerned that where a DTV allotment occupies a channel in this range, that channel cannot be used in the affected area for

---

14 The UHF power issue is addressed in the DTV Power section below. See also letter of December 5, 1997, from Viacom and several other UHF broadcasters responding to MSTV's November 20, 1997, *ex parte* filing.

15 See Joint MSTV Petitioners' petition, at p. 19.

other uses until the end of the transition. They state that the most severe situation is in Southern California, where there are six DTV stations and four existing NTSC stations on channels 60-69. It states that as a result nearly all of the 746-806 MHz band is, or will be, encumbered and public safety agencies in Southern California will have to wait for these frequencies until the end of the transition. APCO argues that this is the most spectrum-congested area where there is an immediate need for additional spectrum for public safety. APCO and LMCC state that we should explore all possible methods for eliminating the allotments in channels 60-69.

16. The California Highway Patrol (CHP), the County of Los Angeles, California (LA County) and the LMCC also express concern that the use of channel 69 in particular for DTV in Southern California poses an interference threat to land mobile operations in the 800 MHz band. In this regard, LMCC submits that the channel 69 DTV allotment provided for KRCA-TV in Riverside, California could result in harmful interference to existing Los Angeles area public safety, private and special mobile radio (SMR) systems operating in portions of the adjacent 806-821/851-866 MHz band. These petitioners request that we provide KRCA-TV with a different channel for DTV service and that we otherwise avoid the use of channel 69 in reallocoting DTV channels in Southern California. LMCC also requests that we affirm that stations allotted channels adjacent to existing land mobile operations will bear the responsibility of ensuring that no harmful interference occurs to land mobile systems as a result of their operations.

17. A number of parties representing low power interests argue that the plan for early recovery of channels 60-69 will adversely impact low power television (LPTV) and TV translator stations. For example, Abacus Television, Jose Luis Rodriguez, and the Videohouse, Inc. (Urban LPTV Parties), the Community Broadcasters Association (CBA), and the Department of Special Districts, San Bernardino, California (DSD) submit that the removal of channels 60-69 from broadcasting service will cause the loss of many LPTV stations that currently operate on those channels. Telemundo states we need to weigh the important service provided to Hispanic viewers by its LPTV operations and the value of diversity against the spectrum efficiency concerns prompting the reclamation of channels 60-69.

18. The DSD and the Urban LPTV Parties request that we withhold final action on the reallocation of channels 60-69 until after the transition. CBA states that whatever the ultimate disposition of channels 60-69 may be, LPTV stations should be allowed to remain and/or to move there until the mandatory end of analog NTSC service. It states that any spectrum sold at auction should be sold with a caveat that use of some of it may have to wait until the end of the digital transition. Telemundo argues that no broadcast service should be displaced by a non-broadcast service, and specifically that LPTV stations operating in channels 60-69 should never be displaced due to reclamation of their channels unless the Commission provides alternate channels. KM Communications (KMC) states that the methodology for the DTV Table should be reconsidered and developed on a basis which minimizes displacement of LPTV stations by all available means, including use of channels 60-69. It submits that at a minimum, channels 60-69 should be used in major urban markets for displaced LPTV stations.

19. First Baptist Church, Paris, Texas (FBC) submits that, as a result of the Sixth Report and Order, there are no unused television channels available for which it may apply.<sup>16</sup> FBC requests that we take some action to reserve spectrum for use by new applicants.

20. In its November 20, 1997, *ex parte* filing, MSTV suggests making 357 changes to the DTV allotments in the continental United States. It submits that these changes would reduce interference to both NTSC and DTV service in the congested areas and cure the short-spacing of a large number of the cases of DTV-to-DTV adjacent channel allotments. It further submits that neither the Commission nor the industry knew of the adjacent channel problem until late summer, when the ATTC study of DTV-to-DTV adjacent channel operations was released. MSTV's suggestions would place an additional 32 allotments on channels 60-69 in the continental U.S. It states that these additional allotments on channels 60-69 would have little impact on the availability of spectrum for public safety services.

21. Over one hundred filings were submitted in response to the suggested changes set forth in MSTV's *ex parte* filing. A number of parties supported the MSTV changes and/or indicated that the suggested changes improved their individual situations.<sup>17</sup> ABC, Inc. (ABC), for example, states that the MSTV changes solve the problems it has identified in its individual petition for reconsideration and provides a fair and workable plan to remedy the most egregious cases of interference as well as the DTV-to-DTV adjacent channel interference problem. Tribune states that the MSTV Table would eliminate the problematic DTV channel 68 allotment for its station, KTLA-TV in Los Angeles and correct interference in the Northeast corridor. Astroline Communications Company, Brunson Communications, Inc., Central Michigan University, Gulf-California Broadcast Company and others endorse the MSTV changes for their individual stations. They indicate that the proposed changes would eliminate interference, eliminate out-of-core operation, or improve replication for their stations.

22. On the other hand, the majority of parties that submitted responses, including both broadcast and public safety interests, oppose the changes suggested by MSTV. These parties generally argue that the MSTV changes would result in their stations being disadvantaged in some way, such as receiving more interference, reducing service replication or being assigned out-of-core DTV channels. Parties representing public safety interests oppose MSTV's changes to the extent that the changes use additional channel 60-69 DTV allotments and thereby would reduce the amount of spectrum available to public safety and propose allotments that infringe on

---

16 In 1987, the Commission issued an Order (Freeze Order) stating that it would not accept applications for any new stations in 30 major markets. See Order, RM-5811 (Mimeo No. 4074, released July 17, 1987). FBC states that it had been investigating applying for one of two vacant NTSC allotments at Paris, Texas, but was unable to do so because of the freeze on acceptance of new NTSC applications in certain major markets

17 See also, for example, submissions filed by American Christian Television Services, Inc., Advanced Television Technology Center, Inc., Association of Federal Communications Consulting Engineers, Carolina Christian Broadcasting, Inc., Community Television, Granite Broadcasting Corporation, JDG Television, Inc., Meyer Broadcasting Company, Midwest Television, Inc., United Communications Inc. and WLNY-TV, Inc.

current land mobile shared spectrum. APTS/PBS, for example, state that the MSTV Table creates additional out-of-core and technical problems for a number of PTV licensees. It states that the MSTV Table would increase the number of PTV stations with both their NTSC and DTV channels out of the core spectrum and would increase the number of PTV stations on channels 60-69. It also states that the proposed changes would reduce coverage and replication for some PTV stations and create other problems for PTV stations.

23. Bangor Communications, Inc., states that while the MSTV filing purports to improve the DTV Table, the proposed changes would result in a disproportionate loss of viewers and coverage area for its station. Central Virginia Education Telecommunications Corporation (CVET) states that MSTV's suggested changes would have a significant adverse effect on its station since under MSTV's approach both of its channels would be outside of the core spectrum. Cox broadcasting (Cox) states that its stations will lose a substantial number of viewers and coverage if the MSTV proposals are adopted. Chris-Craft/United Group (Chris-Craft) and Golden Orange Broadcasting Co., Inc., in their separate filings, oppose MSTV's changes for their stations in the Los Angeles market area. Chris-Craft states that MSTV's proposed change for its station would conflict with an existing Mexican television allotment. Dispatch Broadcast Group (Dispatch) objects to MSTV proposal to assign DTV channel 21 in Columbus, Ohio to WCMH-TV rather than to Dispatch's WBNS-TV in the same market. Dispatch states that this proposed assignment is not necessitated by either of the two problems the MSTV filing purports to address. Sullivan states that in most cases MSTV changes do not benefit its stations and, in some cases, makes their prospects worse.

24. APCO, the County of Los Angeles, Motorola, National Public Safety Telecommunications Council (NPSTC) generally oppose the changes suggested by MSTV to the extent it proposes additional use of channels 60-69. NPSTC, for example, notes that MSTV proposes 32 new DTV allotments on channels 60-69 and 23 of these are either on or adjacent to channels proposed for public safety use. They state that these allotments would severely reduce the ability of public safety agencies in a number of major metropolitan areas. The New York Metropolitan Advisory Committee states that MSTV's proposed channel 16 DTV allotment for New Haven, Connecticut would pose harmful interference to its existing land mobile operations on UHF TV channels 14-20.<sup>18</sup> It further states that the additional channel 60-69 DTV allotments would prevent the use of this spectrum for public safety in New York City. APCO, the County of Los Angeles and NPSTC do, however, support MSTV's proposed elimination of the use of channels 68 and 69 for DTV in Los Angeles.

25. Decision. We continue to believe that the general principles and priorities used for

---

<sup>18</sup> The New York Metropolitan Advisory Committee includes: the New York City Police Department, New York City Fire Department, New York City Department of Correction, New York City Department of Parks and Recreation, New York City Department of Information technology and Telecommunications, New York City Department of Transportation, New York City Transit Authority, Fire Department of the City of Yonkers, Police Department of the City of New Rochelle, Nassau County Police Department, Suffolk County Police Department, Elmont Fire District, and Bergen County, New Jersey, Police Department.

the development of the DTV allotments/assignments remain appropriate. We reaffirm our approach to provide all eligible broadcasters with the temporary use of a second channel that, to the extent possible, will allow them to replicate the service areas of their existing NTSC operations. We continue to find that such an approach will promote the orderly transition of DTV by broadcasters and foster the provision of service to the public. We also affirm our general plans for spectrum recovery, including the core spectrum and the early recovery of channels 60-69, and maintaining the secondary status of low power stations. In this regard, the petitioners have not presented any new information or analysis that was not available at the time of the Sixth Report and Order that would warrant a change in our basic plan to recover a portion of the existing television spectrum, nor have they persuaded us that we were incorrect in our balancing of the various factors that weigh in this issue.

26. To the extent that petitioners, such as the Joint MSTV Petitioners, suggest that certain “targeted and limited adjustments” to the DTV Table are needed, we are making a number of limited changes in the DTV Table of Allotments in order to prevent the loss of DTV service and minimize the impact of DTV operations on existing NTSC service. In this regard, for example, we have reviewed the DTV-to-DTV adjacent channel situations identified in MSTV’s *ex parte* filing and are modifying the DTV allotments to eliminate these DTV-to-DTV adjacent channel situations in a number of instances. Specifically, we are making changes to 42 DTV allotments, including a number of the changes suggested by MSTV, to resolve cases where use of adjacent channels is no longer acceptable and would impact our service replication and interference goals.<sup>19</sup> We also, as discussed below, are making a number of modifications to our technical rules for DTV operation to further reduce the potential for interference between DTV stations that operate on adjacent channels in the same area. We are further making 29 additional allotment changes to address requests by individual petitioners. As part of these changes, we agree with MSTV and others parties, including those representing land mobile interests, that some revision to the DTV allotments are needed in the Southern California area. Therefore, the 29 changes include modifications to four DTV allotments in this region to address concerns regarding interference to television and land mobile services. We believe that these 71 changes, adequately address the interference and replication concerns identified in MSTV’s *ex parte* filing and the petitions of other broadcasters.

27. We do not find that additional changes in the DTV Table or increased use of channels 60-69 are needed or warranted to address either DTV adjacent channel concerns or DTV operations in the congested areas identified by MSTV and other petitioners. As the Joint MSTV Petitioners note in their petition, the DTV allotments are the product of a balancing among many different interests and goals. While some broadcast parties would have liked such balancing to give greater preeminence to certain specific broadcast concerns, the Commission must balance all of the relevant factors in determining the public interest. In this regard, we find that the DTV Table of Allotments, as amended herein, will provide the vast majority of broadcasters with DTV allotments that offer a high level of service replication. We further conclude, as indicated below,

---

<sup>19</sup> See discussion of adjacent channel issues below.

that making additional changes would provide little or no improvement, would have other adverse consequences such as increasing the number of out-of-core allotments or allotments on channels 60-69, or would lead to the improved service of some broadcasters at the expense of other broadcasters.

28. As stated in the Sixth Report and Order, we find the impact of our core and spectrum recovery approaches on interference to be insubstantial.<sup>20</sup> The new DTV Table of Allotments ensures that almost 99 percent of all existing NTSC service areas and viewers will be unaffected by the implementation of DTV. We note that the cumulative differences in NTSC interference between the DTV Table, as amended herein, and the recently filed MSTV Table that includes 357 new changes are a small fraction of 1 percent. As we indicated with regard to the previous Table submitted by MSTV and the Joint Broadcasters, such a difference is not scientifically significant or is at best *de minimis* when considering the accuracy and probabilistic nature of propagation and the other engineering models and assumptions used to calculate interference.<sup>21</sup> We further note that practical implementation considerations, such as transmitter moves required because of lack of tower space, will likely result in far greater differences.

29. We further find that full implementation of MSTV’s suggested changes would come at a cost of many additional broadcasters being assigned out-of-core allotments that would necessitate those broadcasters being faced with a subsequent second DTV channel move and the costs of that move. In addition, we continue to find that the benefits associated with rapid recovery of channels 60-69 are substantial and would outweigh any positive impact that increased use of channels 60-69 might have for DTV implementation. Moreover, we believe that increased use of channels 60-69 would be inconsistent with our statutory mandate under Section 3004 of the Balanced Budget Act of 1997. In this same light, it is not practicable to eliminate all DTV allotments from channels 60-69 as requested by land mobile interests. We have found that it is necessary to make use of those channels for DTV allotments in a few instances in order to achieve our full accommodation and service replication goals.<sup>22</sup>

---

20 See Sixth Report and Order at para. 78.

21 See Sixth Report and Order, at footnote 145.

22 See Sixth Report and Order, at para. 76. As noted below, we have, however, amended the DTV Table to avoid the use of channel 69 in the Los Angeles area, as suggested in MSTV’s *ex parte* filing. MSTV suggested a number of changes to the DTV allotments in the Southern California region including avoiding the use of both channels 68 and 69 in Los Angeles. MSTV’s suggested changes, however, included 7 violations of the spacing requirements with Mexico:

<u>City</u>	<u>MSTV Chan.</u>	<u>Conflicts with Mexican Chan.</u>
Huntington Beach, CA	49	49 Tecate, BN
Los Angeles, CA	21	21 Tecate, BN
Los Angeles, CA	33	33 Tijuana, BN

30. We do not agree that the issue of the UHF/VHF disparity is best addressed through the elimination of the core spectrum approach, as suggested by DeSoto and others. We believe that there are other approaches, as discussed below, that will more effectively address this issue.

With regard to Tribune’s contention that we were unable to adhere to our own minimum separation standards because we did not make full use of the entire existing TV spectrum or an expanded core, we note that the DTV Table was not developed based on spacing distances. Rather, the Table was developed using engineering standards to provide for replication of existing NTSC service areas during the DTV transition period. In many instances, full replication can be achieved without meeting the spacing standards for new DTV allotments.

31. With regard to low power operations, we are affirming our earlier decision to permit low power stations to continue to operate on channels 60-69 on a secondary basis through the transition process. As set forth in the Report and Order in ET Docket No. 97-157, we have reallocated channels 60-69 for public safety and a broad range of other services, including broadcasting, in accordance with the requirements of the Balanced Budget Act of 1997. However, in that decision, we stated that low power stations will be allowed to operate on these channels, provided no interference is caused to primary users. We also encouraged, wherever possible, private negotiations between low power and new service providers to resolve interference problems in a manner which is acceptable and beneficial to both parties.

32. We do not find it desirable, or indeed, practical to reserve spectrum for new stations as requested by FBC. In many areas there remain opportunities for establishing new stations. We believe the best approach for accommodating new stations is through individual requests for amendment of the DTV Table. This will facilitate use of the available spectrum in locations where there is specific interest in establishing a new station. We also find that FBC’s suggestions that we accommodate new stations by reducing or otherwise infringing the service areas of new DTV stations would be inconsistent with our goal of replicating the service areas of existing stations.

---

Rancho Palos Verdes, CA	29	29 Ensenada, BN
San Diego, CA	48	33 Tijuana, BN
Las Cruces, NM	35	20 Juarez, Chihuahua
Laredo, TX	17	17 Nuevo Rosita, Coahila

It was not possible to avoid the use of both channels 68 and 69 in Los Angeles and protect all Mexican allotments and assignments, as required.

## B. Selection of the DTV Core Spectrum

33. As noted in the Sixth Report and Order, one of our principal concerns in this proceeding is to provide broadcasters with the best possible spectrum for DTV service.<sup>23</sup> In the Sixth Further Notice, we stated that a core region between channels 7-51 may be the most appropriate location for DTV broadcasting; that this spectrum would be sufficient to accommodate all existing broadcasters; and that it would provide additional DTV channels for new entrants after the conversion to digital service.<sup>24</sup> We noted that the lower VHF channels 2-6 are subject to technical penalties, including higher ambient noise levels and concerns of possible interference to and from FM radio service. We did, however, recognize that these channels offer unique characteristics for broadcasting, particularly with regard to propagation. In the Sixth Report and Order, we recognized that a number of commenting parties strongly believed that DTV signals can perform well in the presence of noise and that the lower VHF channels 2-6, with their desirable propagation characteristics, should be made part of the DTV core spectrum. However, other parties agreed with our initial assessment that these channels may not be appropriate for TV use. We therefore concluded that the best approach was to develop the DTV Table based on use of channels 2-51, and modified our allotment software to attempt to locate all DTV channels within this portion of the spectrum. We stated that if channels 2-6 prove acceptable for DTV use, we will consider retaining these channels for DTV use and adjusting the core spectrum to encompass channels 2-46, rather than channels 7-51.

34. A number of petitioners, including the Ad Hoc Group of 25 Low-VHF Stations (Low-VHF Stations), A.H. Belo Corporation (Belo), the Joint MSTV Petitioners, Capitol, Chronicle Publishing Corporation (CPC), Citadel Communications Co., Ltd. (Citadel), Cordillera, DSD, Granite Broadcasting Company (Granite), Harte-Hanks Television, Inc. (Harte-Hanks), Landmark Television of Tennessee, Inc. (Landmark),<sup>25</sup> Mt. Mansfield, Pulitzer Broadcasting Company (Pulitzer), Ramar Communications, Inc. (Ramar), Retlaw Enterprises, Inc. (Retlaw), Scripps Howard Broadcasting Company (SHBC), and the US Broadcast Group Licensees, L.P. (US Broadcast Group) request that we reconsider our decision to defer the determination of the final core spectrum pending information on the suitability of channels 2-6 for DTV service. These parties express concern with regard to the equivocation reflected in our statement that if the lower VHF channels prove acceptable for DTV use, we will consider retaining these channels for DTV and adjusting the core spectrum to encompass channels 2-46, rather than channels 7-51. For example, the Ad Hoc Group of 25 Low-VHF Stations (Low-VHF Stations) argue that no spectrum should be stigmatized with "wait and see" status, particularly channels 2-6.

35. Cordillera, Gannett, Landmark, the Low VHF Stations, and Retlaw argue that our

---

<sup>23</sup> See Sixth Report and Order, at para. 82.

<sup>24</sup> See Sixth Further Notice, at para. 19.

<sup>25</sup> Landmark addresses the inclusion of channels 2-6 in the DTV core in its supplemental filing.



concerns with regard to channels 2-6 are unfounded given the specially suitable characteristics of the lower VHF channels for wide-area broadcast service. The Low-VHF Stations and Retlaw submit that if noise problems in the spectrum at channels 2-6 emerge, there are means of dealing with those problems, such as encouraging manufacturers to develop more robust receivers and addressing leakage from power lines. The Joint MSTV Petitioners argue that more than 280 NTSC stations on low-VHF channels have provided outstanding service on these channels for many years. They also state that putting a cloud on the suitability of channels 2-6 now is problematic because it assumes that portions of the band are more hospitable to DTV without the benefit of real world data from the early stages of DTV implementation. Belo and the Low-VHF Stations similarly argue that our reservations with regard to channels 2-6 lack support in engineering calculations or field data.

36. Citadel and SHBC argue that the testing and analysis that has been completed to date indicates that the propagation characteristics of channels 2-6 provide superior coverage capabilities for DTV service and that potential interference concerns are minimal. They state that the field tests of the DTV system conducted in Charlotte, North Carolina indicate a substantially improved coverage area on DTV channel 6 as compared with analog TV service on the same channel. Citadel argues that while the Charlotte Report did indicate some unanticipated interference from impulse noise, the report noted that the study's results were impacted by the use of extremely limited power and that any interference would be substantially diminished when full power levels were employed.<sup>26</sup> It thus states that the record presents no reason to believe that channels 2-6 will fail to perform well for DTV.

37. These petitioners also generally argue that delaying the decision on channels 2-6 creates uncertainty for a considerable number of both commercial and noncommercial broadcasters, in that it makes business planning for the DTV era problematic. As expressed by Granite and Ramar, these parties generally state that by establishing the DTV core spectrum as encompassing channels 2-51 for the transition period, but holding out the possibility that licensees using channels 2-6 or 47-51 may be required to move, we are potentially placing unnecessary technical burdens and expense on stations whose DTV allotments are at either end of the core spectrum.

38. In view of the above considerations, these petitioners request that we expand or amend the DTV core spectrum to include channels 2-6. For example, the Low-VHF Stations and others ask that we consider all channels between 2 and 51 for the DTV core spectrum.<sup>27</sup> Hart-Hanks and Pulitzer state that more stations will be able to switch to their existing channels

---

<sup>26</sup> See "Terrestrial Broadcast Field Test Reports," in "Record of Test Results for Digital HDTV Grand Alliance System," submitted to the FCC Advisory Committee on Advanced Television Service (October 1995).

<sup>27</sup> A.H. Belo Corporation (Belo), Capitol Broadcasting Company, Inc. (Capitol), California Oregon Broadcasting Company (COBI), Gannett Co., Inc. (Gannett), Hubbard Broadcasting, Inc. (Hubbard), Lee Enterprises, Inc. (Lee), and Mt. Mansfield, Inc., support the Low-VHF Broadcasters request that all channels between 2-51 be considered fairly and equally as part of the final core spectrum.

if the post-transition core is channels 2-46 than if the core is channels 7-51. Pulitzer states that by adopting a core of channels 2-46, a significantly greater number of stations (71 vs. 12) with initial DTV channels outside the core will be able to switch to their existing NTSC channels. Ramar states that we should make clear that the core spectrum includes channels 47-51, even if channels 2-6 are included in the core. Ramar believes that it is important to allocate as much core spectrum as possible to facilitate achievement of the important goal of providing high quality DTV service to all viewers.

39. Guy Gannett Communications (Guy Gannett), in its supplemental filing, maintains that television transmissions on channel 2 often experience interference caused by both impulse noise from natural and man-made sources and sporadic E-layer ionospheric reflections. Guy Gannett further states that this interference, coupled with the low ERP specified for WTWC-TV and the poor performance generally of commercially available receive antennas, makes it very unlikely that WTWC-TV could achieve the service replication necessary for viable DTV operations.

40. National Public Radio (NPR) requests that we reconsider the DTV Table to the extent that it provides DTV allotments on channel 6. It also states that we should reconsider permitting TV broadcasters to switch their DTV service to their current NTSC channel 6 assignments at the end of the transition. NPR argues that it is inappropriate at this time to permit such an option because there has not been sufficient field testing or practical experience to determine whether it is appropriate to use channel 6 for digital broadcasting and that the return of 50 or more broadcasters to channel 6 may result in significant interference to FM radio services. NPR argues that in the case of an existing or new noncommercial FM station that either experiences or causes adjacent channel interference of a new type, degree, or effect that is associated with the operation of a DTV channel 6 station, the DTV station should be responsible for such interference. NPR also states that there is no justification for requiring FM noncommercial educational stations to bear the substantial costs and burdens associated with compliance with Section 73.525 of the rules, which requires that new noncommercial educational FM stations operating on channels 201-220 protect existing TV operations on channel 6, if it is believed that no adjacent interference will occur.<sup>28</sup>

41. Decision. We recognize that postponing a decision on the low-VHF channels has raised uncertainties for licensees whose existing and/or DTV channels are in that portion of the spectrum. We further understand that these uncertainties can make planning for DTV service more difficult and burdensome. We also concur that there is no engineering evidence available at this time to indicate that these channels are unsuitable for DTV operation and such channels offer desirable propagation characteristics for television service. We therefore recognize the benefits of including these channels in the core spectrum. We also note, however, that a DTV core spectrum of channels 2-46 would require significantly more second moves by broadcasters than a core of channels 7-51. In reconsidering this matter, we now believe that the most

---

<sup>28</sup> See 47 CFR 73.525.

desirable course of action is to expand the core to include all channels 2-51.

42. This expansion of the core will eliminate the planning uncertainties for many broadcasters that have either DTV or NTSC channels in the channel 2-6 or 47-51 regions of the spectrum. Providing an additional five channels for DTV will reduce the number of out-of-core allotments, thereby further reducing the number of stations that will be required to make second channel moves. Expanding the core will also promote additional competition and diversity in the provision of DTV services by increasing the availability of channels for new stations and networks. Expansion of the core will also provide more flexibility to address new technical information on adjacent DTV channel performance and ensure that there is sufficient spectrum to eliminate DTV-to-DTV adjacent channel interference situations.

43. This change will also reduce the impact on low power operations. In this regard, channels 2-6 and 47-51 now support a significant number of low power and TV translators. The low VHF channels, for example, have some of the highest concentration of low power stations. Expanding the core to include channels 2-6 would eliminate the eventual displacement of most of these stations. In addition, expanding the core will also provide low power stations with more channels and opportunities for new stations and relocation of existing stations.

44. While we recognize that this change will reduce by 30 MHz the amount of contiguous spectrum to be recovered, we believe that the benefits of expanding the DTV core spectrum to include channels 2-51 outweigh the benefits of clearing either channels 2-6 or 47-51. Expanding the DTV core spectrum will permit recovery of 108 MHz of spectrum at the end of the transition period, which is more than one-fourth of the total spectrum used for broadcast television today. We note that this amount of spectrum is significantly more than our original plan to recover 72 MHz of spectrum.<sup>29</sup> While expansion of the core spectrum may raise concerns about providing broadcasters with additional spectrum and reducing the amount of spectrum available to other service providers, these concerns are offset by the fact that this expansion will provide additional opportunities for new DTV stations and other new digital data services. Our analysis indicates that expanding the core will add approximately 175 additional channels, and that many of these new channels will be in top markets, including at least three new channels each in congested and highly-valuable New York, Los Angeles, San Diego, San Francisco, and Detroit. Last July, Congress expanded our auction authority to include assignment of broadcast licenses and therefore most of the new channels will be awarded through our auction procedures, as required under new Section 309(j)(14)(C) of the Communications Act. Additional benefits also exist, including less interference to existing broadcasters in major markets during the transition, continued operation of some 500 additional low power TV and TV translator stations that provide service to many suburban and rural areas and that otherwise might have been required to cease operation, and elimination of mandatory second moves into the core for about 120 broadcasters at the end of the transition. Based on

---

<sup>29</sup> See Second Further Notice of Proposed Rule Making in MM Docket no. 87-268, 7 FCC Rcd 5376 (1992), at para. 18 and footnote 24.

these factors, we conclude that the public will benefit substantially from our expanding the core.

45. With regard to the concerns of noncommercial radio interests regarding the use of channel 6, we first note that in developing the initial DTV Table we have sought to minimizing the potential for interference between DTV and FM radio service by avoiding the use of channel 6 for DTV wherever possible. There is only one channel 6 allotment in the initial DTV Table. To the extent that stations may return to existing channel 6 assignments, we note that DTV operations will be at substantially lower power levels than existing NTSC channel 6 operations. Analysis by our staff indicates that the current rules for protection of analog TV channel 6 service from interference caused by FM radio service are adequate to protect DTV operations on existing analog channel 6 allotments as long as DTV coverage on these channels is the same as, or does not significantly exceed, the coverage of the analog service it would replace. The existing rules will similarly provide adequate protection for new DTV stations on new channel 6 allotments.<sup>30</sup> Our staff analysis also indicates that a DTV station operating on a new channel 6 allotment would not cause interference to an existing FM radio service in most cases, particularly where the FM station is operating at or near its maximum allowed power. In other cases, particularly where the FM station operates significantly below 3 kW, some interference may occur. We agree with NPR that noncommercial radio licensees should not be solely responsible for resolving interference that might result from our inclusion of channel 6 in the core spectrum. Accordingly, as a general matter and consistent with our longstanding policy regarding new stations, it will be the initial responsibility of a DTV licensee to protect against or eliminate harmful interference to any FM radio stations that are in operation at the time the DTV station commences operation. In view of our staff analysis, as discussed above, we believe this policy is adequate to address any instances where stations relocating their DTV service to their existing analog service channels might result in interference to FM radio service. In the case of new DTV stations on new channel 6 allotments, however, the nature of the potential for interference to FM service from DTV signals necessitates that determinations of whether such interference would occur be made on a case-by-case basis. We therefore will require that parties requesting allotment of new DTV allotments on channel 6 submit an engineering study to demonstrate that no interference would be caused to existing FM radio stations on FM channels 200-220.

### C. Out-of-Core Allotments

46. A number of parties, including AK Media Group, Inc. (AK Media), Allbritton Communications Company (Allbritton), APTS/PBS, Brechner, Blade Communications, Inc. (Blade), the Christian Network, Inc. (CNI), the Educational Broadcasting Corporation (EBC), LeHigh Valley Public Television (LeHigh Valley), the University of North Carolina Center for Public Television (UNCTV), Univision Communications Inc. (Univision), and the WGBH

---

<sup>30</sup> Section 73.525 of the rules, 47 CFR 73.525, provides interference protection to television stations operating on TV channel 6 from noncommercial FM radio stations operating on FM channels 200-220. This protection is provided through minimum mileage spacings or maximum power restrictions on co-located FM stations operating on those channels.

Educational Foundation (WGBH) express concern regarding the additional burden that will be placed on stations that are provided transitional DTV channels outside the core spectrum. These parties generally state that because they will have to relocate their DTV operations to channels within the core spectrum they will have to endure additional costs and be placed at a disadvantage with respect to their competitors. For example, Brechner submits that a "double move" for its stations, while unlikely to be as expensive as the initial conversion to DTV, could easily cost millions of dollars in technical, legal and equipment costs, and in destabilizing effects on viewers and revenues. It further points out that a second conversion would necessitate changes to the digital converter equipment used at the headend of each cable system that carries the station and that affected stations could well be asked to bear the costs of such changes to cable retransmission equipment. These petitioners argue that the disparity in treatment of similarly situated broadcasters, where some must pay to relocate while others enjoy DTV allotments in the core is unfair. Univision also argues that a disproportionate number of minority-oriented licensees like itself have been allotted DTV channels in areas of the spectrum that will eventually be recovered and that the need for these stations to build their DTV facilities twice threatens the future health and diversity of minority programming.

47. The petitioners request that we take a variety of steps to alleviate the additional burdens faced by stations with out-of-core DTV channels. CNI requests that we modify the "no new interference criteria" for allotment changes to make it easier for such broadcasters to find channels in the core. AK Media Group, Inc. (AK Media) suggests that we require stations that have both a DTV and NTSC channel within the range of channels 7-46 to choose now the channel they intend to keep following the transition. It states that this would allow stations with out-of-core DTV channels to know the channels that will be available so that they can select their ultimate DTV channel now. AAPTS/PBS makes a similar request with regard to public television (PTV) licensees.

48. Allbritton submits that replicating the signals of some of its existing VHF stations on out-of-core UHF channels will necessitate the construction and operation of massive transmitters. It states that the burden of cost and difficulty associated with these conversion investments will be heightened because the stations' DTV channels must be surrendered after the transition. Allbritton therefore requests that we permit stations with out-of-core DTV channels to retain those channels after the transition. It also states that we should consider alternative proposals for new allotments for these stations.

49. AAPTS/PBS and other parties representing the interests of noncommercial stations are concerned that a number of PTV stations were provided out-of-core DTV channels and that the burdens associated with such channels will materially impair the ability of these stations to make the transition to DTV. AAPTS/PBS submits that many PTV stations will have great difficulty in building a single DTV facility, and given their reliance on federal, state and private contributions for operating and capital expenses, it will be difficult or even impossible for PTV stations assigned channels outside the core to build a second DTV facility in the short span of the transition period. It further submits that because PTV stations must raise capital funds from the same sources as operating funds, the need to raise additional funds to construct a second DTV

station may affect the ability of even the largest PTV licensees to fund their operating expenses. These petitioners request that we take a number of steps specifically to alleviate the burdens of out-of-core allotments on public television stations.

50. AAPTS/PBS and EBC request that, to the extent we modify the DTV Table, we also allot, wherever possible, core channels for PTV licensees currently allotted channels outside the core.<sup>31</sup> WGBH states that we should give special consideration to PTV stations with out-of-core DTV channels as DTV channel assignments are changed and channels become available for reassignment. Specifically, it requests that we provide that PTV stations with out-of-core NTSC and DTV channels be entitled to be "first in line" to move to technically appropriate channels within the core as such channels open up if, for example, licensees do not participate in the conversion or do not construct their facilities on time.

51. AAPTS/PBS further submits that we should provide PTV stations with out-of-core DTV channels greater flexibility than the rules currently provide to deal with the burdens caused by out-of-core allotments. In this regard, it requests that we allow PTV stations with DTV allotments outside the core spectrum to select DTV channels in the core, even if the alternative channel does not fully comport with our planning factors. Such exceptions to the planning factors could include, for example: 1) channels that do not fully replicate a station's NTSC coverage; 2) channels that require the station to operate from a transmitter site more than 5 km from its current site; or, 3) channels that receive more interference from NTSC stations than our planning factors allowed. AAPTS/PBS states that such solutions would, of course, only be acceptable if they did not cause additional interference to another DTV allotment, an existing NTSC station, or a currently pending NTSC application, or if the affected licensee or applicant concurs. AAPTS/PBS submits that while these suggestions vary from the principles used in developing the DTV Table, they are not inconsistent with them, in that they would protect DTV allotments and existing and proposed NTSC stations. AAPTS/PBS next requests that we permit a PTV licensee with both NTSC and DTV channels outside the core to defer construction of its DTV station until its permanent DTV channel is assigned. It states that this would alleviate the burden of constructing a DTV station that would have to be abandoned relatively soon, perhaps some three or four years after it is built. AAPTS/PBS also states that we should allow PTV stations with an NTSC channel out of the core and a DTV assignment in the core to operate an NTSC station on the in-core DTV channel during the transition and to switch operation to DTV on that same channel at any point during the transition, as long as no additional interference is caused. It further states that we should allow PTV stations with both an NTSC and DTV channel within the core to convert to DTV on their in-core NTSC channel, rather than having to spend the resources to build a separate DTV stations.

52. In addition, AAPTS/PBS requests that we allow PTV licensees with two or more stations in a market to use any of the channels assigned to them for NTSC or DTV operation, as

---

31 LeHigh Valley and UNCTV support the AAPTS/PBS position with respect to assignment of public television stations to DTV stations in the core.

long as no additional interference is caused to other stations. AAPTS/PBS states that as with any multiple station licensee, it would be particularly burdensome for such licensees to construct multiple DTV stations simultaneously. They submit that the existence of a second station in the same market affords the possibility of a workable compromise that would ensure that the public retains access to the licensee's analog and digital services throughout the transition. They also argue that PTV licensees with two stations in the same market should be permitted to employ the overnight switch option and convert one of their stations to DTV on either their current NTSC or their allotted DTV channels.

53. A number of petitioners, including AK Media, Allbritton, AAPTS/PBS, Brechner, Capitol, CPC, Citadel, EBC, Fox, Granite, Harte-Hanks, the Joint MSTV Petitioners, Pulitzer and WGBH request that we address the issue of compensation for full service and low power stations displaced by new service providers on reconsideration, rather than address this issue in a future rule making proceeding. In a statement representative of these petitioners, the Joint MSTV Petitioners request that, on reconsideration, we require that new users of the recaptured broadcast spectrum compensate broadcasters for the cost of forced relocation to the core spectrum. They argue that the transition to DTV will impose heavy financial burdens on broadcasters and that compensation for relocation would avoid an additional burden of spectrum recovery that is particularly onerous for small and noncommercial stations and that falls arbitrarily on some stations and not on others. AAPTS/PBS states that the availability of reimbursement would provide some additional assurance that PTV stations will be able to continue operations after the transition. AAPTS/PBS and EBC state that since new public safety users of channels 60-69 would be unable to pay broadcasters' relocation costs, the reimbursement could be either from a general pool of funds collected from the auctioned spectrum, from the commercial entities that acquire the spectrum in the affected market, or some other source. WGBH requests that we expressly adopting the principle that licensees assigned out-of-core channels, particularly licensees of noncommercial stations and those with out-of-core NTSC channels as well, be compensated for the costs of moving their DTV operations to an in-core channel as a result of spectrum recovery.

54. Decision. We recognize the additional burden placed on licensees with out-of-core DTV allotments. In view of this concern, we have attempted to minimize to the extent possible the number of out-of-core DTV allotments in developing the DTV Table. We note that we are further reducing the number of stations with out-of-core DTV channels by our expansion of the DTV core spectrum to include all channels between 2-51, as discussed above. As a result of these efforts, there are now only 189 stations with out-of-core DTV allotments. All but 12 of these stations have existing NTSC channels within the core spectrum to which they may relocate at the end of the transition period. In addition, to the extent that in-core channels become available during the transition, we will attempt to further reduce the number of out-of-core allotments in any future amendments to the Table.

55. In general, we do not believe that approaches such as CNI's suggestion that we modify our "no interference criteria" would offer significant relief in further reducing the number of out-of-core allotments. We note that most out-of-core allotments occur in the most

congested areas of the country where we have already permitted some interference in order to achieve our goal of full accommodation and to maximize the number of in-core allotments. We also do not find that it is practicable to require stations to choose now the channel they intend to keep following the transition, as suggested by AK Media. We believe that in implementing a new technology such as DTV, stations will need some experience to make an appropriate decision on which channel to keep. We are also denying Allbritton's request that we permit stations with out-of-core DTV channels to retain those channels after the transition. Such an approach would be contrary to our decision to eventually recover this spectrum and reallocate it for new uses.

56. We agree with AAPTS/PBS and other parties that the allotment of out-of-core channels may present a particular burden to noncommercial public television licensees because of their reliance on federal, state and private contributions to raise funds. In this regard, we are initiating a separate proceeding to seek comment on the ability of noncommercial public television stations to use the DTV channel capacity for commercial purposes. As discussed above, however, we are not undertaking a general revision of the DTV Table that would facilitate relocation of the DTV allotments of all PTV stations to in-core channels, as requested by AAPTS/PBS and EBC. We also believe that providing all PTV stations with an in-core DTV allotment at this time would pose significant problems for replication and interference. Nevertheless, as stated in the Sixth Report and Order, we remain committed to the recovery of channels temporarily assigned for the transition.<sup>32</sup> Once these channels are recovered, there will be adequate spectrum to ensure that all stations with initial out-of-core DTV allotments can readily be provided with new channels within core spectrum between channels 2-51. In this regard, we do not believe that any special provisions or priorities for PTV stations are needed at this time. With regard to WGBH's request that PTV stations with both NTSC and DTV channels out of the core should receive "first in line" priority in obtaining new channels within the core, as such channels open up, we note that there are now only 12 such cases overall. We therefore do not find that PTV stations in this situation should have a priority merely based on the noncommercial nature of their operations, but rather believe that these limited situations should be dealt with on a case-by-case basis. While noncommercial operation is one of the factors that we will consider, we will also weigh other factors such as minimizing interference and/or significantly improving replication in making such decisions. On a case-by-case basis, we will also consider requests by stations with both NTSC and DTV channels outside the core area to defer the construction of their DTV station beyond the current construction deadline, or to convert their operations directly to DTV at the end of the transition, where such stations can show that implementing DTV in accordance with our schedule will cause undue hardship to their operations.

57. With regard to the issue of compensation, we continue to believe that this matter is best addressed in the context of future proceedings. The petitioners have presented no new information that persuades us that our decision to address this matter separately was incorrect or

---

<sup>32</sup> See Sixth Report and Order, at para. 34.



that there is need to finalize compensation decisions now. Furthermore, as pointed out by the petitioners, the issue of compensation is complex and likely to involve special considerations, such as allocations for not-for-profit services such as public safety communications, where compensation might not be appropriate. To decide this matter on reconsideration without a complete and adequate record that includes comment from potential new users of the reallocated spectrum would be inappropriate.

#### D. DTV Power

58. In the Sixth Report and Order, we allotted DTV channels using a "service replication/maximization" concept that was suggested by a variety of broadcast industry interests and representatives.<sup>33</sup> Under this approach, we specified for each DTV allotment a maximum permissible effective radiated power (ERP) and antenna height above average terrain (HAAT) that will, to the extent possible, provide for replication of the station's existing Grade B service area.<sup>34</sup> The antenna HAAT specified for each DTV allotment was the same as antenna HAAT of its associated NTSC station. The ERP specified was the value calculated to provide service replication. We recognized, however, that the service replication approach originally proposed by the broadcast community could lead to increased disparities among stations. Therefore, in considering the DTV power issue, we stated that it is important to adopt an approach that provides for a high degree of service replication by all stations, while at the same time ensures that all stations are able to provide DTV service competitively within their respective markets. To this end, we adopted elements of a compromise plan set forth in the reply comments of AAPTS, the Broadcasters Caucus and others. In particular, we developed the DTV Table based on providing all new DTV allotments with a minimum of 50 kW and no more than a maximum of 1000 kW.<sup>35</sup> We also stated that if future field testing and studies show that higher power is needed to provide a satisfactory level of replication or that changes in the treatment of interference are warranted, we will be able to evaluate those results at our planned

---

33 For example, this approach was suggested by the Commission's Advisory Committee on Advanced Television Service (Advisory Committee), the Broadcast Caucus, the Association of Maximum Service Television, Inc. (MSTV), the National Association of Broadcasters (NAB) and others.

34 The methodology used to calculate NTSC service areas was based on studies and methodologies developed by the broadcast industry and our Advisory Committee. This methodology is described below in the discussion of our DTV allotment methodology. See Final Report and Recommendation of the Advisory Committee on Advanced Television Service, November 28, 1995. As discussed in the Fifth Report and Order, broadcasters will be allowed to begin DTV operations at power levels less than those needed for achieving full service area replication. That is, broadcasters will be allowed to operate at power levels lower than those specified for their operation in the DTV Table. This will afford them an opportunity to increase their power over time and thereby "grow into" the power level needed for full service area replication, as specified in the DTV Table. See Fifth Report and Order, at para. 91.

35 These minimum and maximum power levels are for UHF channels only. The minimum DTV allotment powers for VHF channels are 1 kW for lower VHF channels and 3.2 kW for upper VHF channels.

two-year review and consider whether adjustments are needed.<sup>36</sup> In order to allow broadcasters to study this matter, we stated that we will entertain requests for a limited number of stations to experiment at power levels higher than those specified for individual allotments in the DTV Table.

59. Many parties representing existing UHF station interests request that we reconsider our policy with respect to the amount of DTV power authorized for UHF stations. These parties include ALTV, Blade, Media General, Inc. (Media General), Paxson Communications Corporation (Paxson), Pegasus Communications Corporation (Pegasus), Sainte Partners II, L.P. (Sainte), the Sinclair Broadcasting Group (Sinclair), Sullivan Broadcasting Company (Sullivan), Trinity Christian Center of Santa Ana, Inc./Trinity Broadcasting Network (Trinity), Univision, US Broadcast Group and Viacom, Inc. (Viacom). These parties generally submit that our approach for replicating broadcasters' NTSC Grade B contours creates a serious and unfair competitive disparity between existing UHF stations with UHF DTV channels (U-to-U stations) and existing VHF stations with UHF DTV channels (V-to-U stations).<sup>37</sup> They state that as a result of our Grade B replication policy, V-to-U stations receive power levels of up to 20 times higher than U-to-U stations. They state that the power levels provided U-to-U stations are generally so low that these stations will be unable to provide high-quality service within their core business areas, where most of their audience is located and where most of their revenue is generated.<sup>38</sup> They express concern that at such power levels they may not be able to serve even close-in viewers that use indoor "rabbit ear" or loop antennas. On the other hand, they note that the high power levels of V-to-U stations will provide those stations with a significant margin for error in the event that the DTV system's real world performance does not match its effectiveness in the laboratory. A number of these parties are concerned that U-to-U stations will also be at a significant disadvantage in the delivery of ancillary services, such as transmission of data to computers with low gain antennas.<sup>39</sup>

60. These parties also submit that service maximization offers only illusory benefits for addressing the UHF power problem because many allotments are located in congested areas where, as a practical matter, it is not possible to increase power and coverage. A number of these parties also object to the decision to reduce the DTV receiver noise figure for UHF from

---

<sup>36</sup> See Fifth Report and Order for description of our two-year review.

<sup>37</sup> These parties, in general, do not request we adopt an approach that would equalize the service areas of UHF and VHF stations. ALTV, for example, submits that most UHF stations would be satisfied with the *status quo* vis-a-vis the existing disparity between UHF and VHF facilities. Paxson similarly states that it is not arguing for elimination of the advantage that VHF stations now have over UHF stations in the analog environment. Rather, it seeks to eliminate a new competitive disparity that the Grade B replication approach has introduced for U-to-U stations. Sullivan, on the other hand, rescinds its previous support for the service replication concept.

<sup>38</sup> See, for example, the petition for reconsideration filed by Sinclair.

<sup>39</sup> See, for example, the petition for reconsideration filed by ALTV.

10 dB to 7 dB, while raising the DTV receiver noise figure for VHF from 5 dB to 10 dB.<sup>40</sup> They argue that these changes were unwarranted and have the effect of further increasing the power disparity between U-to-U and V-to-U stations.

61. The petitioners submit a number of suggestions for resolving the UHF power problem. Paxson, Pegasus, and Sinclair argue that in determining whether or not a station can increase its power, we should weigh interference to another broadcaster only where such interference occurs inside an affected station's Grade A contour, rather than inside the station's Grade B contour.<sup>41</sup> ALTV suggests a similar approach and proposes that we permit power increases by U-to-U stations on a case-by-case basis, using a more lenient definition of interference in the Grade B area (outside the Grade A contour). Specifically, it submits that in calculating DTV-to-NTSC interference within an NTSC station's predicted Grade B coverage area, we should permit a higher predicted field strength of the undesired or interfering signal by using the F(50,50) curves in lieu of F(50,10) curves.<sup>42</sup> Under this approach, the existing definitions of interference using F(50,10) curves would be used within the predicted Grade A contour of the affected NTSC station, and no new interference would be permitted within the Grade A contours of either NTSC stations or DTV stations. ALTV states that if the applicant satisfied the above standards, its proposed increase would be further evaluated under a set of public interest criteria relating to cumulative and area/population-specific interference to affected stations and the need for increase. Viacom supports use of the relaxed interference standard and public interest criteria recommended by ALTV, and argues that its application should be limited to only UHF stations. It submits that U-to-U stations willing to sacrifice portions of their Grade B service areas in order to ease the power disparity should not be made to lose any of their Grade B or Grade A service areas at the expense of V-to-U stations that have already been assigned higher operating power levels. It further requests that we clarify that as part of our two-year reviews we will take whatever actions are necessary to maintain the competitive posture of UHF and VHF stations, even if such action involves amending the DTV Table.

62. Blade, Grant Broadcasting Group (Grant), and Media General request that stations be permitted to increase and maximize power now, in the reconsideration process, rather than in individual modification applications. Blade argues that acting now on power increases would avoid costly and time-consuming procedures and conserve our administrative resources. Blade

---

<sup>40</sup> See, for example, petitions of Fox, Paxson, Sinclair, Sullivan, Univision, and Viacom. The receiver noise figures assumed for DTV service were listed in the planning factors in Appendix A of the Sixth Report and Order.

<sup>41</sup> Sinclair offers this option in the event we maintain our Grade B contour replication policy, rather than adopt its suggestion to revise our allotment criteria and adjust the Table.

<sup>42</sup> The FCC F(50,50) and F(50,10) field strength charts are used to predict service and interference. They estimate the field strength of a signal at a percentage of locations for a given percentage of time. For example, the F(50,50) curves estimate the values at which the field strength of a signal is exceeded at 50% of the locations for 50% of the time. Using the F(50,50) rather than the F(50,10) curves will permit a higher level of undesired signal.

states that we should designate the current Table as an "interim Table" and allow parties additional time to bring engineering solutions (including facilities requests) to the Commission. Grant and Media General submit that maximizing power now would resolve fairness questions in the transition process. Media General also argues that maximizing power now would allow the Commission and licensees to focus on addressing the real engineering issues certain to arise in implementing DTV. Media General states that we should permit stations to increase their power upon a showing that any predicted interference can be avoided through engineering techniques such as using directional antennas, moving transmitter sites or using terrain shielding. Sullivan also supports increasing power, but states that it is unlikely that many stations will be able to meet a "no new interference" test in requesting an increase in facilities. It recommends that we permit power and/or antenna increases as long as no more than 5 percent of the homes of a co-channel or adjacent channel station receive interference. It states that this represents a reasonable *de minimis* standard for interference. Sullivan also states that we should permit the use of directional antennas to shape signals in order to protect stations from harmful interference.

63. Viacom suggests an "intermediate maximization" plan for U-to-U stations. Under this plan, a 3-month "window period" would be provided for submission of requests to increase power to 250 kW for those U-to-U stations that are assigned power levels more than four times less than that assigned to the highest powered station in the market. It states that such maximization requests should be granted provided that they are feasible within the confines of the Table using accepted engineering remedies. It states further that any mutual exclusivity or conflicts should be resolved first by negotiations and, if that fails, by the Commission such that each affected party is permitted a proportionate level of maximization. In its supplemental filing, Viacom states that a study of the DTV Table conducted by its consulting engineers indicates that if the power of 964 UHF DTV stations were raised to 250 kW, 93 percent of all stations would experience only 1 percent or less increased interference. It further states that under this scenario 3.7 percent of all stations would experience between 1 and 2 percent increased interference, and 2.3 percent would experience between 2 and 5 percent increased interference. Viacom submits that this minimal increase in interference, balanced against the ability of U-to-U stations to better compete within their Grade A contours, warrants adoption of its "intermediate maximization" plan.

64. Fox and Sinclair recommend solutions based on employing the vertical beam of the transmitting antenna to place the energy where it is needed. Fox states that mechanisms such as beam tilt would maximize station coverage and service without increasing interference. Sinclair submits that a technically achievable option would be to allow U-to-U stations to radiate at the same power as the maximum allowed for V-to-U stations, *i.e.* 1000 kW, as long as they directed that power so that it did not produce a field at their Grade B contour that was greater than the equivalent of their current allotted DTV power. It states that this approach would achieve true replication of the Grade A coverage for UHF stations, preserve the interference protection built into the current DTV Table and allow VHF stations to reach their Grade B viewers.

65. ALTV, in its November 27, 1997, *ex parte* filing, proposes that we permit all UHF

DTV stations to increase power to 1000 kW, provided tilt-beam antennas and/or other technologies are employed to prevent any incremental visible interference.<sup>43</sup> It submits that this proposal is intended to address situations where a station is not expanding its overall coverage area, but rather desires to increase its signal strength within its protected contour without increasing the field strength at the protected contour. ALTV also proposes that we adopt procedures for resolving interference disputes that might occur as a result of such power increases. These procedures would include field strength and interference tests by the station and an accelerated dispute resolution procedure for stations that perceive that they would be subject to additional interference. Many parties representing UHF broadcast interests support the approach as set forth in ALTV's *ex parte* filing.<sup>44</sup> For example, Chris-Craft/United Group states that the ALTV's proposal contains sensible procedures for allowing power increases and resolving engineering disputes expeditiously without causing additional interference. Sullivan states that ALTV has proposed a sensible and much needed procedure by which U-to-U stations will be able to achieve some competitive parity with their V-to-U neighbors. It supports the ALTV proposal as one mechanism to address that UHF power imbalance.

66. In a joint filing, a number of UHF Broadcasters (Joint UHF Broadcasters) support the ALTV proposal as one component of a two-part solution to the power problem.<sup>45</sup> They suggest a second component based on a revised version of the immediate, across-the-board, power maximization plan previously proposed by Viacom. Under this plan, the DTV Table would be modified to increase the power of all UHF stations to at least 200 kW, provided that such increase does not create more than 2 percent additional interference to the population of any NTSC station.<sup>46</sup> They state that this increase in interference is *de minimis* and will affect the analog operations of UHF stations generally at the outer edges of their Grade B contours where service is already typically degraded and cable service has higher penetration. They state that the UHF analog community is willing to accept this slight potential interference in order to

---

43 See *ex parte* letter filed by ALTV on November 25, 1997, as discussed above.

44 See, for example, comments submitted in response to ALTV *ex parte* filing by Chris-Craft/United Group, Communications Corporation of America, Entravision Holdings, LLC, FBC Television Affiliates Association, Granite Broadcasting Corporation, Illinois Broadcasters Association, Malrite Communications Group, Inc., P&LFT, LLC, Pappas Telecasting Companies, Paxson Communications Corporation, *et. al.*, Sinclair Broadcast Group, Sullivan Broadcast Company, Telemundo Group, Inc., Univision Communications Inc., UPN Affiliates Association, and, WB Television Network.

45 The Joint UHF Broadcasters include: Clear Channel Television Licensees, Communications, Corporation of America, DP Media, Inc., Glencairn Ltd., Grant Broadcasting Group, Jasas Corporation, Max Media Properties, L.L.C., Pappas Telecasting Companies, Paxson Communications Corporation, Pegasus Communications Corporation, Sinclair Broadcast, Group, Straightline Communications, Sullivan Broadcasting Group, Telemundo Group, Inc., Univision Communications, Inc., and Viacom.

46 The Joint UHF Broadcasters also propose two exceptions to the two percent rule. First, if the station is predicted to receive population interference of 15 percent or greater, they indicate that no additional interference would be permitted. Second, for those stations that experience no existing population interference, they would allow 3 percent rather than 2 percent interference.

continue to reach existing viewers in their core service area. The Joint UHF Broadcasters indicate that preliminary studies conducted by Viacom and MSTV reveal that all but a small percentage of the over 800 stations now assigned less than 200 kW could increase their power to that level under this proposal.

67. AAPTS/PBS share the concerns articulated by ALTV and many UHF broadcasters. They state, however, that ALTV's proposed enforcement procedures simply cannot be implemented in a practical and workable manner and would place an unfair burden on aggrieved stations. In lieu of the ALTV proposal, AAPTS/PBS reiterate their support for Viacom's suggestion to establish a special window during which only UHF licensees assigned UHF DTV channels could request permission to use higher power levels and directional antennas. Lincoln opposes ALTV's automatic grant of power increases but supports a policy permitting applicants to request power increases based on beam-tilting and other interference abatement techniques. SHBC argues that the ALTV process would over burden the Commission, cause needless cost and effort to stations receiving interference and compromise NTSC and DTV service to the public.

68. MSTV states that ALTV's beam-tilt proposal raises serious technical and other issues. It submits that while the beam-tilt antenna may be useful to solve coverage and interference problems, if used with proper engineering practice, the ALTV proposal appears to permit an "excessive ratio of power at the radio horizon to power within the service area."<sup>47</sup> MSTV also states that ALTV's proposal to place the burden of proof on stations suffering interference should not be accepted and that its scheme for proving interference, including field measurements, is imprecise and cannot be implemented as currently presented. It further states that the use of Designated Market Areas (DMAs) instead of the Grade B contour could result in confusion and loss of service. Cosmos is concerned that beam-tilting could have a significant effect on power radiated toward the radio horizon. It urges that we reject the use of beam-tilting except where it is demonstrated, on a case-by-case basis, that under maximum deflection conditions its use would not create interference to neighboring stations.<sup>48</sup> In a joint filing, ABC, Inc., CBS Broadcasting Inc., and National Broadcasting Company (the Networks) submit comments limited to ALTV's *ex parte* filing. The Networks state the ALTV proposal need not be acted upon before the Commission adopts a final DTV Table. They submit that not enough has been done to quantify the UHF power problem and solutions and that these issues therefore should be considered separately from the DTV Table.

69. On January 6, 1998, MSTV submitted a letter setting forth its proposal for a *de minimis* interference standard for dealing with requests for minor DTV facility changes and UHF stations' requests for power increases up to 200 kW during the DTV transition. Under MSTV's proposal, which is similar to the *de minimis* standard suggested by the Joint UHF Broadcasters, power increases and facility changes would be permitted provided that the increase or change

---

47 See comments submitted by MSTV on December 17, 1997, at p. 9.

48 See also comments submitted by Pulitzer on December 17, 1997, at pp. 5-6.

does not create more than 2 percent additional interference, in the aggregate, to the population served by either a DTV or NTSC station.<sup>49</sup> MSTV further states that an additional one percent be permitted under certain circumstances in the acute problem areas (i.e., the Northeast, Great Lakes and California). It states that this standard would help expedite the application process and speed the DTV build-out.

70. Fox, Paxson, Sinclair, Sullivan and Viacom also request that we use a 10 dB DTV receiver noise figure for all frequencies. They request that UHF power levels be adjusted upwards to reflect this higher noise figure.

71. The Joint MSTV Petitioners support our decision to develop the DTV allotments based on the receiver noise figures recommended by the Broadcasters' Caucus Technical Committee, i.e., a 10 dB noise figure for the VHF band and a 7 dB noise figure for the UHF band.<sup>50</sup> They indicate that they have examined the DTV allotments using power levels consistent with a 10 dB noise figure for all channels and have found that it shows substantially increased interference to NTSC DTV service and less replication.<sup>51</sup>

72. The Joint MSTV Petitioners submit that for some stations the service areas and other statistics shown in the DTV Table do not reflect the actual DTV service areas that are protected under the rules. They contend that many stations given the 50 kW UHF power minimum will have protected DTV service areas that extend beyond their NTSC Grade B contours and that these increases are not reflected in the Table. They note that, on the other hand, for stations subject to the 1000 kW cap, the DTV Table counts all population and area served within the Grade B even though in some instances such service may not be protected under the rules. To address this concern, the Joint MSTV Petitioners request that we modify the rules to comport with Appendix B's treatment of stations subject to the power cap.<sup>52</sup> In this regard, they state that Section 73.622(e) should provide that an existing station will receive protection out to its NTSC Grade B contour or DTV coverage contour, whichever is greater. The Joint MSTV Petitioners also argue that exceptions to the 1000 kW DTV power cap may be needed to ameliorate substantial replication shortfalls. They therefore submit that we should permit limited

---

49 The amount of permissible interference would vary slightly depending on the amount of interference experienced by the affected station. Where an affected stations currently experiences 1 percent or less population loss from interference, 3 percent additional interference, in the aggregate, would be allowed. Where the affected station currently experiences 15 percent or more population loss due to interference, no additional interference would be permitted.

50 See Sixth Report and Order, at para. 193. The Joint MSTV Petitioners also submit that the VHF noise figure includes a 5 dB atmospheric noise adjustment.

51 They note that a 10 dB noise figure would increase the number of larger stations subject to the DTV power cap from 306 to 581.

52 CPC supports the Joint MSTV Petitioners' request that we change the rules to provide interference protection out to the NTSC Grade B contour for all stations subject to the 1000 kW cap.

experimental operations at power levels above 1000 kW, and in our planned two-year review, consider an across-the-board relaxation of the power cap if appropriate.

73. APTS/PBS states that it supports the existing 1000 kW maximum power level and that exceptions to the power cap should be allowed only in limited cases where necessary to correct serious replication problems. Viacom, in its opposition/comments filing, requests that we deny requests for reconsideration that would exacerbate the VHF/UHF power disparity, particularly those proposals that advocate providing a protected area equivalent to the Grade B contour, creating exceptions to the 1000 kW power cap, and eliminating the cap.

74. Longmont Channel 25 ("Longmont") and Viacom, Inc. ("Viacom") request additional information regarding the procedural framework for processing applications to maximize DTV facilities. Viacom defines maximization as any extension of the Grade A or Grade B contour of a DTV facility from that authorized, either by construction permit or by the Table of Allotments. Viacom requests that the Commission classify any such application as one for a major change, making it subject to the "cut-off" procedures of Section 73.3572 of the Commission's Rules. This would provide other parties the opportunity to file applications that are mutually exclusive with the major change application.

75. Under Viacom's proposal, mutually exclusive applicants would be required to negotiate a settlement within a certain period of time. Settlement agreements could include the voluntary funding of upgraded technical equipment for noncommercial stations in exchange for ceding a portion of the requested area of maximization. If mutually exclusive applicants could not reach a settlement, the Commission should then refer the matter to a "geographically relevant, neutral industry coordinating committee" for resolution, and the Commission would determine whether the Committee's proposed settlement would serve the public interest.

76. Viacom requests that the Commission not limit the parties eligible to submit maximization applications to broadcasters that already hold DTV licenses or construction permits. Because expanded coverage allows a station to serve a larger segment of the viewing public, Viacom argues that all stations assigned to DTV channels in the Table of Allotments should be eligible to participate in the maximization process, regardless of whether they have a construction permit. Otherwise, according to Viacom, those stations subject to the earlier construction timetable (*i.e.*, network affiliates in the top 30 markets) will have a distinct advantage over all other stations. Viacom suggests that those stations without construction permits should be allowed to utilize the station parameters relied upon by the Commission in constructing the table or other valid information, and it also urges the Commission to adopt cut-off procedures under Section 73.3572 for applicants seeking to maximize their DTV service areas.

77. Decision. In the Sixth Report and Order, we attempted to address the concerns of



many existing UHF broadcasters with the service replication approach.<sup>53</sup> In this regard, we established a 50 kW minimum UHF power level as part of the DTV allotment process, so that all UHF DTV stations were assigned at least 50 kW as their DTV power even in cases where less power was needed for service replication.<sup>54</sup> We also established a power cap of 1000 kW. Both of these actions were intended to reduce the disparity between existing UHF and VHF stations. We also provided rules and procedures for stations to “maximize,” or increase, their service areas provided they do not cause interference to other stations.

78. We recognize the petitioners’ concerns with regard to the difficulties that UHF stations may face under the current service replication plan in providing DTV service within their core market or Grade A service areas and in competing with the higher-powered DTV service of existing VHF stations. Accordingly, on reconsideration of this issue, we find that additional measures are needed to allow UHF stations to better serve their core market areas and to reduce the disparities that are inherent in the current service replication process.

79. We first agree with MSTV, the Joint UHF Broadcasters, Sullivan and others that a *de minimis* standard for permissible new interference is needed to provide flexibility for broadcasters in the implementation of DTV. This will provide additional opportunities for stations to maximize their DTV coverage and service through increasing their power and/or making other changes in their facilities. We therefore are replacing the current standard that specifies that changes in DTV operations may not cause any new interference with a new *de minimis* standard along the lines suggested by the Joint UHF Broadcasters and MSTV.<sup>55</sup> Under this new *de minimis* standard, stations will be permitted to increase power or make other changes in their operation, such as modification of their antenna height or transmitter location, where the requested change would not result in more than a 2 percent increase in interference to the population served by another station; 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. Parties requesting such changes shall be required to submit an engineering showing that the change comports with the *de minimis* standard. The station population values for existing NTSC service and DTV service contained in Appendix B of this Memorandum Opinion and Order are to be used for the purposes of determining whether a power increase or other change is permissible under this *de minimis* standard.

80. To ensure that parties have a fair opportunity to take advantage of our new *de*

---

53 We note that the service replication concept was overwhelmingly supported by the broadcast industry over the alternative approach that sought to equalize the service areas of all stations. See, for example, Sixth Further Notice at para. 13.

54 The assigned power represents the maximum ERP permitted for each individual allotment. DTV stations may operate at lower ERP provided they continue to serve their community of license.

55 The current no new interference standard is set forth in Section 73.623(c)(2), 47 CFR 73.623(c)(2).

*minimis* approach, we initially are limiting maximization requests for increased power by UHF DTV stations to 200 kW.<sup>56</sup> We therefore will not accept requests by UHF DTV licensees to increase their service area through a maximization of power above 200 kW until substantial progress has been made in the rollout of DTV service. This initial limit on the ability of stations to maximize power beyond 200 kW should put all licensees and permittees on a more equal footing and will give the Commission flexibility to accommodate other facilities changes that will be essential to some applicants. As suggested by the Joint UHF Broadcasters based on computer studies by MSTV, almost 700 of the about 850 stations with less than 200 kW could increase their DTV facilities to 200 kW without creating more than 1 percent interference to any NTSC station. We therefore believe that our 2 percent *de minimis* standard will provide major relief for stations seeking to increase their facilities. We do not find that a more complicated standard that would take into account aggregate interference, include different levels of interference and geographic considerations, or limit interference increases to only NTSC stations, as suggested in the recent filings, is necessary. Such a standard would also be more complex and difficult for broadcasters and the Commission to apply and administer.

81. We also are adopting an approach that will allow stations to increase their power within their existing DTV service areas using beam tilting techniques, as suggested by Sinclair, Fox and ALTV. We believe that use of techniques that permit increased power within a station's core service area will allow all UHF stations to better achieve full replication of their Grade A coverage, will preserve the interference protection built into the current DTV Table, and will not impede the ability of NTSC VHF stations to provide DTV service to their Grade B viewers.

82. We find that the comprehensive plan suggested by ALTV in its *ex parte* letter, with some modification, offers an appropriate model for providing for increased power within a station's service area through using antenna beam tilting techniques.<sup>57</sup> Under the approach we are adopting, a UHF DTV station will be permitted to increase its power up to a maximum of 1000 kW, provided antenna beam tilting techniques are employed so that the field strengths at the outer edge of the station's service area are no greater than the levels that our model predicts would exist if the station were operating at its assigned DTV power. In addition, we will require that the field strengths at the edge of the service area be calculated assuming 1 dB of additional antenna gain over the antenna gain pattern specified by the manufacturer. This will effectively reduce the permissible field strength at the edge of the service area of a station using antenna beam tilting from 41 to 40 dBu, but will allow much higher field strengths in the Grade A or core areas. We believe that providing for a 1 dB margin in antenna gain will provide additional assurances that this approach will not result in increased interference above our *de minimis* standard. This margin will also serve to minimize the potential for increased interference where

---

<sup>56</sup> As discussed below, stations may, however, increase power above 200 kW *within their service areas* through the use of antenna beam-tilting techniques.

<sup>57</sup> These techniques apply antenna beam tilting beyond the up to 1 degree antenna declination that is typically used in broadcast television transmitter antenna installations.

the beam tilting is reduced due to deflection of the antenna by wind and avoid the need for complex and expensive procedures for resolving disputes that might occur as a result of power increases under this option.

83. As suggested by ALTV, a station desiring to operate at a higher power level than that specified for it in the DTV Table shall submit, with its initial application for a DTV construction permit or subsequent application to modify its DTV facilities, an engineering analysis demonstrating that the predicted field strengths and predicted interference within its service area comport with the above requirements. Stations seeking to operate at higher power levels under these provisions will be required to notify, by certified mail, all stations that could potentially be affected by such operation at the time the station files its application for a construction permit or modification of facilities. Potentially affected stations to be notified include stations on co-channel and adjacent channel allotments that are located at distances less than the minimum geographic spacing requirements in section 73.623(d)(2). A station that believes that its service is being affected beyond our *de minimis* standard may file an opposition with the Commission. Such an opposition shall include an engineering analysis demonstrating that additional impermissible interference would occur. In certain instances, grants for increased power may be conditioned on validation of performance through field measurements of actual station operation by the station licensee or opposing parties.

84. We believe that the above measures adequately address the UHF power disparity matter. We do not believe that an across the board increase for all UHF stations, as suggested by Viacom and others, is warranted or desirable. Similarly, we do not find that we should employ a more lenient standard for the determination of interference within the Grade B contour of a station or amend the UHF receiver noise figure to increase authorized station power, as suggested by a number of parties. Such approaches could lead to substantial additional interference that would be detrimental to the television service provided to viewers. Further, we do not find that it would be appropriate to act on requests for maximization of DTV facilities in the context of this reconsideration. We have adopted specific provisions in our rules to allow licensees to request an increase in their DTV facilities and believe that to consider maximization requests as part of reconsideration would unfairly disadvantage parties that have expected such maximization requests to be dealt with under the rules. Accordingly, we are not herein acting on requests to maximize DTV station facilities. At the same time, we are aware of petitioners' concerns that our consideration of individual requests for modification not delay the DTV implementation process. We therefore will consider any requested change meeting the new *de minimis* standard a minor modification and treat such requests under those application processing procedures. Finally, to ensure that all parties are fully aware of our procedures and priorities for processing full service broadcast television applications, we are directing the staff to issue a public notice on this subject in the near future.

85. Upon reconsideration, we agree with the Joint MSTV Petitioners that the definition of DTV service area should be amended for stations subject to the 1000 kW power cap. We therefore will amend the service area definition contained in Section 73.622(e) to include all of the geographic area that is served by such DTV stations and is within the Grade B area of the

associated NTSC station. This will ensure that the statistics associated with the DTV Table comport with the rules. We reiterate our statement in the Sixth Report and Order that we will entertain requests for a limited number of stations to experiment at power levels higher than those specified in the DTV Table.<sup>58</sup> We are also clarifying the rules to make clear that the DTV service area that is to be protected from interference is to be calculated using the technical parameters specified for each individual allotment.

#### E. DTV Adjacent Channel Operation

86. In the Sixth Report and Order, we adopted an “emissions mask” that limits out-of-channel emissions from a DTV station’s transmitter. Specifically, we required that: 1) at the channel edge, transmitter emissions must be attenuated no less than 46 dB below the average transmitted power; 2) more than 6 MHz from the channel edge, emissions must be attenuated no less than 71 dB below the average transmitted power; and 3) at any frequency between 0 and 6 MHz from the channel edge, emissions must be attenuated no less than the value determined by the following formula:<sup>59</sup>

Attenuation in dB =  $46 + [(\Delta f)^2/1.44]$ ; where:  $\Delta f$  = frequency difference in MHz from the edge of the channel.

In addition, in those cases where it was necessary to use adjacent channels in the same area, we paired and co-located adjacent NTSC and DTV channels to the extent possible.

87. Cannell, Fox, Gannett, the Joint MSTV Petitioners, Lincoln, Tribune and others request that we re-evaluate the criteria used in making DTV allotments on first-adjacent channels to NTSC channels. Cannell argues that DTV operation on a channel that is first-adjacent to an NTSC channel and that will operate close to or within the NTSC station's Grade B contour may cause excessive interference to the NTSC operation. It requests that we reconsider this aspect of our allotment methodology to determine whether DTV channels could be allotted without creating interference to first-adjacent NTSC operations. Fox submits that we should develop a lower sideband emissions mask for NTSC stations located within 100 km of DTV stations operating on lower adjacent channels. It states that this would minimize interference and allow more efficient use of the spectrum. Lincoln requests that we provide for streamlined and expedited treatment of applications for alternative channels by stations with DTV channels that are adjacent to other TV operations if use of adjacent channels proves infeasible. Tribune submits that the Charlotte DTV field tests have confirmed the existence of sideband splatter in adjacent DTV channels that would be permitted by our emissions mask.

88. The Joint MSTV Petitioners acknowledge that there are not enough potential DTV channels to avoid assigning adjacent channels in the most congested markets. They note that we

---

<sup>58</sup> See Sixth Report and Order, at para. 30.

<sup>59</sup> See 47 CFR 73.622(h).

have generally assigned adjacent DTV allotments so as to provide exact co-location and reduce interference, as they have suggested. Nonetheless, they are concerned that the existing DTV transmitter emissions mask will not ensure sufficient protection of NTSC service. They now favor a weighting-function approach developed by the Advanced Television Systems Committee (ATSC) over the mask above.<sup>60</sup> The ATSC, in its comment filing, submits that its weighting function for DTV transmitters will provide greater protection of adjacent NTSC channels than will result from the fixed emission mask currently specified in the rules. The Advanced Television Technology Center (ATTC), in its comment filing, states that recent tests indicate that the RF mask contained in the Sixth Report and Order should be re-evaluated. It submits a report that it states shows that DTV-to-DTV adjacent channel interference in the presence of sideband splatter, the dominant interference mechanism in the adjacent channel scenario, has been significantly underestimated in the DTV planning factors.<sup>61</sup> Based on new testing, ATTC now states that the minimum desired-to-undesired (D/U) ratio for DTV-to-DTV lower adjacent channel operation should be about -23 dB rather than about -42 dB; and that the minimum D/U ratio for DTV-to-DTV upper adjacent channel operation should be about -21 dB rather than about -43 dB. Based on these results, ATTC recommends that the RF mask requirement be eliminated and that instead the total sideband power of the DTV signal be limited. Comark, in late-filed comments, submits that we should: 1) maintain the emissions mask adopted in the Sixth Report and Order for cases where there are no adjacent channel assignments; adopt the weighting function mask developed by the ATSC where DTV channels are adjacent to NTSC channels; and, 3) limit the total power integrated over the 6 MHz adjacent channel in cases where DTV channels are adjacent to another DTV channel.

89. In its *ex parte* filing, MSTV states that it has completed further analysis with regard to the DTV-to-DTV adjacent channel problem. It indicates that the DTV Table of Allotments contains about 250 adjacent DTV channel assignments that are too close together given the new information about DTV adjacent channel interference. It includes a list of these channel pairs and states that "(t)his short-spacing will significantly reduce the DTV service areas by up to 60 percent for nearly 130 stations (or at least one in each pair of adjacent channels)."<sup>62</sup> It also includes an exhibit that shows recalculations of the coverage and interference figures for the DTV Table based on new adjacent channel interference values.

90. MSTV also submits that its suggested 357 changes to the DTV Table would cure the

---

60 See "Transmission Measurement and Compliance for Digital Television," ATSC Standard A/64, November 17, 1997. The Joint MSTV Petitioners indicate that this standard is based on use of a weighting function to determine the noise power due to DTV sidelobes allowable in each of twelve 500 kHz frequency bands across the 6 MHz NTSC channel.

61 See "An Evaluation of the FCC RF Mask for the Protection of DTV Signals from Adjacent Channel DTV Interference," Advanced Television Technology Center, Document #97-06, July 17, 1996.

62 See MSTV *ex parte* filing at p. 7.

short-spacing of all cases of DTV-to-DTV adjacent channels.<sup>63</sup> It states that about two-thirds of these changes address the DTV-to-DTV adjacent channel situation. It further states that in developing these changes, efforts were made to preserve most of the current DTV allotments. It asserts that changes were made only where called for by the most extreme cases of interference. It also reiterates that one way to slightly lessen the impact of adjacent channel interference problems would be to replace the fixed mask adopted in the Sixth Report and Order with a mask that limits total average power in the adjacent channel, weighted for DTV-to-NTSC adjacencies and unweighted for DTV-to-DTV adjacencies.

91. Decision. We agree with the petitioners and other commenting parties that revisions are needed to reduce the potential for adjacent channel interference. We believe that a solution that includes tightening the DTV emissions mask, making a number of specific DTV allotment changes where needed, and providing flexible administrative processes to encourage adjacent channel co-locations<sup>64</sup> offers the best approach for addressing adjacent channel interference concerns.

92. The current DTV transmitter mask requires that the total out-of-band emissions in the adjacent 6 MHz channel be attenuated by 39 dB relative to the transmitter's in-band average power. We are revising this emissions mask to require an additional 5 dB of attenuation of the total out-of-band emissions in the adjacent channel. This new emission standard will apply to all DTV stations. We believe that this further reduction in out-of-band emissions is economically practicable with the available technology for broadcast transmitters and will help to reduce all cases of potential for interference, including DTV-to-NTSC and DTV-to-DTV adjacent channel situations. Accordingly, we are revising the DTV out-of-band "emissions mask" to require that: 1) in the first 500 kHz from the authorized channel edge, transmitter emissions must be attenuated no less than 47 dB below the average transmitted power; 2) more than 6 MHz from the channel edge, emissions must be attenuated no less than 110 dB below the average transmitted power; and 3) 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:<sup>65</sup>

Attenuation in dB =  $-11.5(\Delta f + 3.6)$ ; where:  $\Delta f$  = frequency difference in MHz from the edge of the channel.

All attenuation limits are based on a measurement bandwidth of 500 kHz. This mask will lower

---

63 MSTV states that its improvements address both acute problem areas, i.e., the Northeast, Great Lakes region and the California coast, and the DTV-to-DTV adjacent channel problem. The adjacent channel changes permit DTV-to-DTV adjacent channel assignments located at 70 km or more from each other, according to MSTV.

64 In the Sixth Report and Order, we stated that to provide broadcasters additional flexibility in constructing their DTV facilities, we will allow stations to relocate to other transmitter sites or co-locate their facilities with other stations where such relocations and co-locations would not increase interference. See Sixth Report and Order, at para. 102.

65 See 47 CFR 73.622(h).

the power radiated in the adjacent channel as compared to our current RF mask by approximately 5 dB to a level of -44 dB below the average power transmitted. Other measurement bandwidths may be used as long as the appropriate correction factors are applied. As with our original mask, in the event interference is caused to any service, greater attenuation may be required.

93. We note that the ATTC test results can be interpreted to indicate that all calculations involving D/U ratios for adjacent channel operation should be changed by a factor of about 20 dB; and, in fact, MSTV in its re-tabulation of DTV coverage and interference took this approach.<sup>66</sup> However, predictions of service areas and interference are complex matters. The estimates contained in the DTV Table are based on the assumption that the interfering and desired signals are not correlated when it comes to signal fading. That is, the methodology assumes that the desired signal is at its weakest or minimum level and the undesired signal is at its strongest or maximum level at any particular point.<sup>67</sup> At the edge of the station's service area, this results in very large differences in desired and undesired signal levels. In practice, however, adjacent channel signals from co-located or closely-located sources tend to be highly correlated since the signals travel over the same or nearly the same path and are affected by the same propagation and weather conditions. In these instances, the signals tend to exhibit the same fading characteristics and large differences due to propagation factors do not occur. Recent studies by our laboratory confirm this correlation. We therefore believe that a more accurate modeling of service coverage and interference would take this correlation into account and that the service coverage and interference for many adjacent channel situations will be better in practice than the estimates shown for the DTV Table.

94. As indicated above, we are also making a number of specific DTV channel allotment changes to eliminate DTV-to-DTV adjacent channel situations where such allotments resulted in significantly reduced DTV service areas. In this regard, we are changing 42 DTV allotments.<sup>68</sup> These changes include many of the changes suggested by MSTV, including its proposal for the San Francisco, California area. We are not, however, making all of the adjacent channel changes suggested by MSTV. We note that many of the DTV allotments for which MSTV raised a concern would still provide a high degree of service replication and/or provide DTV service areas larger than their NTSC service area even taking into account the new adjacent channel test data. We further note that some of the changes requested by MSTV would not provide significant improvements in service or replication, or raise other concerns such as out-of-core operation. Furthermore, as a general matter, we do not believe that simply changing

---

66 See MSTV *ex parte* filing, Exhibit 1B, "FCC DTV Table with Corrected Coverage and Interference Figures."

67 The methodology assumes a value for the desired signal that occurs at 50% of the locations for 90% of the time, and a value for the undesired signal that occurs at 50% of the locations for 10% of the time.

68 The 42 allotments changed to eliminate adjacent channel interference are listed in Appendix C. In general, we attempted to eliminate adjacent channel allotments wherever a station received a DTV allotment that resulted in less than 95 percent service area replication or did not provide an increase in the population served.

DTV allotments is an appropriate universal solution to the adjacent channel matter. As the Joint MSTV Petitioners acknowledge, there are not enough potential DTV channels to avoid any assignment of adjacent channels. Further, even if that could be done in all instances, we recognize that many stations may be forced to implement their DTV operations at locations other than their NTSC transmitter sites, and that these new, yet unknown, locations may create additional adjacent channel concerns. We therefore believe that a solution that includes tightening the emissions mask, allowing flexibility in our licensing process and for modification of individual allotments in the DTV Table to encourage adjacent channel co-locations, and continued monitoring of this situation, offers the best approach in a dynamic process like the implementation of DTV. We also note that petitioners' proposal raises other concerns, such as operating on channels outside the core spectrum, on channels 60-69, or on spectrum shared with land mobile services, that must also be weighed against slight increases in service replication and DTV coverage. We believe that our improved emissions mask and DTV channel changes provide the appropriate balance between all of these factors.

#### F. Low Power and TV Translator Stations

95. In the Sixth Report and Order, we recognized that in providing all full service TV stations with a second DTV channel, it will be necessary to displace a number of LPTV and TV translator operations, especially in the major markets. This determination was based on studies by our staff and by our Advisory Committee on Advanced Television Service (Advisory Committee) that indicate there is insufficient spectrum available in the broadcast TV bands to factor in low power displacement considerations in making DTV allotments.<sup>69</sup> Notwithstanding our decision to maintain the secondary status of low power stations, we indicated that we were concerned about the effect of DTV implementation on low power services, especially the impact with regard to LPTV stations for which the likelihood of displacement is greater, and therefore took steps to minimize the impact on those stations. We adopted a number of changes to our rules in order to provide additional flexibility to accommodate low power operations during and after the transition to DTV, and thereby substantially mitigate the impact of DTV implementation on this segment of the television industry. We estimated that these changes will permit hundreds of LPTV stations and TV translators to continue providing service to their viewers.

96. We first took a number of steps to assist low power stations in relocating to new channels. In this regard, we allowed low power stations that are displaced by new DTV stations to apply for a suitable replacement channel in the same area without being subject to competing

---

<sup>69</sup> See "Interim Report: Estimate of the Availability of Spectrum for Advanced Television (ATV) in the Existing Broadcast Television Bands," OET Technical Memorandum, FCC/OET TM88-1, August 1988 and "Interim Report: Further Studies on the Availability of Spectrum for Advanced Television," OET Technical Memorandum, FCC/OET TM89-1, December 1989; and, "Preliminary Analysis of VHF and UHF Planning Subcommittee Working Party 3, Doc. 0174 (June 1991).



applications.<sup>70</sup> We also amended our rules to provide that such applications will be considered on a first-come, first-served basis, without waiting for the Commission to open a low power application window. Under this process, the low power licensee requesting such a channel or related facilities change submits an application for the requested channel change. If no other prior requests for that channel had been made within the same area and the application is acceptable for filing, the Commission would propose to grant the application. Assuming no negative comments or petitions to deny, the request would be granted at the end of the 30 day period.

97. We stated that we would extend this “displacement” relief measure to LPTV and TV translator licensees and permittees whose facilities are predicted to conflict with a DTV station. Applications for such relief may be filed when there would be a reasonable expectation of displacement; for example, upon the filing of an application by a full service broadcaster for a DTV channel that would conflict with operation of the LPTV or TV translator station. We stated that as secondary operations, LPTV and TV translator stations will be permitted to operate until a displacing DTV station or a new primary service provider is operational. We also permitted low power stations to file non-window displacement relief applications to change their operating parameters to cure or prevent interference caused to or received from a DTV station or other protected service.<sup>71</sup> In this regard, we stated that we will continue to allow low power operations on all existing TV channels, including channels 60-69, provided that such operations do not cause harmful interference to any primary operations. We stated that we will also permit displaced LPTV or TV translator stations to request operation on these channels on a non-interfering basis. We found that the current interference rules for low power operations are overly restrictive and adopted a number of rule changes that will provide additional operating flexibility for low power stations.

98. In addition to these processing and technical rule changes, we stated that we would consider providing relief for low power stations in a number of other ways. We stated that we will entertain requests to waive the LPTV protection standards where it can be demonstrated that proposed LPTV or TV translator stations would not cause any new interference to the reception of TV broadcast analog stations. We also stated that we will entertain waiver requests for low power and TV translator applications proposing co-located or nearly co-located facilities to those of TV broadcast analog stations operating on the first adjacent channel above or below, or the fourteenth adjacent channel below. We stated that until we gain some experience with near co-

---

70 This streamlined low power licensing procedure also applies to a requests for any channel change from a low power station that is displaced by a DTV station. A channel change request can include a replacement channel for NTSC operation or a channel change to be used for DTV operations, on a case-by-case basis. We stated that we will also permit displaced stations to request an increase in power or other facility modifications necessary to avoid interference or permit it to continue serving its current coverage area.

71 LPTV and TV translator stations will be allowed to continue to operate provided they protect full service DTV operations in accordance with the desired-to-undesired signal ratios used for modifications to the DTV Table of Allotments.

located operations, we are inclined to limit consideration of such waivers to applications for "displacement relief" filed by LPTV and TV translator permittees and licensees in jeopardy of losing their channels. We next stated that we will consider waiving the LPTV interference protection standards when the applicant obtains the written consent of the potentially affected NTSC or DTV licensee or permittee to the grant of the waiver. This policy, which has worked well for terrain shielding waivers, permits a full service licensee or permittee to concur that interference is unlikely, but without absolving the LPTV or TV translator applicant of the responsibility to eliminate interference caused to the regularly viewed signal of the station. Finally, we amended our low power rules to replace the existing transmitter power (TPO) limits with limits for effective radiated power (ERP).

99. Many petitioners representing the interests of low power television and TV translator stations continue to express concern for the impact of DTV implementation on these stations. As stated by the Urban LPTV Parties, these parties generally urge that we keep a sense of proportion in considering the public interest gains and losses from the particulars of the DTV allotment plan. They state that we should tread very lightly where the very survival of these stations during the transition is an issue. As discussed below, these parties submit requests urging that we modify and amend our policies and rules in a number of ways to ensure the viability and survivability of LPTV stations in a digital world.

(1) Protection of Secondary Low Power Stations

100. CBA, Paxson Communications LPTV, Inc. (Paxson LPTV), and Skinner Broadcasting, Inc. (Skinner) request that we reconsider the meaning of secondary status with respect to low power stations. Paxson LPTV argues that we must reconsider our decision not to accommodate low power stations in developing the DTV Table. CBA submits that while those opposing relief for LPTV stations on the basis that such stations are secondary operations often cite Polar Broadcasting, et al. v. FCC, 22 F.3d 1184 (1994) to support their position, the Polar case is not dispositive. CBA argues that Polar was decided in a different environment than exists today, where we have in one action doubled the number of television allotments and reduced the total number of channels available for television service. It argues that because of these differences we must undertake every effort to facilitate LPTV survival.

101. Skinner argues that we should conduct a reasonable Regulatory Flexibility Analysis, and must review, pursuant to Section 307(b) of the Communications Act of 1934, as amended, the impact of our decision on communities that will lose LPTV or TV translator service. It argues that we failed to comply with the Section 307(b) mandate that we consider community needs prior to displacing facilities that cannot be replaced on other channels to serve the same community. It contends that our claim that low power service is secondary is an inadequate defense to our failure to make any analysis of the effect of the DTV Table on either the licensees or the communities affected by LPTV/TV translator displacement, since no LPTV or TV translator licensed earlier than five years ago ever envisioned the extent of displacement that would occur on a national scale. Skinner further argues that we should hold in abeyance the implementation of the analog-to-digital television conversion, particularly the dual-channel

simulcasting provisions, until a reasonable system has been implemented for reimbursing, or otherwise re-accommodating displaced low power stations.

102. CBA, Cordillera, KMC, KPDX, Paxson LPTV, Skinner, and WHNS request that we revise the DTV Table to protect and/or accommodate low power stations. CBA argues that the DTV Table adopted Sixth Report and Order will result in the displacement of at least 160 operating LPTV stations and that these displacements are not necessary to accommodate the transition to digital television.<sup>72</sup> It submits that the forced elimination of so many LPTV stations will concentrate television broadcasting in large markets at the expense of smaller communities. In arguing for reconsideration, CBA notes that the DTV Table of Allotments was generated without any penalty in the computer software for displacing LPTV stations. It contends that this omission was contrary to the public interest because it resulted in the allotment program selecting many of the same channels for DTV service that LPTV search programs have found for LPTV stations, when alternatives were readily available for DTV use. Cordillera argues that LPTV and TV translator operations should be protected throughout the DTV conversion process, since these stations provide extended coverage for "primary" stations.

103. CBA states that it undertook to accommodate LPTV stations in the allotment process using our allotment software. CBA states that to do this it modified the TV data base to include operating LPTV stations and added instructions to the program to avoid displacing an operating LPTV station unless no other way were available to provide a DTV channel for a full service station. It submits that using this approach it was able to develop an alternative Table that saves a substantial number of LPTV stations. CBA includes a copy of this Table with its petition.<sup>73</sup> CBA states that the point is not that its Table is optimal, but that it has shown that the transition to DTV service can be achieved without ignoring LPTV stations and without wholesale displacement of the LPTV industry. In order to reduce the impact on these LPTV stations, it requests that we substitute the CBA Table for the current Table or generate a new Table using a significant penalty for displacing LPTV stations. In its most recent filing, CBA indicates that it has modified the Commission's computer program to include an algorithm that avoids displacing LPTV and TV translator stations where possible.<sup>74</sup> This is done by placing a small penalty for the use of a channel for DTV that is currently used by a low power station.

---

72 CBA states that in preparing to analyze the DTV Table, it circulated a questionnaire to as many LPTV stations as it could find, so that it could compile as accurate a data base as possible of stations actually on the air and the facilities they use. Based on this survey, CBA submits that the DTV Table will cause the displacement of 160 operating LPTV stations.

73 In its supplemental filing, CBA states that it inadvertently submitted the results of the wrong computer run with its petition. It submits that the proposed Table included with its petition should be discarded and that we should substitute the Table attached to this filing. It states that its use of the allotment software did not produce ideal results, but is the best it could do given our decision to adopt a DTV Table on April 3, 1997. CBA states, however, that its Table does much more to protect LPTV stations than does the DTV Table adopted by the Commission, with only a small price in additional interference.

74 See *Ex Parte* Supplement to CBA's petition for reconsideration filed December 15, 1997.

CBA states that algorithm can be used so that it doesn't impact full service stations in the three congested or problem areas; impede the rollout of DTV in the top 30 markets; or, affect channels that have already been applied for. CBA states that it has used this algorithm to create a new DTV Table that would reduce the number of co-channel LPTV/TV translator displacements from 779 stations to 477 stations, with an increase in overall interference to full service stations of about 2.5 percent.

104. CBA also requests that we allow LPTV stations to request changes in the DTV allotments for individual full service stations in order to avoid displacement of LPTV stations. Specifically, CBA requests that we provide that if a potentially displaced LPTV station files a request to amend the DTV Table, *i.e.* modify one or more DTV allotments for full service stations, so as to avoid displacement, and the LPTV station's proposal meets the spacing and other requirements of the DTV rules, there will be a strong presumption that the public interest requires a grant. It argues that a request to substitute digital allotments should not be rejected unless the full service station would be significantly worse off as a result and that all channels should be considered equally in determining which channel is made available to a particular full service station.

105. Decision. We continue to believe that our decision to retain the secondary status of low power stations with regard to digital television and other new primary television services is appropriate. As indicated above, studies throughout this proceeding, by industry and our staff, have indicated that it would be necessary to displace a significant number of low power TV and TV translators in order to implement DTV service. As secondary operations, low power stations must give way to new operations by primary users of the spectrum, including in this case new full service DTV stations operated by existing broadcasters under our DTV implementation plan. While we recognize the important services low power stations provide, we must ensure that our goals for the implementation of DTV are achieved before taking any additional steps to minimize the impact on these secondary operations. We disagree with the petitioners that the fact that we have significantly increased the use of the TV spectrum by primary stations warrants modifying the secondary status of these stations. We also continue to find that our Regulatory Flexibility Analysis in the Sixth Report and Order with regard to low power stations, including our assessment that there will be impact on these stations and that we have taken steps to minimize that impact, adequately evaluates the effects of our DTV implementation decisions on these stations. Skinner provides no new information that indicates that this analysis was in error, that we failed to comply with the requirements of Section 307(b) in allowing displacement of low power stations, or that supports its request that we delay the implementation of DTV service in order to take steps to accommodate low power operations.

106. We are not making a general revision of the DTV Table to protect or otherwise accommodate low power stations as requested by many low power operators. As a general matter, measures to accommodate low power stations would, by their very nature, pose restrictions on our choice of allotments for full service DTV stations. Using the software algorithm and approach recommended by CBA, we have, however, been able to identify a limited number of cases in certain areas of the country where it is possible to avoid using a

channel occupied by low power stations by providing full service stations with an equivalent alternative DTV channel.<sup>75</sup> These equivalent alternative channels will allow the stations to implement their DTV service without affecting their ability to replicate their existing service or any technical planning these stations may have already undertaken for DTV implementation. From our studies with this software we were able to identify 171 potential DTV allotment changes. We found that in 66 of these cases, a channel change could be made that would not affect the operations of full service stations. These 66 changes eliminate 36 co-channel conflicts with one or more low power stations. We therefore are modifying the DTV Table to adopt these 66 DTV channel changes. We wish to emphasize that in making these changes we are not altering the secondary status of low power stations. Rather, we find that these changes can be made without impacting either the DTV service of the associated full service stations or our overall DTV implementation goals and therefore should be made to preserve low power services.

107. We are not granting requests by low power licensees to change the channels of individual full service DTV allotments in order to avoid displacement of low power stations. Except for the changes identified through the CBA algorithm, as discussed above, we find that the requests to change DTV channels to protect low power operations would adversely affect the ability of full service stations to replicate their existing service and would also lead to increased interference. We recognize, however, that there may be instances where a full service station is willing to accept a modification of its DTV allotment in order to protect one or more low power stations. We believe it is desirable to preserve low power stations in this manner wherever possible. We therefore will consider changing DTV allotments to protect low power stations where the affected full service station agrees to the change.<sup>76</sup> In this regard, we encourage low power and full service licensees to work together to develop modifications to the DTV Table that will preserve the service of low power stations.

---

75 In using the CBA approach, we excluded from consideration the three regions of the country noted by the Joint MSTV Petitioners where congestion among full service station already makes it more difficult to find acceptable DTV channel changes. We also excluded states bordering Canada in order to ensure that no conflicts would arise with our coordination efforts with that country. In states bordering Mexico, we took into account the spacing criteria for DTV allotments set forth in our April 2, 1997, Memorandum of Understanding with Mexico. See "Memorandum of Understanding Between the Federal Communications Commission of the United States of America and the Secretaria de Comunicaciones y Transportes of the United Mexican States Related to the Use of the 54-72 MHz, 76-88 MHz, 174-216 MHz and 470-806 MHz Bands for Digital Television Broadcasting Service Along the Common Border," signed April 2, 1997. Replacement channels were considered acceptable if they would provide the same replication as a station's existing DTV channel and were within 3 channels above or below that channel. With regard to the latter criterion, we believe that a change within 3 channels would not affect any DTV technical plans or preparations that a station might already have in place. The software used in our implementation of CBA's algorithm included modifications for all of the revisions we are making herein to address full service station issues. In addition, we revised our data base to reflect all of the other modifications we are making to the DTV Table herein. Those modifications and all allotments in the excluded areas were "frozen" in this study and not made subject to change.

76 We are also applying this policy to our consideration of petitions for reconsideration that seek to change individual DTV allotments in order to protect low power stations.

(2) Displacement Relief

108. A number of parties, including AAPTS/PBS, CBA, DSD, First Cullman Broadcasting, Inc. (First Cullman), KMC, KPDX License Partnership (KPDX), the National Translator Association (NTA), Paxson LPTV, the Urban LPTV Parties, and Venture Technologies Group (VenTech), request that we refine and in some areas revise the low power displacement rules. Several parties request that we clarify or change the rules defining when a TV translator or LPTV station is considered displaced.<sup>77</sup> These petitioners generally submit that it should not be necessary to wait for a displacement-causing DTV construction permit to be issued before an LPTV or TV translator station can file for displacement relief. CBA states that the timetable for full service DTV implementation is too short for LPTV stations to wait for a full service filing before they start implementing their own displacement plans. It submits that an early opportunity should be afforded for filing for displacement relief, whether through the first-come, first-served approach, a filing window or otherwise. DSD and the Urban LPTV Parties submit that the DTV Table itself evidences displacement of the affected channels because virtually all incumbent full service broadcasters are expected to confirm their acceptance of the second channel and because allotments not claimed will remain on the books for early use by those not in the rolls of the initially eligible. Paxson LPTV specifically requests that we open a window for filing these applications upon issuance of our decision addressing the petitions for reconsideration. NTA and DSD also request that translator and LPTV stations on channels 60-69 have immediate displacement relief privileges on a par with specifically displaced LPTV and TV translator stations.

109. CBA, KMC, and Paxson LPTV request that we establish clear procedures for relief for displaced low power stations. These parties generally state that the opportunity for the filing of displacement applications must be structured in a fair manner that maximizes the number of LPTV stations that can be accommodated. DSD, along with NTA, submits that we should clarify that any predicted interference relationship with any allotted DTV channel will satisfy as the necessary showing for displacement relief. NTA states that this approach would provide low power stations with the greatest flexibility in deciding when to apply for relief.

110. CBA offers suggestions for some general approaches for providing displacement relief. First, it states that if a window is opened, either the initial window should be reserved for displacement relief or else displacement applications should be given priority over other kinds of modification applications. Second, CBA states that if two LPTV stations file for the same displacement channel and one of the applicants is able to identify an alternative substantially different channel for the other, the other should be required to amend its application to specify the alternative channel. To facilitate such changes, it states that amendments should be permitted without requiring a new window. CBA further submits that once an opportunity has been afforded for early displacement relief, we should also afford an opportunity for LPTV stations to file applications to take advantage of the new effective radiated power limits adopted

---

<sup>77</sup> See Section 74.702(b) of the rules, 47 CFR 74.704(b).

in the Sixth Report and Order.

111. VenTech argues that we should not allow suburban and rural LPTV and TV translator stations to take frequencies needed for the survival of urban, major market LPTV stations. It argues that urban LPTV stations should be provided with priority in frequency use over these other stations because their location precludes the use of other possible channels. APTS/PBS request that we give PTV translator stations priority over other translators and low power TV stations in finding new channels when they are displaced by DTV facilities, by new NTSC stations commencing operation or by changes in the facilities of existing NTSC stations. The Urban LPTV Parties request that we not re-open filings for LPTV and TV translator stations until an adequate opportunity has been provided for incumbent licensees and permittees to appraise the likely impact of DTV implementation on their operations and to protect a new (displacement) channel through early filing. Los Cerezos Television Company (Los Cerezos) notes that, under the existing rules, a displaced LPTV station may not use the displacement rules to apply for any channel for which there is a pending mutually exclusive application, regardless of whether the pending application is for a new station or for modification of an existing station. It states that we should modify this rule and give displaced LPTV stations like its WMDO-LP preference over pending mutually exclusive LPTV applications for new stations or major modifications to existing stations that are not necessitated by new DTV allotments.

112. CBA, DSD, KMC and the Urban LPTV Parties request that displacement relief be treated as a minor modification of the license. DSD, for example, states that treating facility changes for existing translator and LPTV permittees and licensees that comply with the new power and separation requirements as minor changes would dispense with displacement relief showings. Under this approach, to receive consideration as a minor change an application would need to include an engineering certification to show that a frequency study had been performed and that the requested change otherwise would be in full compliance with the rules. KMC notes that the rules for minor modifications in Section 73.3572(a)(2) should be amended to reference Section 74.706 as well as Section 74.705.

113. First Cullman requests that we require full service television stations whose DTV services will displace LPTV stations to keep the displaced LPTV stations accurately informed as to their application and construction plans relating to those services. It states that for low power licensees, and especially those that are nonprofit community organizations that are dependent on community support, a long lead time for planning and raising funds may be essential to successfully deal with a DTV displacement. First Cullman therefore states requiring full service stations to provide timely information about their DTV plans to any low power stations they will displace would ease the disruption and financial hardship that the displacement will cause.

114. NTA notes that in GEN Docket No. 85-172, a total of forty TV channels in eight

cities were considered as candidates for assignment to land mobile services.<sup>78</sup> It states that even though these reservations have been in limbo for many years, there has been an informal policy at the Commission that requires protection of those channels just as though they had actually been assigned to land mobile use. NTA notes that under this policy, LPTV and TV translator stations must provide protection to these channels based upon a fifty mile radius from the associated city coordinates, and that the required protection includes limits on adjacent channel use as well as co-channel use. NTA also observes that the DTV Table ignores these tentative land mobile reservations and by implication abandons the proposals of GEN Docket No. 85-172. It states that release of these channels from the informal and unpublished freeze would provide considerable relief for translators and LPTV stations that will be displaced in major markets. NTA therefore urges that we make it clear that these channels are available to translator and LPTV stations.

115. Decision. We agree that some clarification of our rules regarding low power displacement relief is needed. In order that the displacement relief be made available in an equitable manner to all affected low power stations, we will consider an LPTV or TV translator station eligible for such relief where interference is predicted either to or from any allotted DTV facility.<sup>79</sup> Stations eligible under this criteria may apply for relief as of the effective date of this Memorandum Opinion and Order. All LPTV and TV translator licensees on channels 60 to 69 are also eligible to file such displacement relief applications at any time. We will not establish a special limited filing window for such applications. Rather, applications for displacement relief may be submitted at any time during the transition process. We believe this approach will establish a fair process for affected low power stations and provide such stations the greatest flexibility in deciding when to seek relief, as suggested by NTA. Because of the importance of preserving, to the extent possible, the existing LPTV programming service for its viewers, we believe that providing relief so that low power stations can continue to operate should have higher priority than requests to extend or alter existing service that is not affected by DTV implementation. Accordingly, as suggested by CBA, we are affording displacement relief applications priority over new station applications or other requests for modification by low

---

78 The Notice of Proposed Rule Making in GEN Docket No. 85-172, 50 FR 25587 (June 30, 1985), at para. 29, lists the following candidate TV channels for possible assignment for land mobile use: New York- channels 19, 27, 28, 33, and 34; Los Angeles- channels 26, 32, 36, 42, 48, 60 and 66; Chicago- channels 41, 47, 64, and 68; San Francisco- channels 18, 24, 28, and 34; Philadelphia- channels 26, 32, 42, and 46; Washington, D.C.- channels 30, 35, 36 and 39; Houston- channels 16, 35, 41, 63 and 69; and Dallas- channels 17, 35, 41, 62, and 66.

79 Low power stations will be allowed to apply for displacement relief if their operations would be impacted by one or more allotments in the DTV Table. We will assume that a low power station is impacted if the spacing between the low power station and a DTV allotment is less than the following distances:

Stations on UHF channels-	265 km (162 miles)
Stations on VHF Channels 7-14-	260 km (159 miles)
Stations on VHF channels 2-6-	280 km (171 miles)

Engineering showings of predicted interference may also be submitted to justify a need for displacement relief.



power stations, including any such applications and requests that may be pending at the time the displacement relief application is filed. We will also permit displaced stations to seek modifications other than channel changes, including, where necessary, increases in effective radiated power up to the maximum allowed values.

116. We are not providing any additional priority for urban LPTV stations or PTV low power and TV translator stations in the displacement relief process as requested by VenTech and AAPTS/PBS. We believe that treating all potentially displaced low power stations in a fair and equitable manner is the most appropriate course of action. We note that low power stations provide a wide range of services to the public. We find no basis for preferring, for example, a PTV station over a station that provides foreign language service to the community, or for preferring an urban LPTV station over an LPTV or TV translator station that provides basic television service to rural viewers.

117. As suggested by the Urban LPTV Parties, we will not open windows for filing applications for new LPTV and TV translator stations until existing low power licensees have had an adequate opportunity to assess the impact of the DTV Table on their stations and to seek displacement relief if necessary. This will maximize the availability of alternate channels and will also allow us to focus our administrative resources on the processing of displacement relief applications. Consistent with our existing procedures for processing requests for special relief in cases where an LPTV or TV translator has an actual or predicted conflict with an NTSC station or a land mobile radio operation, we will treat applications for displacement relief under our minor change procedures. This will allow displacement relief applications to be filed at any time and without being subject to competing applications, except where another application for special relief requesting the same or an adjacent channel is filed the same day. We will also follow our existing procedures for displacement applications in placing such applications on proposed grant lists. Consistent with this change, we will also amend Section 73.3572(a)(2) of the rules, which sets for the procedures for processing minor changes for all types of TV broadcast stations, to include a reference to Section 74.706 of the low power rules, which sets forth the standards for protection of DTV stations from interference by low power stations, as requested by KMC.

118. Given that we are allowing low power stations to apply for displacement relief at any time, we do not find it necessary to require full service television stations whose DTV services will displace low power stations to keep the low power stations informed of their DTV application and construction plans. We do, however, encourage full service stations to coordinate their DTV construction schedules with low power stations in their area that may be affected. Low power licensees are also advised that the channels considered as candidates for assignment to land mobile services in eight major markets under GEN Docket No. 85-172 are available at this time for low power use and may be requested in displacement relief applications.

### (3) Technical Rules for Low Power Stations

119. CBA requests that we eliminate or modify the new DTV protection requirement in Section 73.623, which requires that co-channel NTSC operations provide an additional 19 dB of protection to DTV service at the edge of a DTV station's noise-limited service area. It submits that this rule is not needed to avoid interference and will greatly complicate the task of finding new channels for displaced LPTV stations. In addition, CBA and NTA note that the new rules require that in the case of adjacent channel operation where a DTV station is immediately above an NTSC station, the carrier frequencies of the two stations be locked to a common reference frequency in order to reduce interference to the NTSC station. These petitioners request that we require DTV stations that are co-located with a lower adjacent channel LPTV station to match the frequency offset of the LPTV station as a method of reducing interference. NTA further requests that we require that the DTV station in such cases cooperate in making the necessary arrangements for maintaining an offset between the two signals, that each station bear any special costs relating to its own transmitter, and that any common costs such as the basic frequency source be shared equally.

120. Decision. The values for protecting DTV service from NTSC interference were derived from the ATTC's evaluation of the performance of the DTV system. The tests of the DTV system indicate that an additional 19 dB of co-channel protection from NTSC interference is needed when the DTV signal is weak, as is the case at the edge of a station's service area. While we recognize that this may complicate the task of finding replacement channels, we must maintain this standard to ensure protection of DTV service. Accordingly, we are not amending Section 73.623 to eliminate the additional 19 dB of protection to DTV service at the edge of a DTV station's noise-limited service area, as requested by CBA. We are, however, amending the low power television rules to specify the D/U values as a function of S/N values to provide a transition from 21 dB to 2 dB D/U for NTSC-into-DTV, and from 15 dB to 23 dB D/U for DTV-into-DTV.<sup>80</sup> These values are based on measurement data presented to our advisory committee. With regard to adjacent channel operation where a DTV station is immediately above an NTSC station, we agree with CBA and NTA that DTV stations that are co-located with a lower adjacent channel low power NTSC station should be required to cooperate and maintain the necessary offset to eliminate interference to the low power station. We note that the equipment necessary to lock to a common reference frequency is relatively inexpensive and should not be burdensome for a full power station. We believe that on balance the benefits of maintaining service from low power stations in such cases outweigh the relatively small incremental costs for full service stations. We therefore will amend the rules in this regard, as suggested by CBA and NTA.

#### (4) Digital Operation by Low Power Stations

121. CBA, DSD, Island Broadcasting Co. (Island), KASA-TV, Inc. (KASA), and Paxson LPTV request that we reconsider our decision to defer to a future proceeding the

---

<sup>80</sup> As discussed below, we are making a similar modification to Section 73.623(c) of the rules for modification of allotments included in the initial DTV Table of Allotments for full service stations.

question of digital operation by low power stations. CBA, KASA and Paxson LPTV state that some LPTV operators wish to be at the forefront, not the tail end, of the digital transition. They argue that these operators should be permitted to lead and to experiment with digital operation now, without waiting for another rule making to be initiated and completed. CBA submits that there is no reason to preclude DTV operation by low power stations now. It states that if an LPTV station can operate successfully in analog mode, no additional interference potential will arise if the station converts to digital operation with a 7-10 dB power reduction.

122. Decision. While we recognize the desire of low power operators to allowed to begin providing DTV service at the same time as full service stations, there are a number of issues that need to be addressed through a notice and comment rule making proceeding in providing a general authorization for low power TV and TV translator stations to offer DTV service. We believe these issues are best addressed through a separate proceeding, which we intend to initiate in the near future. As noted in the Sixth Report and Order, we will consider requests by low power operators to operate DTV service on replacement channels on a case-by-case basis under our displacement relief policy prior to our adoption of general rules for DTV operation by low power stations.<sup>81</sup>

#### (5) Primary Status for Low Power Stations

123. CBA, Cordillera, KPDX, Paxson LPTV, and WHNS request that we take steps to establish a permanent class of LPTV stations with primary allocation status. CBA urges that we commence a rule making proceeding in the near future to allow LPTV stations that are willing to meet full service operating standards the opportunity to obtain primary status. Paxson LPTV submits that we could reduce the existing hardships by establishing a home for LPTV stations while nearby vacant spectrum is unassigned.

124. Decision. On September 30, 1997, CBA submitted a petition for rule making requesting that we create a new "Class A" television station class. As proposed by CBA, Class A status would be made available to qualified low power television stations providing substantial local programming service and would avoid the displacement of such stations by affording them primary status against all but full power television stations authorized as of the date of the petition. We believe that issues relating to primary status for LPTV stations are best addressed in the context of our consideration of this petition, and therefore will defer consideration of all such issues, including those raised by petitioners requesting reconsideration in this proceeding, to a future action addressing CBA's petition for rule making.

#### (6) Compensation for Low Power Stations

125. AAPTS/PBS, CBA, KMC and Skinner request that we provide for compensation of low power stations that are displaced in the DTV implementation process. These petitioners

---

<sup>81</sup> See Sixth Report and Order, at footnote 263.

generally request that we reconsider our stated intention to consider reimbursement for displaced low power stations in a separate proceeding. As stated by KMC, they argue that the issue of whether, and how LPTV stations should be compensated is an integral part of the DTV allotment process and should not be deferred to a future proceeding. CBA argues that in cases where an LPTV station cannot survive the DTV implementation process, its owner should be compensated, either from auction funds or by the displacing full service station. Skinner argues that in the past when we have cleared a band to permit a new radio service, we have required the newcomer to compensate the incumbents for the cost of relocating. It states that there is no good reason why LPTV and TV translator licensees should not be afforded the same treatment. Skinner therefore requests that we adopt a reasonable reimbursement policy for all unavoidably displaced secondary stations. It submits that such reimbursement should equal a low power station's fair market value as of the time it is forced off the air by a full service station's DTV operations. APTS/PBS requests that we require commercial operators that acquire reclaimed spectrum to reimburse any public television translator stations that will be displaced as a result of the initiation of DTV service.

126. Decision. We do not believe that it is appropriate to require broadcasters to implement DTV and at the same time require them to compensate secondary low power stations that are affected by this required implementation. We also continue to believe that compensation with regard to reclaimed spectrum is best addressed in proceedings that specifically consider the reallocation of spectrum and rules for new services. We note that in our Report and Order in the channel 60-69 reallocation proceeding, we found no basis for requiring new public safety and commercial services to provide monetary compensation to low power stations on channels 60-69 for altering their operations because low power stations are secondary operations that are authorized to operate on those channels on a secondary basis.<sup>82</sup> We also stated that we will consider whether there are any other steps that may be of benefit to LPTV and TV translator stations as we develop service rules for the new commercial spectrum.

#### G. Land Mobile Sharing Issues

127. In the Sixth Report and Order, we provided for protection against possible interference between DTV stations and land mobile operations. The rules currently authorize sharing between land mobile and TV operations on frequencies in the range of UHF channels 14-20, which occupy the 470-512 MHz band, in 13 urbanized areas, the Gulf of Mexico offshore region and Hawaii.<sup>83</sup> In developing the DTV Table, we generally attempted to provide

---

<sup>82</sup> See Report and Order in ET Docket No. 97-157, at paras. 26-27.

<sup>83</sup> See 47 CFR 2.106, Notes NG66, NG114 and NG127. The 13 urbanized areas where UHF channels may be used for land mobile operations and the channels set aside for such operations in those areas are:

	TV Channel
New York-Northeastern New Jersey	14, 15
Los Angeles	14, 16, 20
Chicago-Northwestern Indiana	14, 15

allotments for DTV stations at co-channel and adjacent channel spacings to the city-center of land mobile operations of at least 250 km (155 miles) and 176 km (110 miles), respectively. We also established these separation distances in the rules as the land mobile-to-DTV spacing standards for any future DTV allotments.<sup>84</sup>

128. The Joint MSTV Petitioners argue that a minimum co-channel spacing of 240 km or less is sufficient when combined with tailored engineering to protect land mobile operations in the congested markets. They also submit that land mobile operations have different contours in different cities and that protecting all land mobile channels to the same degree in all directions is simply unnecessary and comes at the expense of preserving existing television service in certain regions of the country. They note that in the Sixth Report and Order, we indicated that the spacing requirements were chosen to be very conservative.<sup>85</sup> The Joint MSTV Petitioners therefore state that in some limited number of cases, particularly in the congested areas, we should relax the land mobile protection criteria to the extent that doing so will better accommodate DTV allotments. Paxson submits that the same type of case-by-case interference analysis used to analyze interference between television stations should be used to analyze interference from television stations to land mobile services.

129. Decision. The DTV-to-land mobile spacing standards adopted in the Sixth Report and Order were derived from the spacing standards for sharing between NTSC and land mobile services. Taking into account that DTV stations will operate at less power than NTSC stations, we reduced the required co-channel separation from 345 km (212 miles) to 250 km (155 miles) and reduced the required adjacent channel separation from 230 km (140 miles) to 176 km (110 miles). The petitioners have presented no information that indicates these spacings are not appropriate for sharing between DTV and land mobile services. While we stated that these spacing standards are conservative, we believe that the fact that this sharing environment involves a service where there is substantial mobility of transceiver units warrants a conservative approach. That is, the fact that automobiles and other vehicles may travel in and out of a service area in the course of their operations makes it difficult to identify and resolve interference problems if they should occur. While we agree that protecting all land mobile channels to the

---

Philadelphia, PA-New Jersey	19, 20
Detroit, MI	15, 16
San Francisco-Oakland, CA	16, 17
Boston, MA	14, 16
Washington, DC-Maryland-Virginia	17, 18
Pittsburgh, PA	14, 18
Cleveland, OH	14, 15
Miami, FL	14
Houston, TX	17
Dallas, TX	16

<sup>84</sup> See 47 CFR 73.623(e)

<sup>85</sup> See Sixth Report and Order, at para. 164.

same degree in all directions is unnecessary in many instances, we believe that such reductions in protections should have the agreement of all affected parties. Accordingly, we will permit modifications of DTV allotments that do not meet the minimum DTV-to-land mobile spacing standards where all affected land mobile licensees agree. We are amending the rules to reflect this change.

#### H. Use of Existing Transmitter Sites

130. In the Sixth Report and Order, we provided that applications for authority to construct or modify DTV facilities may specify an alternate location for the DTV transmitting antenna within 5 km (3 miles) of the DTV allotment reference coordinates (the 5-km rule).<sup>86</sup> The Joint MSTV Petitioners argue that this flexibility is unwise because movement of a transmitter even just 5 km may significantly affect interference that may be caused to other stations. They submit that in the case of co-located adjacent channel NTSC and DTV stations, we should refrain from granting automatic flexibility, except where both stations involved consent to the move. They next state that we should require all other stations seeking to relocate within a 0.1 to 5 km radius to submit an interference showing. Under this plan, if the interference resulting from the relocation would be serious and substantial, we would provide the public with an opportunity to comment. If the proposed relocation would cause no or *de minimis* interference, we would expeditiously process the request with no public comment. The Joint MSTV Petitioners argue that this process would preserve our desire to provide broadcasters with flexibility and preserve the integrity of the DTV allotments. ABC Inc. states that while it agrees with the Joint MSTV Petitioners' position that an engineering showing should be required with all requests for relocation of DTV transmitter sites, we should go further and require that all affected stations have notice and the opportunity to rebut any such showing.

131. Decision. We recognize that some additional interference may occur as a result of stations relocating their transmitter sites under the 5-km rule. We anticipate, however, that such relocations will occur principally in cases where stations are unable to use their existing antenna site or wish to co-locate with one or more other stations in order to reduce interference or improve service. We are therefore faced with the choice of freely permitting such moves or placing licensees in a position where they may be unable to construct their DTV facilities or must operate in a manner or from a site that will result in diminished service for themselves and perhaps others. On balance, we continue to believe that providing broadcasters with this flexibility in locating their DTV transmitting facilities is appropriate, even though in some cases additional interference may result. Nevertheless, we are concerned that relocations under this flexibility do not lead to substantial new interference. We therefore will continue to monitor relocations under this rule and will make any adjustments that may be necessary through our two-year review process.

#### I. Noncommercial Allotments and NTSC Station Modifications

---

<sup>86</sup> See Sixth Report and Order, at para. 102; see also Section 73.622(d), 47 CFR 73.622(d).

(1) Replacement of Deleted Vacant Noncommercial NTSC Allotments

132. In the Sixth Report and Order, we stated that we will consider establishing additional noncommercial reserved allotments on recovered channels for those existing vacant noncommercial allotments that cannot be replaced now.<sup>87</sup> AAPTS/PBS express concern that it is not clear from this statement whether we will replace all vacant reserved allotments deleted from the NTSC Table that can fit in the DTV Table at the end of the transition or whether some action will be required by the public broadcasting community to re-instate those channels. They request that we clarify that we will, in fact, reinstate and reserve for noncommercial use all remaining deleted reserved channels at the end of the transition insofar as possible, consistent with the criteria for new DTV allotments.

133. Decision. As requested by AAPTS/PBS, we are clarifying that we will, on our own motion, at the end of the transition period, consider establishing additional DTV noncommercial reserved allotments for existing noncommercial reserved NTSC allotments that cannot be replaced at this time.

(2) NTSC Modification Applications

134. Cannell, Cornerstone TeleVision, Inc. (Cornerstone), Flinn Broadcasting Corporation (Flinn), Longmont, Paxson, Ramar and Viacom request that we reconsider our decision to condition grant of NTSC modification applications pending after April 3, 1997, the adoption date of the Sixth Report and Order, on the impact these modifications would have on DTV service.<sup>88</sup> Cannell, Paxson, and Ramar argue that broadcasters with applications pending as of April 3 should not be subject to DTV constraints simply because we did not complete processing of those applications prior to that date. Cannell further argues that processing only those applications already on file would not prevent us from achieving our service replication goal. It contends that because the number of such applications is finite, once approved they would not affect the DTV Table any more than applications that were approved prior to April 3. Cannell, Paxson and Ramar submit that we should give comparable treatment to all parties that had applied to modify their television facilities during the pendency of the DTV proceeding. Paxson and Ramar specifically request that we process all modification construction permit applications pending as of July 25, 1996, and grant them with full DTV replication of the requested NTSC facilities.

135. Flinn Broadcasting Corporation (Flinn) and Longmont argue that our DTV allotment plan has arbitrarily and unfairly denied existing licensees the right to upgrade to maximum facilities. They argue that the fact that a station has not been able to achieve maximum facilities does mean that it should be unfairly penalized. Flinn and Longmont

---

<sup>87</sup> See Sixth Report and Order, at para. 112.

<sup>88</sup> Cornerstone and Viacom state that they support Paxson's request for reconsideration regarding the treatment of NTSC modification applications.

therefore request that we revise the DTV allotment plan to protect the maximum authorized facilities of existing stations and permittees.

136. Decision. In order to achieve our DTV full accommodation and service replication objectives it is necessary to limit modifications of existing NTSC station facilities in cases where such modifications conflict with DTV allotments. This approach is consistent with our plan to convert all television operations to DTV service in the future. Parties were given notice of this policy in the Sixth Further Notice and had opportunity to submit comment on it thereunder. We decided, after considering the comments on this issue, that it is necessary to limit modifications of NTSC facilities where such modifications would conflict with DTV allotments.<sup>89</sup> In this regard, all modifications granted after July 25, 1996, the date of adoption of the Sixth Further Notice, were subject to a condition that the modification not impact the DTV allotments. We were, however, able to remove this condition for modification requests granted as of the date of the Sixth Report and Order based on our finding that they would not conflict with DTV allotments. Applications that remained pending after that date are subject to the same review for impact on DTV allotments as those applications granted prior to April 3 from which we removed the conditions. Thus, we find that our procedures for processing applications for modifications of NTSC facilities before April 3 and after that date are consistent and fair. In addition, we find Paxson and Ramar's request that we process all NTSC modification applications and grant DTV full replication of those expanded facilities is counter to our service replication policy. Accordingly, we are denying the petitioners requests that we process all modification construction permit applications pending as of July 25, 1996, and grant them with full DTV replication of the requested NTSC facilities. We also reject Flinn and Longmont's argument that we have unfairly denied existing licensees the right to upgrade to maximum facilities. As indicated above, it is necessary to limit modifications of NTSC facilities in some cases in order to protect DTV allotments. Accordingly, we are denying Flinn and Longmont's request to protect the maximum authorized facilities of existing licensees and permittees.

#### J. International Coordination.

137. In the Sixth Report and Order, we noted that we have been coordinating for some time now with Canada and Mexico on the allotment of DTV channels in the border areas.<sup>90</sup> We

---

<sup>89</sup> See Sixth Further Notice, at paras. 60-61; and Sixth Report and Order, at paras. 112-113.

<sup>90</sup> See Sixth Report and Order, at para. 171. Use of television frequencies in the Canadian and Mexican border areas currently is governed by international agreements. Use of these frequencies in the Canadian border area is governed under the "Agreement Relating to the Allocation of Television Channels," exchange of notes at Ottawa April 23, and June 23, 1952, entered into force June 23, 1952, 3 UST 4443, TIAS 2594, 207 UNTS 25, Amendment: February 26 and April 7, 1982 (TIAS 10645). Use of these frequencies in the Mexican border areas is governed under two agreements: 1) "Agreement Relating to the Assignment and Use of Television Channels Along the United States-Mexican Border," exchange of notes at Mexico April 18, 1962, 13 UST 997; TIAS 5043; 452 UNTS 3; and 2) "Agreement Relating to Assignment and Usage of Television Broadcasting Channels in the Frequency Range 470-806 MHz (Channels 14-69) Along the United States-Mexico Border," signed at Mexico June 18, 1982, entered into force January 17, 1983, TIAS 10535, Amendments: October 31, 1984 and April 8,



indicated that we are working to complete interim agreements on DTV allotments with both of these countries and that we have also coordinated the DTV Table with the Canadian and Mexican administrations and believe that it will be generally acceptable to them. We stated that we therefore expect only minor adjustments will be necessary to conform the Table to these agreements.

138. Several petitioners with existing stations located in areas near the United States' international borders, including Cannell, Century Development Corporation (Century), Cordillera, Grant, and Mt. Mansfield and also the Joint MSTV Petitioners express concern that we have not yet finalized our agreements with the Canadian and Mexican administrations regarding the allotment of channels for DTV service in the border areas. These petitioners generally submit that prompt international coordination is an essential prerequisite for their planning, land use, and investment decisions during the DTV transition. For example, the Joint MSTV Petitioners state that the absence of final agreements with Canada and Mexico regarding DTV allotments along the border areas leaves a large number of stations in a state of uncertainty that may impede the rapid buildout of DTV. Mt. Mansfield states that it needs to be able to design and construct its DTV facilities with some certainty that final coordination on border allotments will not disrupt its efforts. These petitioners urge that we conclude our coordination agreements with Canada and Mexico promptly so that the DTV allotments in the border areas may be finalized. Grant also expresses concern that Canada may try to restrict U.S. border stations permanently to the lower power levels assigned for the transition period -- effectively precluding future station upgrades. It therefore urges that we negotiate with Canada for full power operation of U.S. stations in border areas so that U.S. stations may properly plan their transition to DTV.

139. Decision. The DTV development process has been a cooperative North American effort. Both Canada and Mexico have participated in our advisory committee process. All subjective testing of the DTV system, in fact, was carried out in Canada. Both Canada and Mexico are now in the process of considering the implementation of DTV in their respective countries. We are also negotiating and coordinating the implementation of our DTV allotments with the Canadian and Mexican administrations. This international coordination effort is continuing in a cooperative manner. While we seek to complete this process as quickly as possible, these are complex matters that require careful study and planning by parties on both sides of the negotiations. We do not believe that this coordination will disrupt the channel allotments for stations in the border areas or delay their ability to begin DTV service. In this regard, we have signed a Memorandum of Understanding with Mexico relating to cooperation in the use of TV channels for DTV service<sup>91</sup> and have established an informal working group with

---

1985, June 22 and October 19, 1988.

91 See "Memorandum of Understanding Between the Federal Communications Commission of the United States of America and the Secretaria de Comunicaciones Y Transportes of the United Mexican States Related to the Use of the 54-73 MHz, 76-88 MHz, 174-216 MHz and 470-806 MHz bands for the Digital Television Service Along the Common Border," signed April 2, 1997.

Canada to facilitate the coordination effort. We disagree with Grant that we should negotiate for full power operation by U.S. stations in the border areas. Such an approach would likely result in conflicts with the DTV allotment plans and needs of our neighbors and would, in fact, not be achievable on our own side of the borders without affecting full accommodation of all broadcasters.

#### K. Negotiations and Frequency Coordinators

140. Throughout this proceeding we have recognized that the implementation of DTV service will be a dynamic process. In the Sixth Report and Order, we encouraged the broadcast industry to continue their current voluntary coordination efforts. We indicated that an approach similar to that set forth in the Broadcasters Caucus' petition would appear to provide an appropriate model for industry coordination of DTV allotment and facility modifications.<sup>92</sup> We also stated, however, that we believe it is important that any voluntary negotiation or coordination effort be open to all affected parties. We therefore required that such negotiations be open to all affected parties, including low power broadcasters and the public. In this regard, we indicated that we will review all requests for modification of the DTV Table for their impact on low power stations. We also advised parties coordinating proposals for changes to the DTV Table that we will not consider requests for allotment modifications that would relocate an allotment to a channel in channels 60-69, and that we will not consider creating new DTV allotments in this area of the spectrum.

141. AK Media, EBC, Granite, the Joint MSTV Petitioners and Malrite request that we amend Section 73.622(c) of the rules to exempt not only intra-community channel swaps from the rule making process, but also exempt intra-market and inter-market DTV channel swaps from this process as well.<sup>93</sup> In this regard, Granite and the Joint MSTV Petitioners note that while Section 73.622(c) of the rules exempts channel swaps between stations within the same community from the petition for rule making process, inter-market exchanges can be achieved only by filing a petition for rule making to amend the DTV Table, thereby making the process more difficult. These petitioners therefore request that we allow inter-market channel exchanges also to proceed upon application. AK Media and Granite state that this change would facilitate efficient resolution of technical problems facing stations by equalizing the treatment of inter-market and intra-community swaps and eliminating unduly burdensome and time-consuming procedural requirements.

---

<sup>92</sup> The Caucus suggested that DTV coordinating committees function according to the basic principles established in the private land mobile radio service for frequency coordinators. In particular, it proposed that the coordinating committees: 1) be representative of the industry; 2) generally process requests in the order in which they are received; 3) provide all stations that might be affected by a proposed change notice and an opportunity to comment, object, or submit their own proposals that could be precluded by a proposal under consideration; 4) provide coordination services on a nondiscriminatory basis for reasonable fees; 5) serve in a purely advisory role to the Commission; and 6) help resolve licensee disputes. The Caucus also proposes that the committees function in a coordinated fashion nationwide.

<sup>93</sup> See 47 CFR 73.622(c).

142. AAPTS/PBS, Granite, Millwright Communications Group (Millwright), the Joint MSTV Petitioners and Malrite request that we clarify that licensees may negotiate modifications to the DTV Table among themselves, as long as no additional interference occurs. These petitioners state that while Section 73.623(f) of the rules authorizes DTV stations to operate with increased facilities even if interference is caused to an analog station where the analog station agrees, the rest of the rules are silent on whether parties may negotiate channel swaps, relocations of antenna sites, and other changes they believe desirable.<sup>94</sup> These petitioners urge that we modify the rules to state that we will approve negotiated changes in the Table that do not result in any increased interference to DTV allotments, NTSC stations or applicants that are not parties to the agreement. They further request that we clarify that such negotiations can include the payment of money or other consideration from one station to another, including payments to and from public television stations.

143. CBS, Granite, Great Trails Broadcasting, Inc. (Great Trails), the Joint MSTV Petitioners, and Television Wisconsin (TV Wisconsin), request that we provide a more well-defined industry DTV allotment coordination process. CBS and the Joint MSTV Petitioners submit that a smooth roll-out of DTV requires a streamlined mechanism for changing DTV channel allotments. The Joint MSTV Petitioners argue that the existing petition for rule making procedure to change allotments, which has proven burdensome in the NTSC world, is unsuited to handle the inevitable flow of proposed adjustments to the DTV Table, especially given the stringent build-out requirements that broadcasters must meet. They urge that we adopt an approach that minimizes the number of petitions filed to amend the DTV Table and encourages regional solutions to shared problems. Great Trails states that to encourage stations to participate in DTV coordination activities and the development of market-wide solutions, they need assurance that the activities of those committees will be given credence by the Commission. It states that we need to empower the DTV coordinating committees and accord their activities some degree of deference. The Joint MSTV Petitioners urge that we take steps on reconsideration to establish DTV coordinating committees, define their appropriate role, and provide the tools these committees will need to help broadcasters and the Commission as DTV rolls out.

144. Blade and Cordillera request that we provide more extensive guidance on how the industry committees should be organized and governed. Blade specifically requests that we consider the effect of "private parties" that may attempt to control coordination committee efforts. In its opposition/comment filing, Viacom similarly seeks assurances that the committees will be neutral. It also requests that we indicate that the Commission will always serve as the final arbiter of any coordinating committee determination that is questioned by any interested party. The Urban LPTV Parties submit that our statement advising industry allotment coordinating committees to consider LPTV and TV translator stations is inadequate. They submit that we should be mindful that LPTV and TV translator stations are actually competitors, albeit with fewer resources than full service station. The Urban LPTV Parties therefore state

---

<sup>94</sup> See 47 CFR 73.623(f).

that we should fortify the language requiring consideration of low power stations to indicate that coordinated solutions will not be considered unless they include proof of actual meeting notice to affected LPTV and TV translator stations, actual consultation with such stations, and actual service of copies of FCC submissions with the opportunity to comment separately.

145. Decision. Section 73.622(c) allows stations within a community to negotiate the exchange of DTV channel allotments; such exchanges must include the technical parameters associated with those allotments.<sup>95</sup> Section 73.623(f) permits DTV stations to operate with increased power and antenna height that would result in additional interference if the affected stations agree to accept the additional interference. These rules permit changes through the application process. In the Sixth Report and Order, we also indicated that we would consider any negotiated or coordinated change to the DTV Table where all affected parties agree and the allotment modifications do not include relocating an allotment to a channel in channels 60-69. It is our intention to provide licensees the maximum flexibility to negotiate changes in their DTV allotments where such changes do not cause interference to other stations or where all affected stations agree to accept any additional interference that may result. We agree with the petitioners that the rules permitting such negotiations need to be clarified to fully reflect this policy. Accordingly, we are modifying Sections 73.622(c) and 73.623(f) to provide that licensees and permittees may file applications that implement such exchanges of allotments on an intra-community, intra-market, or inter-market basis, provided that the exchanges do not result in additional interference beyond our *de minimis* standard to other stations or that all affected stations agree to accept any additional interference that would result from the exchange, and that the all other requirements of the DTV allotment rules are met with respect to the application.<sup>96</sup> Such negotiated exchanges will be allowed to include modifications of the technical parameters of the allotments. We are also clarifying that negotiated agreements under these rules can include the exchange of money or other consideration from one station to another, including payments to and from noncommercial television stations operating on reserved channels.

146. Parties should be afforded as much flexibility as possible in the negotiation process so they may address situations that may be unique to their particular circumstances. Our voluntary negotiation plan already has served well as a framework for the coordination of DTV allotment changes: an agreement on a new regional DTV allotment plan recently was negotiated by the Eastern Washington and Northern Idaho DTV Allocation Caucus (EWNIC). We believe that this process is sufficiently open and neutral because all affected parties must concur with the changes. The Commission, of course, retains ultimate authority over these changes. In addition, as stated in the Sixth Report and Order, we believe it is important that voluntary negotiation or coordination efforts be open to all affected parties, including low power broadcasters and the public, and therefore have required that such negotiations be open to all affected parties. In this

---

95 These technical parameters include transmitter site, power, and antenna pattern and height.

96 In this regard, we will clarify that Section 73.622(c) also applies to co-located facilities that may be allocated to a different community.

regard, we indicated that we will review all requests for modification of the DTV Table for their impact on low power stations. We believe that this review process provides sufficient incentive for coordinating parties to include low power licensees in their deliberations. We also recognize broadcasters' interest in the establishment of an industry committee system for coordination of DTV allotment changes with oversight by the Commission. We therefore will initiate a separate rule making proceeding in the near future and seek comment on whether we should adopt such a committee system and, if so, procedures for its operation. It is our intention that consideration of an industry coordination committee system not delay the implementation of DTV service. Furthermore, voluntary coordinations and negotiated agreements will continue to be processed throughout the pendency of our proceeding on that matter.

#### L. Other Allotment Issues

##### (1) Protection of Existing NTSC Service

147. Cannell Cleveland, L.P. (Cannell), Pulitzer, Roberts Broadcasting of Cookeville, LLC (RBC), and WHNS request that we adopt rules to protect NTSC stations in cases where interference would occur from DTV stations. Pulitzer states that the negative effects of DTV operations on NTSC service could be ameliorated or avoided if temporary limits or caps were placed on transmitter power or antenna heights of interfering DTV stations. It states that such caps could be applied narrowly, for example, in cases where an NTSC station objects and the interference is not *de minimis*. Pulitzer states that such temporary caps would be consistent with the Commission's general DTV policy that permits DTV licensees' initial facilities to serve only the community of license. It states that these temporary caps should be subject to the biennial reviews and that as the DTV audience grows the Commission would be free to relax the caps where the circumstances may justify.

148. Decision. We are not adopting rules to place limits or caps on DTV operations in cases where the DTV Table predicts interference to NTSC service or where an NTSC licensee objects to new interference. In developing the DTV Table we attempted to minimize all interference. Nevertheless, in some instances it was necessary to allow increased interference to NTSC service. Our goal in this proceeding is to provide for the transition to DTV service so that the benefits of this new technology can be brought to the American people in an expeditious and efficient manner. To handicap the provision of this new service by placing caps on DTV transmissions or otherwise limiting the provision of DTV service would thwart this goal.

##### (2) Use of Booster Stations

149. Sunbelt Television, Inc. (Sunbelt) observes that the Grade B contour defines the areas in which fill-in booster stations can be operated and also determines (in a broad sense) those areas in which television stations have "must carry" rights on cable television systems. Sunbelt is concerned that the DTV allotment plan replicates an existing station's service area as computed using the "Longley-Rice" method of service prediction, which takes terrain into account. It argues that this approach will cause broadcasters such as itself to lose their current

rights to make their actual service coterminous with their current predicted-Grade-B contour through the use of TV booster stations and may result in some stations losing protection under the "must-carry" rules. Sunbelt submits that we should make allowances to ensure that the existing rights of broadcasters to provide service, by whatever means, throughout their existing predicted Grade B service areas are preserved.

150. Decision. We disagree with Sunbelt that we should protect service provided by secondary booster stations. Under our service replication approach, the service area of a DTV station is determined based on the main transmitting facilities of the associated NTSC station. Extensions of this service area either through the use of booster stations or TV translators are not considered. Accordingly, we are not protecting areas outside a station's service area that are served by booster stations. "Must carry" issues regarding DTV service will be addressed in a separate proceeding.

### (3) Minimum DTV Operating Power Requirement

151. Fireweed Communications Corporation (Fireweed) and Lincoln Broadcasting Company (Lincoln) express concern that the 50 kW minimum authorized power for DTV stations will require some stations to build more powerful facilities than their current NTSC stations. Fireweed submits that in the case of a small NTSC station such as its KYES-TV in Anchorage, Alaska, that serves a small rural community, the unnecessary expense of higher power could present an unnecessary barrier delaying provision of DTV service. Lincoln, the licensee of KTSF-TV, NTSC channel 26 in San Francisco, California, is concerned about the feasibility of operating the station's DTV service at the minimum power level on upper adjacent DTV channel 27. It states that the new rules are unclear whether KTSF-TV and similarly situated stations would be permitted to operate their DTV facility at less than the 50 kW minimum power.

152. Decision. The transmitter power values associated with the DTV allotments are, in general, the values needed for a station to replicate its existing NTSC service. Due to the concerns about transmitter power disparities between larger and smaller stations and to ensure that all stations remain competitive in the future in the provision of DTV services, however, no station was assigned a power level less than 50 kW. We are clarifying, herein, that this 50 kW value is the maximum permitted power level for stations assigned 50 kW and that such stations may operate at lower power levels.<sup>97</sup> In addition, of course, the 50 kW level may be increased through our maximization procedures.

### (4) Calculation of Maximum Allowable Power and Antenna Height

153. The Joint MSTV Petitioners request that we provide more guidance on how an

---

<sup>97</sup> In this regard, we note that some stations may not be able to operate at the full 50 kW of power and maintain the proper power ratio between their DTV and NTSC signals. In order to avoid interference to their analog operations, such stations may also need to increase their NTSC power.

existing licensee should calculate its maximum permissible power level and antenna height when it seeks to modify its facilities or change its channel. They observe that Section 73.622(f)(1) specifies that the maximum power and maximum antenna heights for allotments included in the initial DTV Table of Allotments are in Appendix B.<sup>98</sup> They also observe that Section 73.622(f)(3) further provides that DTV licensees may request increases in these initial specifications up to the maximum permissible limits on DTV power and antenna height set forth in this section or up to that needed to provide the same geographic coverage area as the largest station within their market. In addition, they note that footnote 70 of the Sixth Report and Order states that we will entertain requests for increases in power above 1000 kW where such additional power is needed to provide service to the station's Grade B contour and would not result in additional interference. The Joint MSTV Petitioners submit, however, that paragraphs (4)-(6) of Section 73.622(f) explicitly address only the maximum power levels and antenna heights for DTV stations that operate on allotments created subsequent to the initial DTV Table. The Joint MSTV Petitioners request that we clarify how existing licensees making facility changes calculate appropriate power levels and antenna heights, and specifically whether paragraphs (4)-(6) apply to the initial DTV allotments. They also request that we clarify the rules governing power levels and antenna heights for existing licensees that seek to change their channels.

154. Decision. We agree with the Joint MSTV Petitioners that the rules are somewhat unclear with regard to maximum permitted power levels and antenna heights for DTV operation. We are therefore amending the rules to clarify that the maximum power levels and antenna heights specified in subparagraphs (4), (5) and (6) of Section 73.622(f) apply to all DTV stations, except for those DTV allotments that are specifically provided higher values in order to better replicate their existing NTSC service.<sup>99</sup> We are also clarifying subparagraph (3) of Section 73.622(f) to indicate that DTV licensees and permittees may request increases in the maximum ERP and HAAT for a DTV allotment up to the maximum values specified in subparagraphs (4), (5) and (6) of this section or up to those of the largest station in its market in such cases where one or more stations have been specifically provided higher values.<sup>100</sup> Further, we are clarifying that these rules also apply to existing licensees that seek to change their DTV channels.

#### (5) Allotment Criteria for Existing and New DTV Licensees

155. The Joint MSTV Petitioners submit that the rules, in some instances, appear to apply different criteria and procedures to existing DTV licensees seeking to change their channels and new broadcasters seeking DTV channels. They state that Section 73.622(a) for

---

<sup>98</sup> See 47 CFR 73.622(f).

<sup>99</sup> This would also include any stations that in the future may be assigned more than 1000 kW.

<sup>100</sup> As discussed previously, however, we initially are limiting requests for maximization of power to 200 kW by UHF DTV licensees until substantial progress has been made in the rollout of DTV service.

example, distinguishes between requests to amend the DTV Table to change the channel of an allotment in the DTV Table (which are evaluated using the engineering criteria in Section 73.622(c)) and requests to amend the DTV Table to add a new allotment (which are evaluated using the geographic spacing criteria in Section 73.623(d)).<sup>101</sup> They further note that Section 73.622(a) maintains this distinction with respect to spectrum requirements, in that it specifies that petitions for the addition of a new allotment must specify a channel between 2 and 51, and petitions for a change in the channel of an initial allotment must specify a channel between 2 and 59.<sup>102</sup>

156. The Joint MSTV Petitioners submit that these distinctions suggest that an existing licensee requesting a modification of its DTV allotment is subject only to the engineering interference test. However, they submit that Section 73.622(d) clouds the issue because it does not appear to maintain the distinction between existing licensees and newcomers. Section 73.622(d)(1) provides that the reference coordinates of an initial DTV allotment are the coordinates of its paired NTSC station, unless the licensee moves its transmitting site more than 5 km, in which case the relocation must comply with the engineering criteria of Section 73.623(c). By contrast, Section 73.622(d)(2) provides that the reference coordinates of a DTV allotment not included in the initial DTV Table will be in the Order amending the Table (to add the new allotment) and that these must comply with both the engineering criteria of Section 73.623(c) and the geographic spacing criteria of Section 73.622(d)(2). The Joint MSTV Petitioners further submit that it is unclear whether the rule allowing licensees to move automatically within a 5 km radius applies to newcomers as well as to existing DTV licensees. They request that we clarify these two aspects of Section 73.622(d).

157. Decision. The rules are intended to make a distinction between existing and new licensees. Petitions for new allotments will be considered only if they meet our geographic spacing criteria and if they specify a channel within the DTV core spectrum. Engineering criteria rather than spacing distances were used to develop the initial DTV Table and are to be used with regard to any changes for existing stations. This approach was taken in order to provide for full accommodation and service replication of existing facilities. The rules are correct in this regard. The rules are incorrect, however, with regard to reference coordinates. The second and third sentences of Section 73.622(d)(2) incorrectly referenced Section 73.623(c) instead of 73.623(d). We are therefore amending the rules to correct this error. This will correct the rules to specify only geographic spacing criteria for new allotments. In addition, we are clarifying that the 5 km radius only applies to existing licensees.

## M. Technical Issues

### (1) Antenna Height Changes

---

<sup>101</sup> See 47 CFR 73.622(c) and (d), and 73.623(c).

<sup>102</sup> See 47 CFR 73.622(a).



158. The maximum permissible antenna HAAT values for the DTV allotments correspond to the antenna HAAT values of the existing analog stations with which the DTV allotments are paired.<sup>103</sup> The Joint MSTV Petitioners and Paxson submit that most stations will be unable to mount DTV antennas at exactly the same height as their existing NTSC antennas. These petitioners state that stations will need to deviate from the maximum height specification by several meters. They indicate that the most desirable approach for many stations will be to stack their DTV antennas above or below their NTSC antennas. In this regard, Paxson states that many stations installing new NTSC antennas recently have purchased “stacked” antennas, with the NTSC antenna at the bottom and a dummy pole at the top for future installation of the DTV antenna. The Joint MSTV Petitioners note that the construction permit application form (FCC Form 301) suggests that if a station were to deviate its antenna HAAT downwards, no new showings would be required. They point out that if the station were to deviate upwards even just one meter, however, a showing of no increased interference would need to be submitted pursuant to Section 73.623(c). The Joint MSTV Petitioners and Paxson request that we not require a station to make a “no new interference” showing when it is simply stacking its antennas and deviating (increasing) its antenna HAAT a minimum number of meters, *i.e.*, no more than 10 meters, from the antenna HAAT specified in Appendix B. Paxson states that accepting such a minor antenna height change without any interference showing will help speed the implementation of DTV service.

159. Decision. We agree that broadcasters should be afforded additional flexibility to make minor adjustments in antenna height and power without submitting an interference showing. We will therefore permit stations to increase their antenna height by up to 10 meters without an interference showing if they reduce their DTV power in accordance with the following formula:

$$\text{ERP adjustment in dB} = 20\log(H_2/H_1)$$

where  $H_1$  = Reference antenna HAAT specified in the DTV Table and  
 $H_2$  = Actual antenna HAAT

We will also permit stations that decrease their antenna height by up to 25 meters to adjust their power upward in accordance with the above formula without an interference showing.<sup>104</sup> We believe that this change will enable more licensees to use our expedited checklist application procedure.

---

<sup>103</sup> The maximum antenna HAAT values for DTV stations are as set forth in Section 73.622(f) of the new rules. Section 73.622(f) provides that the maximum ERP and antenna HAAT for allotments included in the initial DTV Table are as set forth in Appendix B of the Sixth Report and Order.

<sup>104</sup> Stations, of course, may decrease the HAAT by any amount without an increase in power and use our expedited checklist procedure.

(2) Use of Directional Antennas

160. A number of parties raised questions with regard to the directional antenna patterns associated with the DTV allotments. SHBC, for example, requests clarification with regard to the use of directional antennas. It observes that the methodology we used in developing the Table has resulted in the specification of a directional antenna pattern for each DTV allotment. It states that if directional patterns are intended to be assigned with the allotments, some latitude needs to be permitted, such as plus or minus 1.5 dB from the computed directional pattern. SHBC states that it would be very difficult, or perhaps impossible, for a manufacturer to build an antenna with a pattern that exactly replicates an antenna pattern developed from terrain contours. Pulitzer notes that if the directional pattern assumed is not commercially available then the station may be required to reduce power and coverage.

161. H&E observes that the DTV replication program sometimes generates patterns that are markedly different from a station's NTSC antenna pattern. For example, it states that for KREZ-TV, NTSC channel 6 and DTV channel 17, Durango, Colorado, which has large variations in average terrain, the DTV replication pattern differs significantly from the station's omnidirectional NTSC pattern. H&E suggests that, where a station's NTSC antenna is omnidirectional, we limit the replication pattern to no more than 3 dB below the omnidirectional NTSC pattern in any particular direction, even if the DTV threshold contour extends beyond the NTSC Grade B in certain directions.

162. H&E states that the DTV replication program used a procedure that first derived the Grade B contour for an existing NTSC station, and then redefined that contour as the limit of protected service for the DTV facility (27.8 dBu for channels 2-6, 35.8 dBu for channels 7-13, and 40.8 dBu, with a dipole factor applied, for UHF channels). It observes that using the appropriate curves from Section 73.699 of the rules, the DTV power necessary to reach the Grade B contour was then determined radially. It states that when the maximum calculated power was found to be above the maximum power allowed (e.g., 1000 kW), the power was scaled to that maximum. H&E argues, however, that the scaling process necessarily reduces the directional replication pattern to power levels below that maximum for other azimuths, even though the replication power at those azimuths may not have exceeded the maximum power. It therefore submits that by scaling the pattern instead of truncating it at the maximum power level, the DTV station is further limited from replicating its Grade B coverage. Fox also supports truncation and further states that stations should be permitted a  $\pm 0.075$  tolerance in the antenna field expressed in the replication antenna patterns to compensate for errors caused by the scaling technique.

163. Decision. The concept of replication of service, as developed by the broadcast industry and adopted in the Sixth Report and Order, is based on the use of specific antenna patterns taking terrain considerations into account. We have long recognized in some situations, such as where a station is replicating its VHF NTSC service on a UHF channel or where there are large differences between the NTSC and DTV UHF channels, service replication can result in a station having a significantly different DTV antenna pattern from its existing NTSC pattern.

We are continuing to maintain our service replication approach and are not making the changes suggested by the petitioners. Stations will be required to comply with the directional antenna patterns associated with the DTV allotment. If the pattern cannot be fully implemented, the station may reduce the power to ensure that the maximum ERP is not exceeded in any particular direction. To the extent that stations may wish to exceed their maximum ERP values, they may address such changes through our maximization rules and *de minimis* interference standard.

164. We are also not making a change from scaling to truncation as requested by H&E and Fox for stations subject to the power cap. Scaling maintains the existing antenna patterns for capped stations. The vast majority of stations subject to the power cap received DTV allotments that would permit the provision of DTV service to an area and population greater than their existing NTSC service. We see no reason to adopt a new truncation methodology to further “improve” this situation. To the extent that increases in service are desired, we find that they are better addressed through our maximization procedures. In this regard, we will consider maximization requests from capped stations to increase power, up to the capped value, in any direction.

### (3) Calculation of Coverage Area

165. H&E and the Joint MSTV Petitioners submit that our assessment of coverage overlooked some sources of interference caused by distant co-channel, adjacent channel and taboo channel stations. They state that the distances specified in the FCC software were too short to consider all the interfering stations that would have an impact on a particular NTSC station or a new DTV allotment. For example, they state that when assigning a DTV channel, the FCC software limited the search distance for selecting all the interfering taboo stations to 35 km. The Joint MSTV Petitioners argue that a distance of at least 100 km should have been used to adequately discern all the interference caused to a DTV allotment. They state that most of these errors are of less than 0.5 percent of a station’s NTSC or DTV service area.<sup>105</sup> However, they believe that correcting these errors could affect the DTV allotments for some stations. They urge that we reassess the interference and coverage for these stations and make appropriate adjustments to the DTV Table.

166. H&E observes that Appendix B of the Sixth Report and Order states that a dipole factor should be applied for UHF DTV stations, yet this is not reflected in Section 73.622(e) of the rules. It submits that if a dipole factor is to be applied, it should be reflected in the new rules. H&E also states that it is illogical to apply dipole factors as small as 0.1 dB at UHF and

---

<sup>105</sup> The Joint MSTV Petitioners submit that the calculations of expected interference for 1335 NTSC and 1163 DTV stations were affected by this factor. They included a separate list of these stations with their petition. In subsequent filings, MSTV submits that using the FCC software it found that interference was underestimated in 1257 cases, where either the NTSC or the DTV service area or population or both were affected. MSTV states that these analyses indicated that in most cases the interference was underestimated by less than 1 percent of the total NTSC or DTV service area or population. It further states, however, that in 375 cases the loss was greater than 1 percent, and in 37 of those cases was greater than 5 percent.

ignore dipole factors of up to 2.0 dB at VHF. It therefore states that we should consider extending the dipole factor to VHF channels or dispense with them as not significant.

167. Decision. We believe that our assessment of service coverage was sufficiently accurate and that the differences in our approach and that suggested H&E and the Joint MSTV Petitioners yield only minor differences in coverage estimates. We note that while our software limited the search for interfering taboo stations to 35 km, this 35 km search was made for each cell within a station's Grade B contour. Therefore, interfering stations well beyond even the 100 km range suggested by the petitioners were in fact considered in our coverage calculations. Nonetheless, we recognize that the approach for estimating service coverage and interference suggested by these petitioners is slightly more conservative than the methodology we have previously used and therefore have used this approach in calculating the service coverage and interference estimates provided in Appendix B of this Memorandum Opinion and Order. We are also incorporating this revised approach in the guidance for estimating coverage and interference provided in OET Bulletin No. 69. The use of the dipole factor for UHF, but not VHF, DTV channels was adopted at the request of the broadcast industry. Use of the dipole factor for UHF frequencies is intended to take into account the differences in antenna performance across the entire UHF portion of the TV spectrum (470-806 MHz). The antenna performance differences across channels at each end of the VHF TV spectrum (54-216 MHz) are of less concern because the range of frequencies is less than that of the UHF band. While it is true that differences between adjacent UHF channels can be as small as 0.1 dB, the range of performance difference across all 56 UHF channels is 4.6 dB. With regard to H&E's concern that the dipole factor is not specified in Section 73.622(e) of the rules, we note that this section references OET Bulletin No. 69 which specifies use of the dipole factor for evaluating coverage area. We therefore do not believe that a specific reference in the rules is necessary.

#### (4) Receiver Standards

168. Gannett, the Joint MSTV Petitioners, Paxson, Univision and Viacom argue that we should establish minimum performance standards for DTV receivers. These parties generally submit that receiver standards are necessary to ensure that the goals of replicating NTSC service and minimizing interference are achieved. In this regard, the Joint MSTV Petitioners state that these goals will not be achievable if receivers do not perform at the level on which the DTV allotments are predicated. The Joint MSTV Petitioners, Gannett and Viacom submit that we should require that DTV tuners perform at least to the 10 dB noise figure for the VHF band and the 7 dB noise figure for the UHF band recommended by the Broadcasters' Caucus Technical Committee.<sup>106</sup> These petitioners state that the noise figure standards could be phased in over a reasonable three or four year transition period. In the alternative, the Joint MSTV Petitioners submit that we should ask the manufacturing industry to provide periodic updates regarding the development of low noise-figure DTV tuners. They submit that such reports would better enable the Commission, relevant industries, and the public to monitor whether more regulatory steps are

---

<sup>106</sup> Gannett indicates that it supports the Joint MSTV Petitioners' proposals regarding DTV receiver standards.

necessary. The Joint MSTV Petitioners also urge that we adopt minimum receiver standards that require adaptive equalizer circuits and tuner performance to protect DTV signals from interference.

169. NTA requests that we require that NTSC receivers continue to tune through channels 60-69. It notes that in earlier years when channels 70-83 were removed from TV service, UHF translators were allowed to continue to operate on those channels. NTA states, however, that channels 70-83 quickly began to disappear from the tuning range of new TV sets, so that viewers who purchased new sets could not tune to translators operating on the higher channels. The NTA therefore urges that we include a policy statement to the effect that no matter what the outcome of the core spectrum issue, channels 60-69 will be considered in the frequencies allocated by the Commission for broadcasting for purposes of defining the required tuning range of receivers usable with NTSC signals.

170. The Electronics Industries Association (EIA) and the EIA Advanced Television Committee oppose mandatory performance requirements on DTV receivers. They argue that mandatory standards are unnecessary and that the competitive marketplace will ensure the development of high performance DTV receivers. They state that should standards prove necessary in the future, EIA stands ready to develop voluntary industry standards.

171. Decision. We continue believe that competitive market forces will ensure that DTV receivers perform adequately. We note that receiver performance involves trade-offs among many different factors. We continue to believe that the television manufacturers are in the best position to determine how these trade-offs should best be made to meet consumer demand. As suggested by the Joint MSTV Petitioners and others, we will continue to monitor this area through the implementation process and we will take further regulatory action, if necessary. At this time, however, we see no need for any mandatory reporting requirements. With regard to NTA's request, we are not making any changes to the channel tuning requirements for television receivers at this time. Since channels 60-69 will continue to be used for the provision of analog television service throughout the transition period, all new NTSC television receivers must include those channels.

(5) DTV Allotments Required to Use Precision Off-Sets

172. VenTech submits that there is a mistake in the specification of the "c" designations for DTV allotments where stations are required to operate with precise carrier frequency control, as provided in Sections 73.622(b) and (g). It notes that whereas the requirement for precise frequency control is only needed to reduce interference from a DTV station to an NTSC station on a channel immediately below the DTV station, the DTV Table also includes the "c" designation on DTV allotments that are on channels immediately below an NTSC station. VenTech observes that about 40 percent of the "c" designated DTV allotments (17 DTV allotments) are not immediately above the channel of an NTSC station and therefore should not be so designated. It requests that we remove the "c" designation on these allotments.

173. Decision. We concur with VenTech that a number of allotments were inappropriately designated as requiring precision carrier frequency control and are herein correcting those allotments for which the “c” designation was in error.

(6) Spectrum for Wireless Microphones and Other Secondary Uses

174. Tribune submits that we should provide some spectrum for secondary uses of vacant channels by broadcasters. In particular, it requests that we provide some mechanism for television licensees to continue to use wireless microphones and other equipment that operate on television frequencies.

175. Decision. We will continue to permit broadcasters to use vacant television channels for the operation of wireless microphones and other secondary uses. However, consistent with the secondary status of such devices, we will not take steps to ensure the availability of spectrum for their operation.

(7) Desired-to-Undesired Signal Ratios at the DTV Noise-Limited Service Area

176. H&E, KPDX, and VenTech observe that Section 73.623(c)(2) of the new DTV rules requires that, at the DTV threshold, the desired-to-undesired (D/U) ratio must be 2 dB for DTV-into-NTSC interference and 15 dB for DTV-into-DTV interference. They also observe that the “Note” following that section states that these co-channel D/U ratios are only valid where the signal-to-noise (S/N) ratio is 28 dB or greater. At the edge of the noise-limited service area, defined as a S/N ratio of 16 dB, the required D/U ratios are instead 21 dB for NTSC-into-DTV and 23 dB for DTV-into-DTV. H&E asks how the transition from 2 dB to 21 dB D/U for DTV-into-NTSC, and the transition from 15 dB to 23 dB D/U for DTV-into-DTV, should be modeled in the 16 dB to 28 dB S/N region. It believes that a linear ramp transition may be the appropriate method and requests clarification.

177. Decision. We are amending Section 73.623 of the rules to specify the D/U values as a function of S/N values, as requested. These values are based on measurement data presented to our Advisory Committee.

(8) Longley-Rice Out-of-Range Calculations

178. Granite, H&E and KPDX note that the Longley-Rice model is not always capable of determining, within certain confidence limits, whether a particular cell has service. Specifically, these petitioners point out that in cases where the actual horizon from a given cell or transmitter location is less than 0.1 times or greater than 3 times the distance to the smooth earth horizon, the algorithm will return an error code that means internal program calculations show parameters out of range, so that any reported results are dubious or unusable. These petitioners question that our allotment software assumed such cells have “interference-free” service. H&E states that while this assumption does not appear to introduce significant overall errors in urban areas of relatively flat terrain, the error code is returned much more often for

studies involving mountainous or even hilly terrain. For example, it submits that our analysis ignored possible interference to over 1.1 million persons within the KABC-TV, Los Angeles, California DTV service area. It states that this is one reason that it uses the TIREM (Terrain-Integrated Rough Earth Model) model, a more sophisticated propagation loss algorithm of which the Longley-Rice routine is only a part. Granite submits that our treatment of such cases as having interference-free service leads to inflated estimates for the area and population served by a station. KPDX requests that we address this issue in our application of the Longley-Rice method and consider whether alternative propagation models should be used in making interference calculations involving mountainous areas.

179. H&E requests confirmation that interference studies for possible facilities modifications should be performed with "interference" and "interference-free" retaining their definitions acquired during the replication and allotment process, that is, any Longley-Rice study cell that returns an error message is: 1) presumed to have service, 2) not studied for interference from other stations, and 3) presumed not to cause interference to other stations.

180. Decision. The methodology for calculating service and interference, including the use of the Longley-Rice propagation model and the presumption of service, was developed by our Advisory Committee. We note that this was a public process and that the development of this methodology underwent considerable debate. In their deliberations, the Advisory Committee considered and rejected a number of alternative propagation models, including the TIREM model. While we recognize that the Longley-Rice model may have certain limitations, as do all propagation models, we continue to believe that it provides a sufficiently accurate measure of service and interference. Furthermore, the Longley-Rice model is in the public domain and has been extensively documented, thereby ensuring that all parties using this model will be able to achieve the same results. We further note that other models, such as TIREM, are proprietary and can yield very different results depending upon their implementation. Accordingly, we are reaffirming our decision to use the Longley-Rice model.

181. With regard to the petitioners' concerns regarding the treatment of out-of-range calculations, we believe that the assumption of service is appropriate where the Longley-Rice propagation model indicates that service calculations are unreliable. We note that we generally assume service is available within the Grade B contour and since only cells within the Grade B contour are investigated, a presumption of service would appear to be reasonable in such cases. We also confirm that H&E's interpretation on how such cells are to be evaluated in the case of an error message is correct.

#### (9) Power Adjustments/Donut Interference

182. Hearst Corporation (Hearst), Rainbow Broadcasting, Inc. (Rainbow), and Sarkes Tarzian, Inc. (STI) request relaxation of Section 73.623(c)(2) regarding interference caused by changes in initial DTV allotment facilities that produce a "donut hole" shaped interference pattern within the service area of an NTSC station. These parties indicate that this problem is most likely to arise where a DTV transmitter is located within the service area of an NTSC

station-- the donut hole interference pattern occurs in the immediate area around the DTV transmitter. Hearst notes that under the rules, changes in the location and power of DTV stations must be agreed to by any affected NTSC stations. It states that such approval in cases where an increase in donut hole interference would occur is highly unlikely since an affected station will be in direct competition for the same viewers. Hearst suggests that Section 73.623(c)(2) be modified so to allow some nominal increase, for example, no more than 25 percent increase in donut hole interference surrounding the DTV transmitter. It states that this change would better facilitate DTV power adjustments and prevent competitive activity from delaying DTV implementation. Rainbow also requests that Section 73.623(c)(2) of the rules be made more flexible to allow for increased interference in situations involving donut-hole interference. STI suggests that Section 73.623(c)(2) be modified so that no reduction in height/power will be required in cases involving donut hole interference, even where a station licensee proposes to modify its DTV transmitter site beyond the 3-mile zone, so long as the new transmitter site remains within the interference-free contour of the other station both before and after the site relocation.

183. Decision. We believe that this matter has been addressed by our adoption of a 2 percent *de minimis* interference standard. This will permit DTV stations that may cause donut hole or blanketing interference to an NTSC station some flexibility to increase their facilities or modify the location of their transmitter. At the same time, it will ensure that any new interference is small enough, *i.e.* less than 2 percent, so that the NTSC operation is not significantly affected. We therefore believe that our *de minimis* standard sufficiently addresses the concerns of Hearst, Rainbow and STI regarding this issue.

(10) Typographical Error

184. H&E and KPDX observe that Section 73.623(c)(2) of the rules specifies a threshold D/U ratio of -34 dB for DTV channels operating seven channels above an NTSC facility, while Appendix A of the Sixth Report and Order specifies -43 dB for this taboo and the DTV allotment computer program applied -43.22 dB. They state that it appears that -43 dB should have been specified in Section 73.623(c)(2) and request correction or clarification.

185. Decision. We are correcting Section 73.623(c)(2) to specify a threshold D/U ratio of -43 dB for DTV channels operating seven channels above an NTSC facility.

#### IV. REQUESTS FOR MODIFICATION OF INITIAL ALLOTMENTS

##### A. General Treatment of Allotment Change Requests

186. In addition to the general policy matters discussed above, a number of parties submitted petitions for reconsideration concerning specific changes to the DTV Table or to



individual DTV allotments.<sup>107</sup> These petitions concern, among other things, requests for DTV channel changes to improve service replication, increase coverage, reduce perceived interference situations, or eliminate impact on low power operations. Throughout this proceeding, we have stated that we intend to provide broadcasters with the flexibility to develop alternative allotment approaches and plans.<sup>108</sup> We specifically stated that we would consider alternative allotment/assignment plans that are the result of negotiations and coordination among broadcasters and other parties within their communities. Therefore, as a general matter in considering these specific requests, we will make changes to the DTV Table where such changes have the agreement of all affected broadcasters or do not result in additional interference to other stations or allotments, and do not conflict with our other DTV allotment goals, such as full accommodation and spectrum recovery. On the other hand, we are generally denying requests by parties to change the DTV allotments of stations licensed to other parties where such parties have not agreed to the proposed change.

187. As described above, we have used the software developed by CBA to modify certain DTV allotments to avoid a co-channel conflicts with low power stations in a limited number of situations. Beyond these adjustments, we are not generally granting requests by low power interests to modify the DTV allotments of full power stations in order to protect their existing operations, except where such changes are agreed to by all affected broadcasters. We have provided a number of rule changes for low power stations to minimize the impact of DTV on their operations and to provide them with additional flexibility to find replacement channels when necessary. At the same time, low power stations remain secondary to both the analog and digital operations of full service broadcasters. Therefore, requests by low power interests that we modify the DTV Table to protect their existing low power operations will generally be denied unless the petitioners have obtained the concurrence of the full service licensee to the change and the change would comport with our other allotment principles and policies.

188. A number of petitioners request modification of their channel allotments and/or assigned power or antenna height to expand or maximize the DTV service of their stations beyond that their existing service areas. In addition, a number of petitioners requests that we modify their DTV allotments to take into account recent or pending requests to modify their NTSC facilities. To the extent feasible, the DTV Table provides for service replication of all station parameters including any modifications granted as of the date of adoption of the DTV Table, *i.e.*, April 3, 1997. As discussed above, we are not providing for maximization of DTV station facilities at this time. We believe that to do so as a matter of reconsideration would be inappropriate. We have adopted specific provisions in our rules to allow licensees to request an increase in their DTV facilities and believe that to consider maximization requests as part of reconsideration would unfairly disadvantage parties that have expected such maximization

---

<sup>107</sup> In a number of instances, petitioners addressed both general matters and specific requests concerning the DTV Table of Allotments. This section deals only with such specific changes to the DTV Table; all general aspects of the petitions for reconsideration are addressed above.

<sup>108</sup> See, for example, Sixth Report and Order at para. 172.

requests to be dealt with under the rules. Likewise, we also do not believe that it is appropriate to attempt to increase DTV facilities to match requests for NTSC facility increases that are pending or have been granted after April 3, 1997. Accordingly, we are generally denying petitioners' requests for DTV channel and facility changes solely for the purpose of increasing DTV service areas beyond that provided in the Sixth Report and Order or to replicate their existing facilities as of April 3, 1997. These parties may submit separate requests for increased power and/or antenna height under the procedures for maximization of DTV facilities contained in the Commission's rules.

189. In the Sixth Report and Order, we adopted a policy to base DTV allotments on current transmitter sites, rather than on community reference coordinates. We also provided broadcasters flexibility to locate their transmitting facilities at any site within a three-mile radius of their existing antenna site coordinates. We further stated that we would allow stations to relocate to other locations or co-locate their facilities with other broadcasters where such relocations and co-locations would not increase interference.<sup>109</sup> As indicated above, we have affirmed these policies to give broadcasters flexibility in finding new transmitter sites where necessary and to encourage co-location of DTV facilities. As is the case with requests to increase power, we generally believe that requests to change transmitter sites should be dealt with through the DTV allotment modification procedures provided for in the rules and not as a matter for reconsideration. Accordingly, we are generally not granting such requests by petitioners.

190. Certain petitioners question the adequacy of the DTV channels allocated to their stations but do not request the use of specific alternative channels or supply any information to show that the DTV channels provided to their stations do not comport with our DTV allotment principles and goals. In general, we are declining to grant such requests. We are also, in general, denying requests to change DTV allotments based solely on the fact that the licensee received a DTV allotment out of the core spectrum. In developing the DTV Table of Allotments, we attempted to provide all eligible broadcasters with an initial DTV allotment within channels 2 to 51.<sup>110</sup> However, this was not always possible because of the limited availability of spectrum and the need to accommodate and replicate all existing facilities with minimal interference. We recognized that this approach would require certain broadcasters to make a second transition to a new DTV channel within the core spectrum and have attempted to minimize the number of times such a second transition would be necessary. In this regard, we specifically did not adopt approaches suggested by other broadcast interests, such as MSTV, that would have significantly increased the number of out-of-core DTV allotments. To facilitate second channel transitions, we stated that we will allow broadcasters with DTV channels out of the core spectrum to switch their DTV service to their existing in-core NTSC channels at the end of the transition if they so desire. We also stated that stations with both NTSC and DTV

---

<sup>109</sup> See Sixth Report and Order at para. 102.

<sup>110</sup> Our allotment software includes a penalty for the use of out-of-core DTV allotments, and such channels were used only where benefits of their use would outweigh the penalties for interference and service replication.

channels outside the core spectrum would be assigned new channels within the core from recovered NTSC spectrum. We noted that the DTV Table contains only 68 instances where both channels are outside of channels 7-51 and 89 instances where both channels are outside of channels 2-46. We find that, in considering changes in the DTV allotments, including changes to eliminate out-of-core channels, the interests of service replication and minimizing interference generally outweigh other station considerations, such as network affiliation, commercial, or noncommercial operation, station or market size, etc. Finally, we believe that the out-of-core problem is reduced by our decision to expand the core spectrum at this time to include all channels from 2-51.

191. Below, we summarize and respond to petitions seeking specific changes in the DTV Table of Allotments. We have arranged many of these summaries and responses into groups.

#### B. Petitions Granted or Made Moot

192. In this subsection, we discuss petitions that advocate changes to the DTV Table of Allotments that have been made in this reconsideration order. These petitions include requests for specific changes to the DTV Table that we have granted, in whole or in part, along with certain petitions that have been rendered moot by other decisions we have made.

193. ABC, Inc. Petition.<sup>111</sup> With regard to KABC-TV in Los Angeles, California, ABC states that its DTV channel 8 allotment will cause interference to the NTSC channel 8 service of KFMB-TV in San Diego, California, 172 km away. ABC is also concerned that KABC-TV's DTV channel 8 operation would not achieve the predicted degree of replication because of interference from KFMB-TV. ABC states that KABC-TV is in one of three regions identified in the Joint MSTV Petitioners' petition as problem areas where existing NTSC service and future DTV service are most in jeopardy under the DTV Table. It states that it recognizes that a change in any individual allotment potentially will impact other NTSC and DTV stations. ABC did not submit an individual supplemental filing proposing an alternative allotment, but it was party to MSTV's *ex parte* filing of November 20, 1997.

194. As indicated above, we have reviewed the DTV allotments in the Southern California area and made a number of changes to address various interference concerns. In this regard, we are changing KABC-TV's DTV allotment from DTV channel 8 to DTV channel 53. To make this channel available, we are also changing the channel 53 DTV allotment for Santa Ana to channel 23. These changes will eliminate ABC's concern with regard to interference from KFMB-TV and will not adversely affect the service replication of other stations. Accordingly, we are granting ABC's request to change the DTV allotment of its KABC-TV and are amending the DTV Table to specify DTV channel 53.

---

<sup>111</sup> We address ABC's requests regarding other stations below in the alphabetical section.

195. Blade Communications, Inc. Petition and Supplemental Filing. Blade Communications, Inc. (Blade) requests that the DTV allotment for its station KTRV-TV, Nampa, Idaho be changed from channel 44 to channel 27. It states that operation on DTV channel 44 would create no new interference and would satisfy the criteria for DTV Table modifications. According to Blade, channel 44 would avoid problems associated with several nearby adjacent-channel DTV broadcasts. In addition, Blade states that it has filed an application for a new non-collocated site for KTRV-TV and that the proposed channel change would enhance its ability to operate from this site. Blade asks that we hold its initial DTV channel 27 allotment in reserve until testing is complete and we have authorized operation of the DTV channels without reservation.

196. We have reviewed Blade's request for KTRV-TV. Our analysis indicates that the DTV allotment for KTRV-TV can be changed from channel 27 to channel 44 without adversely affecting other stations. We therefore will change the DTV allotment for KTRV-TV to channel 44, as requested. We do not believe, however, that the public interest would be furthered by reserving for Blade both its new channel 44 DTV allotment and its initial channel 27 DTV allotment until at some unspecified time in the future it decides which is more advantageous for its purposes. We are therefore denying this part of Blade's request.

197. Blade also argues that the power levels assigned to its DTV allotments place its stations at a competitive disadvantage. Blade states that its WLIO-TV in Lima, Ohio, and other stations in similar straits, should be permitted to increase and maximize power now rather than in individual modification applications. Blade states that WLIO-TV currently operates at 661 kW on channel 35 but has been assigned DTV channel 20 with only 50 kW. Blade reports that it has been unable to demonstrate that replication at such low power is possible. It states that granting its station an immediate power increase would avoid costly, time-consuming procedures and would conserve the Commission's resources.

198. As stated above, we have adopted specific provisions in our rules to allow licensees to request an increase in their DTV facilities. We believe that to consider maximization requests as part of reconsideration would unfairly disadvantage parties that have expected that such requests would be dealt with under the rules. Accordingly, we are not granting requests, including those of Blade with regard to its station WLIO-TV, to increase or maximize the power of DTV allotments at this time. We further find that Blade has not submitted any technical showing or provided any additional information indicating that the DTV powers provided for its stations are inadequate for purposes of service replication. For example, our calculations indicate that Blade's WLIO-TV allotment of DTV channel 20 with 50 kW would result in an increase in both geographic area and population served. In addition, as stated above, we have provided increased flexibility for licensees to increase the effective power and field strength of their signals within their service areas through antenna beam tilting.

199. Bowling Green State University Petition and Supplemental Filing. Bowling Green State University (BGU) is the licensee of noncommercial educational station WBGU-TV, channel 27 in Bowling Green, Ohio. In its petition, BGU protests the fact that its station was

assigned out-of-core DTV channel 56. BGU also believes that channel 56 in Detroit will cause harmful interference to WBGU-TV's operations. In addition, BGU notes that WTLW-TV in Lima, Ohio was assigned adjacent DTV channel 57, even though its transmitter is only 47 km from WBGU-TV. BGU states that the situation is particularly problematic because WBGU-TV relies heavily on economic support from the Lima area. BGU states that preliminary analysis indicates that DTV channel 22 would be a superior choice for its station.

200. In its supplemental filing, BGU states that WBGU-TV's transmitter is located 41 km southwest of Bowling Green and that, from this location, the station also provides Grade A and City Grade service to Lima, Ohio. It reiterates its concern that the distance between the DTV allotments for WBGU-TV and WLTW-TV does not meet separation requirements for new adjacent channel DTV allotments, and that the resulting interference will preclude WBGU-TV from serving Lima, the largest city in the area. BGU states that its consulting engineer, using guidance from the rules and OET Bulletin No. 69, found that no alternative core channel was available to WBGU-TV that would not result in interference to an existing NTSC station or new DTV allotment. BGU states that the possibility of an alternative channel for WTLW-TV in Lima was also studied, since this station's current DTV allotment would require it to move back into the core spectrum at the end of the transition, while a reallocation could save it the expense and inconvenience of a subsequent move. Based on this analysis, BGU submits that channel 47 might be an appropriate DTV allotment for WLTW-TV, given that station's existing operation on channel 44. BGU requests that we change the DTV allotment of either WTLW-TV or WBGU-TV to eliminate adjacent channel interference.

201. As discussed above, we have made a number of changes to address new data on DTV-to-DTV adjacent channel interference. In this regard, we have amended the DTV allotment for WLTW-TV from channel 57 to channel 47 to eliminate DTV-to-DTV adjacent channel interference between WTLW-TV and WBGU-TV, as requested by BGU.

202. California Oregon Broadcasting, Inc. Petition and Supplemental Filing. California Oregon Broadcasting, Inc. (COBI) is the controlling owner of three full service television stations and 36 low power and TV translator stations. COBI states that the DTV Table provides unacceptable replication for its stations KOB-TV, NTSC channel 5 in Medford, Oregon and KOTI-TV, NTSC channel 2 in Klamath Falls, Oregon. It also argues that adjacent channel DTV-to-DTV interference from KVAL-TV to its station KLSR-TV in Eugene, Oregon must be addressed. COBI states that KLSR-TV needs a new channel because of the disparities in power levels and antenna height, and that channel 31 appears to be available. In its supplemental filing, COBI suggests that substituting DTV channel 13 for channel 40 for KOTI in Klamath Falls will improve its service area coverage from 79.4% to 88.4%. COBI also states that use of DTV channel 7 in Medford would improve KOB-TV's replication to 92.6% without materially impacting channel 7 operations in other cities. In addition, COBI states that using DTV channel 31 in lieu of channel 26 for KLSR-TV will improve its coverage from 96.8% to 100% with no impact on other stations.

203. Oregon Public Broadcasting (OPB) filed comments expressing concern that DTV

operation of COBI's station KOTI-TV on channel 11 might interfere with the co-channel DTV service of OPB's station KOAB-TV in South Bend, Oregon. It notes that these stations are 125 miles apart and may be able to co-exist; still, OPB urges that we examine carefully the potential for interference before proposing any change in KOTI-TV's DTV allotment and that we provide an opportunity for study and comment in advance of any change.

204. We have reviewed the changes requested by COBI. Our analysis indicates that use of DTV channel 13 by KOTI-TV in Klamath Falls and DTV channel 7 by KOB-TV would impact and cause additional interference to other stations. We are therefore denying COBI's requested changes with regard to the DTV allotments for these stations. With regard to COBI's request that the DTV allotment for its KLSR-TV be changed from 26 to 31, we find that such a change would eliminate potential adjacent channel DTV-to-DTV interference and are therefore granting this requested change.

205. CBS, Inc. Petition and Supplemental Filing.<sup>112</sup> CBS, in its petition, requests that we amend the DTV Table to take into account the modified facilities of its station WWJ-TV, channel 62 in Detroit, Michigan. CBS states that it filed an application for a modification of WWJ-TV's facilities in March 1995, and amended it in December 1995. CBS submits that, while we completed the coordination process with Canadian authorities well before the April 3, 1997 date used to develop the DTV Table, this application was not granted until April 21, 1997. CBS indicates that, as a result, WWJ-TV's DTV allotment does not reflect the station's new NTSC operating parameters and instead perpetuates in the DTV environment certain signal deficiencies that the NTSC modification application had corrected. In its supplemental filing, CBS asks that WWJ-TV be allotted DTV channel 65 rather than channel 44. CBS states that operation on channel 65 with an ERP of 169 kW and an antenna HAAT of 326 m. would provide near-complete replication of WWJ-TV's modified NTSC service area while meeting mileage separations requirements with respect to Canadian NTSC stations and without causing additional interference to any other stations. CBS states that WWJ-TV is one of four CBS-owned television stations that have volunteered to construct DTV facilities by November 1, 1998 and asserts that the requested allotment change is not expected to affect the timing of construction. CBS submits that, as channel 65 is not among the channels proposed for future public safety use in the proceeding to reallocate the 746-804 MHz band, its request would not keep Detroit-area public safety agencies from enhancing their capacity as needed.

206. With respect to CBS's initial request regarding the modified facilities of WWJ-TV, we are sympathetic to the unique situation that WWJ-TV faces, particularly in light of the fact that its modification application has been held subject to Canadian coordination for a number of years. We also recognize that, as one of the stations that has volunteered to construct facilities by November 1, 1998, it is in a particularly difficult situation with regard to facilities maximization. In addition, our analysis indicates that taking WWJ-TV's April 21, 1997 modification application grant into account for DTV allotment purposes will not significantly

---

<sup>112</sup> Other specific requests made by CBS are addressed below in the alphabetical section.

affect any other facilities. For these reasons, we are making an exception to our policy of only recognizing modification applications granted before April 3, 1997, and are amending the parameters associated with WWJ's channel 44 DTV allotment to better reflect its improved facilities, as currently licensed.

207. We are declining to grant the request made in CBS's supplemental filing that we change the DTV allotment for WWJ-TV to channel 65. As indicated above, we find that increased use of channels 60 to 69 is not warranted. We continue to find that the benefits associated with the rapid recovery of these channels are substantial. We further disagree with CBS that use of channel 65 would not impact public safety use of this spectrum. While CBS is correct in noting that channel 65 has not been allocated for public safety, this channel is immediately adjacent to the new public safety allocation and could affect those operations. We therefore are denying CBS's request that we change WWJ-TV's allotment to channel 65.

208. Channel 49 Acquisition Corporation Petition. Channel 49 Acquisition Corporation (WJCB) is the licensee of WJCB-TV, channel 49, in Norfolk, Virginia. WJCB asserts that its DTV channel 14 allotment is adjacent to frequencies used by land mobile and that use of channel 14 would require it to coordinate its application with such use. It states that protection from interference often requires technical adjustments at great expense and asserts that operation on another channel would alleviate these burdens. WJCB indicates that, based on the MSTV/NAB computer study, DTV channel 46 is available for assignment to WJCB-TV. WJCB states that, while it has been unable to conduct a full study without OET Bulletin No. 69, channel 46 appears to be acceptable. WJCB requests that channel 46 be allotted for its station instead of channel 14. WJCB did not file a supplement to its petition.

209. We have reviewed WJCB's request and find that channel 46 may be substituted for channel 14 without any adverse impact to other stations. We will therefore grant WJCB's request and modify the allotment for WJCB-TV to DTV channel 46.

210. Coast TV Petition. Coast TV is the permittee of a new television station on channel 38 in Santa Barbara, California. It states that, while it met the definition of a party eligible to receive a DTV allotment, and was allotted a DTV channel in the Sixth Further Notice, the Fifth Report and Order failed to include Coast TV in the list of eligible broadcasters, and the Sixth Report and Order did not provide Coast TV with an allotment for its new station. Coast TV requests that we correct this error and allot an appropriate DTV channel for its new station.

211. We have found that Coast TV is a broadcaster eligible to receive a DTV allotment.<sup>113</sup> Coast TV meets the criteria set forth in Section 201 of the 1996 Telecommunications Act, and it should have been included in the list of eligible parties contained in the Fifth Report and Order and awarded a temporary channel for DTV service. We are correcting this oversight and amending the DTV Table to include a DTV allotment on

---

113 See Memorandum Opinion and Order addressing petitions for reconsideration of our DTV service rules.

channel 21 for Coast TV.

212. Cornell University and National Radio Astronomy Observatory Petitions. Cornell University (Cornell), the operator of the Arecibo Radio Astronomy Observatory (Observatory) in Arecibo, Puerto Rico, expresses concern that our allotment of DTV channel 38 to the neighboring community of Fajardo will impact observations in the 608-614 MHz band (channel 37) at the Observatory. Cornell states that, while it appreciates the fact that the 55 mile adjacent channel distance separation discussed in MM Docket No. 95-17 was used to develop the Puerto Rico/Virgin Islands portion of the DTV Table, that standard was not designed to provide protection where the Observatory will be in line of sight of two different channel 38 operations, one DTV and one analog.<sup>114115</sup> It proposes that channel 15 or 16 be substituted for channel 38 in Fajardo. Cornell observes that channel 15 is currently not allotted to any community in Puerto Rico or the Virgin Islands and that, while channel 16 is allotted to Mayaguez, that community is at the opposite side of Puerto Rico from Fajardo, and the intervening terrain is quite mountainous.

213. In a separate, late-filed petition, the National Radio Astronomy Observatory (NRAO) also requests the DTV channel 38 allotment provided for WMTJ-TV, channel 40 in Fajardo, Puerto Rico, be changed. NRAO is concerned that operation of WMTJ-TV's DTV service on channel 38 would interfere with radio astronomy observations in the 608-614 MHz band (channel 37) by its Very Long Baseline Array (VLBA) radio telescope antenna at St. Croix, VI. NRAO submits that its technical analysis indicates that a significant potential exists for its St. Croix antenna to receive interference from any channel 36 or channel 38 antenna sites located virtually anywhere in the Virgin Islands or the eastern half of Puerto Rico. It states that the distance from WMTJ-TV's transmitter site to the VLBA's St. Croix antenna is only 142 km (88 miles), with no intervening obstacles. It also states that the Arecibo radio telescope is only partially shielded from this channel 38 allotment and that there exists a potential for disruption of radio astronomy observations by that facility as well. NRAO notes that Cornell University has requested that we change the WMTJ-TV's DTV allotment to channel 15 or 16 to avoid this interference and supports Cornell's petition in this regard. Alternatively, in the event we chose not to allot channel 15 or 16 for WMTJ-TV's DTV service at Fajardo, NRAO urges that we avoid using the following channels for DTV service in Fajardo that cause second or third harmonics to fall within the radio astronomy bands: 11, 14, 25, 27, 28, 31, 36, 38, 46, 47, 48, 49, 50, 51, 52, 53, 54, and 69.

214. We agree that protecting the National Radio Astronomy Observatory and its radio astronomy operations is important and would be in the public interest. Therefore, while we generally are not making changes without the concurrence of the affected broadcaster we believe that in this situation such a change is warranted and should be made. We have reviewed the

---

114 See Notice of Proposed Rule Making in MM Docket No. 95-17, 10 FCC Rcd 2088 (1995).



changes suggested by Cornell and NRAO and find that channel 16 can be allotted to WMTJ-TV in Fajardo, Puerto Rico for its DTV operations. Accordingly, we are granting the requests of Cornell and NRAO and are amending the DTV Table by substituting channel 16 for channel 38 in Fajardo.

215. Cosmos Broadcasting Corporation Petition and Supplemental Filing.<sup>116</sup> Cosmos requests that the channel 58 DTV allotment provided for its station KAIT-TV, NTSC channel 8 in Jonesboro, Arkansas be changed to channel 9. It states that this change would comply with our DTV allotment rules, except for a small short spacing to WKNO-TV on adjacent channel 10 in Memphis, Tennessee. Cosmos also argues that KAIT-TV's allotted DTV channel 58 would be short spaced to three proposed stations.

216. Mid-South Public Communications Foundation (Mid-South), the licensee of WKNO-TV, opposes Cosmos' request to change the allotment for KAIT-TV to channel 9. It states that its plans are predicated on the availability of channel 10 and that it fears allotment of DTV channel 9 for KAIT-TV would preclude the use of channel 10 at Memphis for DTV. Mid-South states that DTV operations by Cosmos on channel 9 at Jonesboro also could result in significant interference to WKNO-TV's existing NTSC service. Mid-South states that such outcomes could result in the loss of existing and future public television service to Memphis.

217. We have reviewed Cosmos's request with regard to KAIT-TV. Our analysis indicates that channel 9 can be substituted for channel 58 without any significant impact on other stations, including Mid-South's WKNO. We are therefore granting Cosmos' request in this regard and changing the DTV allotment for KAIT-TV to channel 9.

218. Cosmos also requests that the channel 53 DTV allotment provided for its station KPLC-TV, channel 7 in Lake Charles, Louisiana be changed to channel 8. It states that all spacing standards would be met except with regard to two co-channel stations: KNOE-TV, in Monroe, Louisiana and KUHT-TV in Houston, Texas. Cosmos states that, with respect to KNOE-TV, the proposed reallocation would result in short spacing of 55 km and create new interference affecting 9.8 percent of KNOE-TV's Grade B coverage area. However, it argues that much of this area is outside the Monroe DMA and that the small affected areas inside the DMA are undeveloped federal property. Cosmos states that the proposed reallocation would be short spaced by 16.5 km to KUHT-TV and would affect only 0.3 percent of the viewers in that station's service area.

219. We have reviewed Cosmos's request with regard to KPLC-TV. Our analysis indicates that channel 8 can be substituted for channel 53 with an appropriate antenna pattern to reduce signal strength in the direction towards Monroe without any significant impact on other stations. We are therefore granting Cosmos' request in this regard and amending the DTV allotment for KPLC-TV from channel 53 to channel 8.

---

<sup>116</sup> Cosmos's requests for changes to other DTV allotments are discussed below in the alphabetical section.

220. Cosmos submits that the existing service of its station, WTOL-TV, NTSC channel 11 in Toledo, Ohio, will receive a substantial amount of interference from the co-channel DTV allotment for WBNS-TV in Columbus, Ohio. It states that WTOL-TV expects to lose approximately 21,000 households within its DMA due to the predicted co-channel interference from WBNS-TV. Cosmos therefore requests that WBNS-TV be assigned a new DTV allotment.<sup>117</sup> Dispatch, on behalf of station WBNS-TV, channel 10 in Columbus, Ohio, opposes Cosmos' petition for reconsideration. Dispatch states that the methodology used by Cosmos to predict interference to Cosmos' station WTOL-TV is inconsistent with the Longley-Rice methodology. In its supplemental filing, Cosmos indicates that it has reviewed the Test Plan for an experimental operation by WBNS-TV on channel 11. It states that this Test Plan provides a framework for shared testing and information gathering that will, hopefully, generate tangible evidence regarding the DTV broadcasts. Cosmos nevertheless states that the Commission could save both parties from expending further efforts to resolve this matter by assigning to WBNS-TV an alternate DTV allotment or establishing parameters for WBNS-TV so that its DTV transmissions would not interfere with WTOL-TV's established NTSC service. Cosmos supported Dispatch's request for an alternative channel.

221. As indicated below, we have granted Dispatch's request that WBNS-TV be assigned an alternative channel. We therefore find that Cosmos' request that we assign WBNS-TV an alternative DTV channel is moot.

222. Dispatch Broadcast Group Petition and Supplemental Filing. Dispatch Broadcast Group (Dispatch), the licensee of WBNS-TV, channel 10 in Columbus, Ohio and WTHR-TV, channel 13 in Indianapolis, Indiana, argues that the model we used to assign power levels to new DTV stations is flawed. Dispatch asserts that because we used the Grade B contour to define NTSC coverage for high-band VHF stations, our model understates the actual NTSC coverage of such stations. To illustrate its point, Dispatch submits the recorded over-the-air viewing of WBNS-TV in several counties that lie beyond the station's Grade B contour.

223. In its supplemental filing, Dispatch requests that the DTV channel 11 allotment at 14 kW ERP for WBNS-TV be changed. Dispatch states that DTV channel 21 with ERP from 854 to 1000 kW would allow WBNS-TV to more closely replicate its NTSC service area and would cause a minimal impact to other DTV and NTSC operations. Dispatch requests that we allot channel 21 for WBNS-TV's DTV service but conditions its request on the analysis of the test results from its experimental station.<sup>118</sup> Dispatch states that the experimental station's results will assist it in evaluating the feasibility of an upper-adjacent DTV signal to a co-located, lower adjacent channel NTSC station. It states that it will promptly update its supplement following the completion of testing pursuant to its experimental authority. Comments submitted by

---

<sup>117</sup> Cosmos notes that Dispatch, the licensee of WBNS-TV, has filed an opposition to this request but states that Dispatch itself has also requested that the DTV allotment for WBNS-TV be changed.

<sup>118</sup> WBNS-TV has been given experimental authority to provide DTV operations on channel 11 in Columbus, Ohio (BPEXT-970225KE).

Cosmos Broadcasting Corporation (Cosmos) support Dispatch's supplemental filing and the proposed change to DTV channel 21 for its licensed station WBNS-TV in Columbus, Ohio. Cosmos states that it will cooperate with WBNS-TV and engage in joint experimental testing if the station's initial DTV allotment is retained but notes that a grant of Dispatch's request would eliminate the need for these additional efforts.

224. We continue to believe that the Grade B contour is the appropriate measure to be used for service replication of existing television service, and we do not find that any additional considerations, such as suggested by Dispatch, should be taken into account in determining DTV channel allotments and powers under our service replication approach. While we recognize that reception can and does occur outside the Grade B contour, the Grade B contour has long been used as the planning factor and the area to be considered in the provision of NTSC analog television. In addition, throughout this proceeding the Grade B contour has been recommended and adopted by both the industry and the FCC as the appropriate planning consideration for DTV. We therefore are denying Dispatch's request that areas outside a station's Grade B contour be considered for service replication purposes. With regard to Dispatch's specific request to use DTV channel 21 for its station WBNS-TV, we find that this channel may be used by WBNS-TV without causing unacceptable interference to other stations. We therefore are granting Dispatch's request and modifying the DTV allotment for its station WBNS-TV from channel 11 to channel 21.

225. Eagle III Broadcasting, L.L.C. Petition. Eagle III Broadcasting, L.L.C. (Eagle) is the licensee of KKCO-TV, channel 11 in Grand Junction, Colorado. Eagle requests that we change its DTV allotment from channel 14 to channel 12. Eagle submits that it cannot accommodate the 12,528-pound channel 14 antenna on any of the towers at its existing transmitter site on Black Ridge in the Colorado National Monument. It notes that there are approximately 20 users on the site at this time. Eagle submits that its discussions with the Bureau of Land Management, which administers the site, indicate that the possibility of reconfiguring the site, by replacing existing towers and relocating existing users, is remote. Eagle states that, if it were provided channel 12 for DTV, it could diplex both signals onto KKCO-TV's existing channel 11 antenna. Eagle provides a technical statement indicating that the use of channel 12 for KKCO-TV's DTV service will not result in a loss of service and that a DTV channel 12 allotment at Grand Junction would be short spaced by 6.4 km to the co-channel NTSC service of KOBF-TV in Farmington, New Mexico but no interference would occur. Eagle states that our database erroneously shows KKCO-TV's visual ERP as 138 kW, when in fact the station operates at a visual ERP of 155 kW.

226. We have reviewed Eagle's request, and our analysis indicates that channel 12 may be substituted for channel 14 without any adverse impact to other stations. We are therefore granting Eagle's request and modifying the DTV allotment for station KKCO-TV to channel 12. With regard to Eagle's claim that there is an error in our data on the ERP of KKCO-TV, we have reviewed our engineering records and confirmed that this station was authorized an ERP of 138 kW, as of April 3, 1997. Therefore, our records are correct and we are not modifying the DTV power assigned to Eagle's KKCO-TV.

227. Eastern Washington and Northern Idaho DTV Channel Allocation Caucus Petition and Supplemental Filing. The Eastern Washington and Northern Idaho DTV Channel Allocation Caucus (the EWNIC) states that its members include all of the known affected television stations in the Spokane, Washington and Yakima-Pasco-Richland-Kenewick, Washington markets.<sup>119</sup> The EWNIC submits that the DTV allotments and assignment pairings provided in the DTV Table for the eastern Washington State and northern Idaho region are unsatisfactory in that they would cause unnecessary loss of coverage, hardship, and delay in the implementation of digital service for a number of Spokane and Yakima television stations. The EWNIC submits that the DTV Table fails to account for the mountainous terrain, thick evergreen forests, and sparse population pattern of eastern Washington and northern Idaho by assigning a number of high UHF channels in the region. It is concerned that signals on the upper UHF frequencies are less able to penetrate obstructions and transmit long distances than signals on high-band VHF or lower tier UHF frequencies. It states that, as a consequence, several stations in the region likely would experience substantial delay and be subject to unnecessarily high expenses in attempting to operate on the assigned frequencies.

228. The EWNIC submits that, because stations in eastern Washington and northern Idaho are terrain-blocked from stations in adjacent geographic areas, it has been successful in negotiating a modified channel plan for the region that resolves the problems discussed above and satisfies the Commission's criteria for modification of the DTV Table. It states that this plan has been accepted by all affected broadcasters, improves coverage, and lowers power requirements while meeting our criteria for DTV Table modification. It submits that the allotments proposed in its plan generally satisfy the spacing requirements for DTV stations set forth in Section 73.623 of the rules. The EWNIC states that, in instances of short-spacing, any potential interference in most cases would be rectified through terrain shielding. It does note, however, that one allotment in its proposed plan, channel 13 for KXLY-TV, is a vacant allotment NTSC allotment in Canada. The EWINC asks us to ensure that our negotiations with Canada take into account proposals for reconsideration of the current DTV Table.

229. The EWINC states that its plan also supports our spectrum recovery efforts by relocating DTV allotments from channels 47-69, to permit reclamation of contiguous blocks of frequencies, and from channels 2-6, to permit the evaluation of the low-VHF frequencies during the initial phases of DTV implementation. It also states that it designed its plan with the goal of

---

119 These stations are: KAPP-TV, Yakima, WA and KVEW-TV, licensed to Apple Valley Broadcasting, Inc.; KAUP-TV, Pendleton, OR, licensed to Communications Properties, Inc.; KUID-TV, Moscow, ID and KCDT-TV, Coeur d'Alene, ID, licensed to the Idaho State Board of Education; KYVE-TV, Yakima, WA, licensed to KCTS Television; KHQ-TV, Spokane, WA, licensed to KHQ, Inc.; KREM-TV, Spokane, WA, licensed to King Broadcasting Company; KSKN-TV, Spokane, WA, licensed to KSKN, Inc.; KAYU-TV, Spokane, WA, licensed to Mountain Licenses, L.P.; KLEW-TV, Lewiston, ID, KEPR-TV, Pasco, WA, and KIMA-TV, Yakima, WA, licensed to Retlaw Enterprises, Inc.; KSPS-TV, Spokane, WA, authorized to Spokane School District No. 81; KXLY-TV, Spokane, WA, licensed to Spokane Television, Inc.; and KTNW-TV, Richland, WA, and KWSU-TV, Pullman, WA, licensed to Washington State University.

minimizing adverse impact on LPTV and TV translator stations. The EWNIC asks that we reconsider our DTV allotment plan in the eastern Washington and northern Idaho region and instead adopt the modified channel allocation plan its members have negotiated.

230. The EWNIC-recommended allotment plan for the eastern Washington and northern Idaho region is as follows:

<u>Station</u>	<u>NTSC Chan.</u>	<u>FCC DTV Chan.</u>	<u>EWNIC DTV Chan.</u>
KREM-TV	2	57	20
KXLY-TV	4	54	13
KHQ-TV	6	55	15
KSPS-TV	7	39	39
KSKN-TV	22	38	36
KCDT-TV	26	56	45
KAYU-TV	28	29	30
KLEW-TV	3	32	32
KWSU-TV	10	17	17
KUID-TV	12	33	35
KEPR-TV	19	20	18
KTNW-TV	31	30	38
KVEW-TV	42	14	44
KAUP-TV	11	4	8
KCWT-TV	27	56	46
KIMA-TV	29	52	33
KAPP-TV	35	34	14
KYVE-TV	47	21	21

231. The EWINC's supplement amends its petition to: 1) delete inadvertent references to station KNDU, Richland, Washington (although KNDU is not a member of the Caucus, the EWINC states that no conflict exists between its alternative channels and KNDU and that KNDU shares this view); 2) eliminate Longley-Rice and terrain profile showings for vacant channel 15, Grangeville, Idaho in connection with KHQ-TV's proposed alternative DTV channel; 3) clarify that no conflict exists between the alternative DTV channel requests of station KPDX (NTSC channel 49, DTV channel 48) in Vancouver, Washington, and the EWINC's member KVEW-TV (NTSC channel 42, FCC DTV channel 14) in Kennewick, Washington (although both KVEW and KPDX have requested DTV channel 44, the EWINC notes that these proposals meet the DTV-to-DTV co-channel spacing requirements); and 4) provide a technical statement affirming that analysis of the proposal in light of OET Bulletin No. 69 did not alter its conclusions.

232. As indicated above, we intend to provide broadcasters with the flexibility to develop alternative allotment approaches. We stated that we would endorse voluntary

negotiations among broadcasters as part of the allotment/assignment process.<sup>120</sup> We believe that the EWINC's proposed changes generally meet the standards for our voluntary coordination efforts. We further find that the proposed changes would not have a significantly greater impact on LPTV or TV translator operations than our original proposed allotment scheme for this region. Accordingly, we are granting the EWINC's reconsideration request and are making the requested amendments to the channel allotments in DTV Table for the stations listed above. DTV powers will be assigned to each channel allotment in accordance with our general allotment and service replication policies, as shown in the attached Appendix. We have informally notified Canada of our intention to modify the DTV Table, as requested by the EWINC, and will pursue the allotment of channel 13 for KXLY-TV in our negotiations on the implementation of digital television services by both countries.

233. Estate of Hector Nicolau Petition and Supplemental Filing. The Estate of Hector Nicolau (Nicolau) seeks reconsideration of the channel 67 allotment provided for its station WTIN-TV, channel 14 in Ponce, Puerto Rico. Nicolau states that it is unfair to require a small station like WTIN-TV to undertake two channels changes in its DTV transition. It states that requiring the station to purchase and install equipment for DTV operation on channel 67 and then purchase and install (or convert) equipment for operation on a second channel could be cost prohibitive. It further states that changing channels twice could cause the station to lose audience unless it undertakes expensive public information campaigns. Nicolau submits that we could resolve its concerns by allotting a channel in the core spectrum for WTIN-TV. It provides an engineering statement identifying channel 15 as a possible substitute. This statement indicates that the main interference concern from operation of WTIN-TV's DTV service on channel 15 is to an application for NTSC facilities on channel 15 in the Virgin Islands. The statement submits that WTIN-TV would operate its DTV facility with an antenna pattern similar to its NTSC facility, which has a deep protection null in the direction of the proposed facility. It states that any interference that might result would fall over the Atlantic Ocean between Puerto Rico and the Virgin Islands. It submits that the terrain in Puerto Rico will greatly limit propagation in this direction.

234. In its supplemental filing, Nicolau states that, using guidance from OET Bulletin No. 69, it has determined that channel 15 could be used for WTIN-TV's DTV service without creating any more interference than would result from operation on DTV channel 67. It submits that continuity of service would provide greater certainty to WTIN-TV's viewers and that optimal service to the public is more likely ensured if the licensee is not burdened with the additional costs of multiple channel changes. It requests that channel 15 be substituted for WTIN-TV's channel 67 DTV allotment at Ponce.

235. We have reviewed Nicolau's request. Our analysis indicates that channel 15 can be substituted for channel 67, provided that a protection null is maintained in the antenna pattern of WTIN-TV in the direction of the Virgin Islands. Thus, we are granting Nicolau's request and

---

120 See Sixth Report and Order at paragraphs 172 and 182.

modifying the DTV allotment for its station WTIN-TV from channel 67 to channel 15.

236. Fouce Amusement Enterprises Petition and Supplemental Filing. Fouce Amusement Enterprises (Fouce), the licensee of KRCA-TV, channel 62 in Los Angeles, California, submits that because the DTV channel 69 allotment provided for KRCA-TV is adjacent to land mobile operations and is outside the DTV core spectrum, it is not a viable DTV allotment. Fouce first states that KRCA-TV's channel 69 DTV allotment is located within a few hundred meters of a substantial number of adjacent channel land mobile base stations that operate at the station's Sunset Ridge transmitter site. In addition, Fouce states that a large number of additional land mobile stations operate within a 10 mile radius of KRCA-TV's transmitter site. It argues that KRCA-TV's obligation to protect these land mobile operations from interference would preclude the station from operating on its assigned DTV channel. Fouce asks that we provide a different DTV channel for KRCA-TV on which it can provide competitive service.

237. In subsequent filings, Fouce proposes a number of alternatives for KRCA-TV. For example, it suggests that channel 68 be allocated for its NTSC operation and that channel 62 be allocated for its DTV operation. Alternatively, it suggests that these channels be reversed, with channel 62 allocated for its NTSC operation and channel 68 allocated for its DTV operation. In addition, it indicates that both alternatives could involve a modification of KCRA's transmitter location from Sunset Ridge to Mt. Wilson. Fouce argues that this will permit greater co-location and improved service to the Los Angeles market.

238. We agree with Fouce that DTV operation on channel 69 is not possible in the Los Angeles market. We therefore are amending the DTV allotments for the Los Angeles area to eliminate the use of channel 69. As part of these changes, we are amending the DTV allocation for KRCA-TV from channel 69 to channel 68. We are not modifying the transmitter site for KRCA-TV. As indicated above, we find that requests to change transmitter sites should be dealt with under the DTV allotment modification procedures provided for in the rules and not as a matter for reconsideration.

239. Fox Television Stations, Inc. Petition and Supplemental Filing. Fox states that its WTTG-TV in Washington, DC was assigned DTV channel 6, an assignment that is short spaced to three other channel 6 NTSC stations (158 to 226 km rather than the Zone I spacing of 244.6 km) and that this allotment therefore will support less replication than those of the station's competitors. Fox asks us to allot a new DTV channel for WTTG-TV and suggests channels 19 or 63 as alternatives.

240. The Executive Committee of the Board of Trustees of American University (WAMU-FM), the licensee of noncommercial radio station WAMU-FM, Washington, D.C., submits that the allotment of channel 6 for WTTG-TV is likely to result in interference to WAMU-FM. It states that the problem of interference between TV channel 6 operations and radio stations in the noncommercial FM band, particularly those in the lower end of that band, is well known. WAMU-FM states that while our limitation of WTTG-TV's DTV power to 6.6 kW

may ameliorate interference to some extent, the amount of interference is not predictable and may be higher than expected. It urges that we allot WTTG-TV another DTV channel.

241. We have reviewed Fox's suggestion of channels 19 or 63 as alternatives to its channel 6 DTV allotment for WTTG-TV and find that neither channel would be appropriate. Our analysis indicates that it would be difficult, if not impossible, for WTTG to implement DTV on channel 19 without causing interference to land mobile operations in the Washington area. We further find that use of channel 63 would be contrary to our spectrum reclamation efforts and the 1997 Budget Act. We have, however, reviewed carefully the allotments for Washington, D.C. and surrounding areas. We find that due to terrain considerations, DTV channel 36 may be used by WTTG-TV in the Washington area without impacting other stations. We therefore grant Fox's request that WTTG-TV be allotted an alternative channel and modify its DTV allotment from channel 6 to channel 36.

242. Golden Link TV, Inc. Petition. Golden Link TV, Inc. (GLTV), the licensee of KPST-TV, channel 66 in Vallejo, California, requests that we assign KPST-TV a different DTV channel that would allow the station to maximize its facilities. GLTV states that the DTV channel 30 allotment provided for KPST-TV is short-spaced to two stations, KRCB-TV, NTSC channel 22 in Cotati, California and KDTV-TV, DTV channel 29 in San Francisco, California. It submits that the short-spacings will keep it from maximizing in the direction of its community of license, while three other stations in the San Francisco/Oakland market are authorized to operate at the maximum 1,000 kW. GLTV also observes that because KPST-TV's NTSC channel is outside of the core spectrum, the channel 30 allotment could become its permanent DTV channel. It is concerned that the station could be irreparably harmed if it is precluded from maximizing its facilities while other, similarly situated broadcasters are able to maximize. GLTV did not submit a supplemental filing.

243. We have changed KPST-TV's DTV allotment from channel 30 to channel 34 to address new information on adjacent DTV-to-DTV operation. We have not analyzed whether this change would improve KPST-TV's ability to maximize its facilities in the future. We note, however, that KPST-TV's DTV allotment is estimated to serve almost 40% more population than is now served by its analog facilities.

244. Harte-Hanks Television, Inc. Petition. Harte-Hanks Television, Inc. (Harte-Hanks), the licensee of KENS-TV, NTSC channel 5 in San Antonio, Texas, requests that we correct the coordinates for this station's DTV channel from 29-16-07 to 29-16-10 N., as indicated on its current license, and make any other related corrections.

245. We have corrected the coordinates for the NTSC channel 5/DTV channel 55 allotment, in our database and Appendix B, to reflect the current coordinates of station KENS-TV, as requested by Harte-Hanks.

246. HMI Broadcasting Corp. Supplemental Filing. HMI Broadcasting Corp. (HMI), the licensee of WPTZ-TV, channel 5 in North Pole, New York, WCHS-TV, channel 8 in



Charleston, West Virginia, and other television stations, did not file a petition for reconsideration. It states that the Heritage Media Corporation, its parent company, filed comments in this rule making on July 18, 1997 on behalf of WPTZ-TV and WCHS-TV. HMC stated that, since it had not then had an opportunity to evaluate its DTV channel under the OET methodology, it would file such comments at a later time. In its supplemental filing, HMI requests that we change the DTV allotment for WPTZ-TV from channel 14 to channel 19 and also change the DTV allotment for WCHS-TV from channel 55 to channel 41.

247. With regard to WPTZ-TV, HMI suggests that DTV operation by WPTZ-TV on channel 14 could cause interference to land mobile operations on adjacent frequencies, a problem which could require the station to reduce power. It submits that an allotment study using the methodology of OET Bulletin No. 69 indicates that WPTZ-TV could better replicate its service area on channel 19. HMI states that DTV operation on channel 19 would avoid the potential interference to land mobile service and would not create impermissible interference to nearby television stations.

248. We have reviewed HMI's request regarding WPTZ-TV. We recognize that the successful implementation of channel 14 for DTV use will require careful engineering and may result in some additional costs. However, we note that channel 14 is being used successfully for NTSC television service without causing interference to, or receiving interference from, adjacent land mobile operations. Our analysis also indicates that the requested change would impact and cause increased interference to other stations. We therefore deny HMI's request to change WPTZ-TV's DTV allotment from channel 14 to 19.

249. With regard to WCHS-TV, HMI is concerned that because the station's channel 55 DTV allotment is not in the core spectrum, it will be required to move its DTV operations to a channel in the core spectrum at a later date, which will place the station at a competitive disadvantage. HMI states that WCHS-TV could operate its DTV service on channel 41 in compliance with our technical rules and would also be able to replicate its NTSC service area on this channel.

250. We have reviewed HMI's request regarding WCHS-TV, and our analysis indicates that channel 41 may be substituted for channel 55 without any adverse impact to other stations. We further note that this change would address potential DTV-to-DTV adjacent channel interference concerns. We are therefore granting HMI's request and modifying the DTV allotment for WCHS-TV to channel 41.

251. Island Broadcasting, Inc. Petition. Island Broadcasting, Inc. (IBI), the licensee of KTGM-TV, channel 14, Tamuning, Guam, submits that the DTV Table contains no reference to Guam in general, or to KTGM-TV and Tamuning in particular. IBI states that as the licensee of a full service television station, it is eligible for a DTV allotment and requests that we revise the DTV Table to include KGTM-TV. Because of Guam's isolated geographic location, IBI believes there are several possible channels that could be allotted to replicate KTGM-TV's service area. It notes that NTSC channels 4, 8, 10, and 12 are allotted at Agana, and channels 14

and 20 are allotted at Tamuning. IBI states that allotting DTV channel 16 or 17 to Tamuning for use by KTGM-TV would be consistent with our goals of minimizing adjacent DTV channel allotments and minimizing DTV operating and transition costs in a small market such as Guam.

252. The DTV Table of Allotments contained in the Sixth Report and Order inadvertently did not specify DTV allotments for eligible broadcasters in certain U.S. possessions, such as Guam. Accordingly, as requested by IBI, we are amending the DTV Table and Appendix B to provide DTV allotments for KGTM-TV and other eligible broadcast entities in affected U.S. possessions.

253. JDG Television, Inc. Petition and Supplemental Filing. JDG Television, Inc. (JDG) is the licensee of KPOM-TV, channel 24 in Ft. Smith, Arkansas and of KFAA-TV, channel 51 in Rogers, Arkansas. JDG states that the allotment of DTV channel 17 at 73 kW to KPOM-TV and DTV channel 50 at 50 kW to KFAA-TV may jeopardize these stations' ability to serve and compete in their markets. In its supplemental filing, JDG requests that we allow KPOM-TV to operate on channel 17 with at least 73 kW, using an omnidirectional antenna, or otherwise replace the station's current DTV channel. It is concerned that KPOM-TV's DTV service could receive interference from adjacent channel operation by KFSM-TV. JDG next submits that, using OET Bulletin No. 69, it has determined that KFAA-TV must reduce power to 42 kW in order to comply with the station's directional power limits. To avoid loss of service, JDG requests that KFAA-TV be allowed to operate its DTV service with 50 kW ERP and an omnidirectional antenna.

254. We are denying JDG's request to operate with additional power. We have adopted specific rules for maximization, and if JDG wishes to request additional power, it should do so in accordance with those rule procedures. With regard to JDG's request that its station KPOM-TV be provided with a new channel, we have changed KPOM-TV's allotment from channel 17 to channel 27 to address recent DTV-to-DTV adjacent channel interference concerns. Accordingly, we are granting JDG's request to this extent.

255. KCWB-TV, Inc. Petition. KCWB-TV, Inc. (KCWB) is the permittee of KCWB-TV, NTSC channel 32 in Kansas City, Missouri. Although KCWB holds a CP for channel 32, it in fact currently broadcasts on channel 29 pursuant to a special temporary authority; and a rule making is currently pending to substitute channel 29 for 32 at Kansas City and to modify KCWB-TV's CP accordingly. KCWB states that its use of channel 29 appears to be consistent with the DTV Table and urges that this channel continue to be protected in the event of any revision. It notes that use of channel 32 and the antenna site specified in its CP is precluded by zoning and FAA restrictions. In addition, it states that its broadcast operations on channel 29 are located over 5 km from the location specified in its CP. It states that, without OET Bulletin No. 69, it has not been able to assess whether the allotment of DTV channel 31 is suitable for operation at its actual transmitter site and would replicate its channel 29 service area. KCWB did not submit a supplemental filing.

256. We were aware of the situation with regard to KCWB, and we developed the DTV

Table to protect the channel 29 transmitter site with these circumstances in mind.

257. Kentuckiana Broadcasting, Inc. Petition and Supplemental Filing. Kentuckiana Broadcasting, Inc. (Kentuckiana), the licensee of WFTE-TV, channel 58, Salem, Indiana, is concerned about operating on its adjacent DTV channel 57 allotment. In its supplemental filing, Kentuckiana submits that channel 51 is available for DTV use from WFTE-TV's existing transmitter site and that the station could replicate its existing service on that channel. It requests that we replace WFTE's channel 57 DTV allotment with channel 51. It indicates that channel 51 at WFTE-TV's existing transmitter site would be short spaced by only 4 km to a co-channel NTSC station to be built at Hopkinsville, Kentucky under a pending application, and that the channel otherwise appears to meet DTV spacing standards.

258. We have reviewed Kentuckiana's request. Our analysis finds that channel 51 may be used by WFTE-TV without impacting other broadcast stations. We are therefore granting Kentuckiana's request and modifying the DTV allotment for station WFTE-TV to channel 51. We note that this will eliminate one of the 13 situations in which both the NTSC and DTV channels of a station fell outside the core spectrum.

259. KM Communications, Inc. Petition and Supplemental Filing. KM Communications, Inc. (KMC) is the licensee of four LPTV stations and the permittee for three new full power stations. KMC first requests that we change the channel 28 DTV allotment provided for its KCFG-TV, channel 9 in Flagstaff, Arizona. It states that the transmitter sites for KCFG-TV and KWBF-TV,<sup>121</sup> also in Flagstaff, and for which adjacent DTV channel 27 has been provided, are approximately 31 km apart. KMC states that, although the allotments technically comply with the minimum geographic spacing requirements for first adjacent DTV channels, analysis under the guidelines of OET Bulletin No. 69 indicates that interference potentially could occur between these DTV stations. To prevent this potential first adjacent channel interference, KMC requests that we allot an alternate DTV channel for either KCFG-TV or KWBF-TV. KMC states that its analysis indicates that channel 32 could provide full replication for either station. In addition to the channel change requests discussed above, KMC states that it is a permittee for a new station on channel 58 in Sierra Vista, Arizona (KAUC-TV, now KWBA-TV). KMC also indicates that, since the filing of its petition, the construction permit for KWBA-TV has been transferred to Sierra Television L.L.C., a co-owned entity. It asserts that the DTV channel 44 allotment for this station does not replicate the station's authorized NTSC service, as amended on June 28, 1996, but rather reflects its earlier CP. KMC requests that the database be modified to reflect this amendment and states that the correct KWBA-TV transmitter site is 31° 45' 33" N and 110° 48' 02" W. KMC also states that it has a pending petition to substitute NTSC channel 33 for channel 14 at Boise, Idaho to avoid certain land mobile concerns and requests that we protect this proposed substitution.

---

121 The call sign of KWBF-TV is now KPBX-TV. Paxson Communications Corporation (Paxson), the previous licensee of this station, objected to KMC's request that KWBF be allotted a new DTV channel, asserting that KMC's proposal to use channel 32 would create new interference to a population of 9,000 for its station. Paxson also argued that KMC had produced no technical showing regarding the viability of its proposal.

260. We have reviewed KMC's request regarding KCFG-TV, and our analysis indicates that channel 32 may be substituted for channel 28 without any adverse impact to other stations. We are therefore granting KMC's request and modifying the DTV allotment for station KCFG-TV to channel 32. With regard to the coordinates of KWBA-TV, we have corrected the database to reflect the currently authorized transmitter site, as KMC requests. We are not granting KMC's request to take into account its pending petition to substitute channel 33 for channel 14 for its station in Boise. Our goal is to provide all eligible broadcasters with the best available channels for their DTV operations. We find that eliminating potential candidate DTV channels that might affect this goal merely because another party filed a petition would not be in the public interest.

261. KMSB-TV, Inc. Petition and Supplemental Filing. KMSB-TV, Inc., the licensee of KMSB-TV, channel 11, Tucson, Arizona, submits that its current channel is designated as a hyphenated Tucson-Nogales allotment under Section 73.606 of the rules. It is concerned that the Sixth Report and Order allots the station's paired DTV channel 25 to Nogales. KMSB-TV requests that we pair its DTV allotment to Tucson-Nogales to reflect the historical and unique regulatory status of KMSB-TV. It also requests that we change its DTV allotment from channel 25 to channel 21 and change its reference coordinates from 31° 42' 18" N and 110° 55' 26" W to 32° 24' 54" N and 110° 42' 59" W, the site of the main Tucson antenna farm. KMSB-TV states that modifying the station's channel 25 allotment and location would facilitate the introduction of new DTV services and promote its economic viability. In its supplement, KMSB modifies its request to ask only that its existing channel 25 DTV allotment be relocated to the Mount Bigelow site. It states that a change to channel 21 is no longer needed. It states that, after reviewing the channel 25 allotment in light of OET Bulletin No. 69, it has determined that channel 25 is satisfactory for providing service to the Tucson market, but that operation at Mount Bigelow would be significantly superior to operation at Mount Hopkins. It states that moving to Mount Bigelow would eliminate one Mexican co-channel short spacing (Nacozari, SO) and one taboo short spacing (Nogales, SO) and would significantly alleviate the remaining short spacing and taboo problems.

262. As indicated above, we generally believe that requests to change transmitter sites should be dealt with through the DTV allotment modification procedures provided for in the rules and not as a matter for reconsideration. In this particular instance, however, we believe that the public interest would be served by making the requested change at this time. Because of KMSB-TV's proximity to the U.S.-Mexican border, adopting this change now will allow us to take it into account in our on-going coordination efforts with Mexico and may help facilitate those efforts by providing additional geographic spacing with certain Mexican allotments. Accordingly, we are modifying the transmitter site coordinates associated with the KMSB-TV's DTV allotment and are correcting the community designation for the allotment from Nogales to Tucson.

263. KVOA Communications, Inc. Petition. KVOA Communications, Inc. (KVOA) is the licensee of television station KVOA-TV, channel 4 in Tucson, Arizona. It states that the assignment of DTV channel 31 to KVOA places it among the minority of broadcasters that

would have a drastically reduced service area, as KVOA-TV's DTV coverage would replicate only 81.6% of its current NTSC coverage area. KVOA asks that we reconsider its channel assignment and, if necessary, that we reevaluate the overall assignment criteria that produce such disparate results. KVOA states that it will not be able to provide competitive service when other stations in the market achieve full or significantly higher replication. It also states that broadcasters must be provided additional time to comment after the release of OET Bulletin No. 69. KVOA did not submit a supplemental filing.

264. To address new DTV-to-DTV adjacent channel interference concerns, we have changed KVOA-TV's DTV allotment from channel 31 to channel 23. This change will also result in a slight improvement in the service replication of this station.

265. Land Mobile Communications Council Petition. The Land Mobile Communications Council (LMCC) expresses concern regarding the allotment of channel 69 for DTV service by Fouce's KCRA-TV in Riverside, California. LMCC states that this allotment will result in interference to existing Los Angeles-area public safety, private, and special mobile relay (SMR) systems. It submits that there will be almost no isolation, except for free space loss, between an adjacent channel DTV allotment and the existing land mobile base station receivers near the band edge. It states that examination of license data shows a number of facilities in close proximity to KCRA-TV; for example, Los Angeles County operates public safety facilities only 0.3 mile away from KCRA-TV's existing transmitter site.

266. LMCC argues that this allotment and others within channels 60-69 may also hamper near-term recovery of that spectrum for use in the Los Angeles area. It notes that the DTV Table places 15 DTV allotments in this spectrum in the Los Angeles area. LMCC asks that we designate alternative allotments that have no potential to affect either existing land mobile operation or near-term spectrum recovery efforts. It states that preliminary analysis by Motorola indicates several possible options for the Los Angeles area that deserve further study. For example, it submits that channel 12, which is adjacent to operations on channels 11 and 13, may have been rejected as a DTV allotment on Mt. Wilson because the potential sites for use of this channel, while on Mt. Wilson, were not exactly co-located. LMCC also believes that channel 55 may be a substitute DTV allotment that KCRA-TV in Riverside may prefer to channel 69. If an alternative allotment cannot be found, LMCC requests that we reaffirm that KCRA-TV and other stations with channels adjacent to existing land mobile operations bear the responsibility of ensuring their operations cause no harmful interference to land mobile systems. In view of the congestion of land mobile spectrum in the Los Angeles area, LMCC states that it does not view *de facto* removal from operation of land mobile channels adjacent to channel 69 to be an acceptable way of discharging these responsibilities.

267. Fox states that most of the unilateral solutions proposed in the petitions of Los Angeles and San Diego area licensees will negatively affect its KTTV-TV's ability to maintain the station's current NTSC coverage or to provide DTV service to the widest possible audience. For these reasons, it opposes several suggested changes to the Table. First, it opposes LMCC's suggestion that a channel 12 DTV allotment would work for KTLA-TV, KTTV-TV, or KCOP-

TV, all of which currently are sited on Mt. Wilson. Fox states that any channel 12 operation in Los Angeles will cause unacceptable interference to KTTV-TV's NTSC operation in that community and will also cause interference to channel 12 in Ensenada, Mexico.

268. As indicated above, we are amending the DTV allotments for the Los Angeles area to eliminate the use of channel 69. We believe that this change addresses LMCC's concern with regard to Fouce's KCRA-TV. As to LMCC's concerns that the use of channels 60-69 may hamper the near-term recovery of that spectrum for other use in the Los Angeles area, we note that we have attempted to eliminate the use of these channels for DTV where possible. Our first goal in this proceeding, however, is the successful implementation of DTV. We therefore believe it is important to use these channels where needed to ensure that our DTV goals of full accommodation and minimizing interference are met. We have reviewed LMCC's suggested alternative channels, 12 and 55, and find that the use of these channels would either cause unacceptable interference or violate Mexican protection requirements. Accordingly, we are not making these changes.

269. Media General, Inc. Petition and Supplemental Filing.<sup>121</sup> Media General asks that Fox's WTTG-TV in Washington, DC be allotted a different DTV channel that does not interfere with its station WTVR-TV, channel 6 in Richmond, Virginia. Media General states that interference its station will receive from WTTG-TV's DTV channel 6 in Washington, D.C. will result in loss of 16-20% of the station's audience. Fox agrees that there will be interference problems between WTVR-TV and WTTG-TV, and it indicates that it has requested that another channel, such as DTV channel 19, be found for its WTTG-TV.

270. As discussed above, we have granted Fox's request that its WTTG-TV be allotted another DTV channel and have allotted that station channel 36. We believe that this channel change fully addresses Media General's interference concerns with regard to this matter, and that its request regarding WTTG-TV is therefore moot.

271. Media General, in its supplemental filing, request that the DTV allotment for WHLT-TV in Hattiesburg, Mississippi, be changed from channel 23 to channel 58. It states that this change would create no new interference to other stations. It urges that broadcasters be permitted to operate on non-core spectrum if they wish to do so. It states that channel 58 would avoid potential adjacent channel problems and allow the station to operate at a maximum ERP of 1000 kW instead of 50 kW. Thus, it requests that WHLT-TV be reassigned channel 58 and authorized to operate at 1000 kW ERP. Media General also asks that we refrain from reassigning its original channel until it has fully tested operation on the channel.

272. We have reviewed Media General's request regarding WHLT-TV, and our analysis indicates that channel 58 may be substituted for channel 23 without any adverse impact to other stations. We therefore are granting Media General's request in this regard and amending the

---

<sup>121</sup> Media General's other specific requests are discussed below in the alphabetical section.

DTV allotment for WHLT-TV to channel 58. We are, however, denying Media General's request to operate at higher power. The power assigned to WHLT-TV's new channel 58 allotment will be in accordance with our service replication policies. We have adopted rules for maximization and any request for additional power should be in accordance with those rules. We also find that Media General's request that we reserve its original DTV channel allotment for its station until it has fully tested operation on its suggested alternative channel is not in the public interest. Granting such a request may prevent other parties from improving their DTV service or offering new DTV service. Accordingly, we are denying this aspect of Media General's request with regard to WHLT-TV.

273. Meredith Corporation Supplemental Filing. Meredith Corporation (Meredith) is the licensee of WOFL-TV, channel 35 in Orlando, Florida. Meredith only submitted a supplemental filing but stated that it had participated in the Joint MSTV Petitioners' petition. In its supplemental filing, Meredith advises that it has discovered an error in our database -- an inversion of WOFL-TV's directional array that would have the station's major lobe covering the Atlantic Ocean. Meredith attaches an engineering map of the station's existing licensed contour as well as the contours it has proposed for the station in its June 1996 minor modification request, which is still pending. This map shows that the contour's major lobes are at approximately 10, 130, and 250 degrees. Meredith also includes an engineering map of WOFL-TV's predicted DTV contour, based on the database MSTV believes we used in creating the DTV Table. It states that the database appears to have inverted the WOFL-TV contour, placing the main lobes at approximately 60, 180, and 310 degrees. Meredith requests that we correct this error.

274. We agree with Meredith that our database was in error and have corrected the antenna pattern for its station WOFL-TV, as requested.

275. Midwest Television, Inc. Petition and Supplemental Filing. Midwest Television, Inc. (Midwest) is the licensee of KFMB-TV, channel 8 in San Diego, California and WCIA-TV, channel 3 in Champaign, Illinois. Midwest requests reconsideration of: 1) the allotment of DTV channel 8 to KABC-TV in Los Angeles, which it states will cause interference to its KFMB-TV's channel 8 NTSC service; 2) the allotment of DTV channel 55 to KFMB-TV, which it states will result in spacing problems with Mexican NTSC allotments; and 3) the assignment of DTV channel 3 to WBBM-TV in Chicago, which it states will cause interference to its WCIA-TV's channel 3 NTSC service.

276. Midwest states that the most severe problem it faces is the assignment of DTV channel 8 to KABC-TV, Los Angeles. It states that this allotment threatens to devastate its KFMB-TV's existing NTSC operations. It states that KABC-TV and KFMB-TV are separated by only 171.7 km, over 102 km short of the required co-channel spacing. It states that the Longely-Rice propagation analysis indicates that approximately 116,482 persons within KFMB-TV's grade B contour will receive interference. Midwest states, however, that this analysis is incorrect due to the fact that there are numerous areas where the Commission's propagation and interference analysis "fails" but service is assumed. It states that this analysis

dramatically underestimates interference and that the assignment of channel 8 to KABC-TV would jeopardize service to about 20% of its Grade B coverage area, or almost 600,000 viewers. It states that a regional solution is needed to resolve its interference problems and those of other stations in the California coastal area. It notes that MSTV has urged the Commission to adopt a regional fix; Midwest vigorously supports this approach and indicates that it is committed to cooperating in the effort to develop and implement such a solution.

277. Midwest also states that KFMB-TV's channel 55 DTV assignment violates the spacing requirements in the recent Memorandum of Understanding between Mexico and the United States with respect to an NTSC channel 57 allotment in Tijuana, Mexico. It states that, while it does not appear that the Mexican station will cause interference to KFMB-TV, KFMB-TV could cause interference to the Mexican station. It therefore states that Mexican concurrence for KFMB-TV to buildout on DTV channel 55 may not be readily obtainable. Midwest indicates that it has investigated the situation, has not been able to identify a simple solution, and thinks that a regional approach will likely prove effective for resolving it.

278. As indicated above we have made a number of changes to DTV allotments in the Los Angeles area. In this regard, we have granted ABC's request to change the DTV channel 8 allotment of its station KABC-TV. This change also addresses Midwest's concern about interference from KABC-TV's DTV channel 8 operations. Accordingly, we find that Midwest's request is now moot. In addition, we note that Midwest's statement that its channel 55 assignment violates the spacing requirements with Mexico is incorrect. Midwest's channel 55 allotment is, in fact, consistent with the recent U.S./Mexico DTV planning agreements.

279. Midwest states that its channel 3 station in Champaign will receive harmful interference from WBBM-TV's channel 3 DTV operation affecting about 28,000 people (11,000 households) within an area of approximately 2,450 square km. It states that this level of interference is not *de minimis*. It also notes that MSTV and other broadcasters have identified this area as a problem area requiring a regional solution. Midwest states that it supports this approach for addressing the interference problems faced by WCIA-TV.

280. Guy Gannett, the licensee of station WICS-TV in Springfield, Illinois, opposes Midwest's petition to the extent that it seeks a new DTV allotment for WBBM-TV, a non-Midwest station in Chicago, to alleviate supposed interference problems of WCIA-TV. Guy Gannett urges us to reject attempts by parties at this late stage to shift the burden of modification to other stations and otherwise delay the DTV transition. It emphasizes that Midwest's request concerns the Chicago market, which is slotted for the earliest transition to DTV. Guy Gannett states that it is sympathetic to Midwest's desire to protect WCIA-TV but notes that all area broadcasters face the prospect of new interference. Furthermore, Guy Gannett notes that the type of NTSC-DTV interference at issue may not come into play for some time, as the Commission is initially only requiring DTV broadcasts to be powerful enough to cover the community of license. Guy Gannett believes that identifying a regional solution is preferable to Midwest's attempt to force WBBM-TV to relocate its DTV channel.



281. We find that the DTV channel 3 allotment for WBBM-TV is fully consistent with our DTV policies. We note that this allotment is estimated to cause interference to less than 3% of the population now served by Midwest WCIA-TV's NTSC channel 3 operations. As Midwest recognizes, its station is located in a congested region of the country and it was not possible to provide all broadcasters with DTV allotments that completely eliminate interference to all stations. We find that the level of impact on Midwest's WCIA-TV is fully consistent with our DTV allotment goals and that no change is necessary or warranted. Midwest's request that the DTV allotment of WBBM-TV be changed is therefore denied.

282. North Carolina Broadcasting Partners Petition. North Carolina Broadcasting Partners (NCBP) is the licensee of WCCB-TV, channel 18 in Charlotte, North Carolina. WCCB-TV was allotted DTV channel 21. NCBP states that channel 21 fails to achieve the goals of replication and maximization of its NTSC service and requests that another channel be allotted if proven superior to channel 21. It states that channel 21 will only reach 89% of the station's NTSC service area, although the Commission predicts a gain in population. NCBP requests that we study other potential allotments for WCCB to determine if its service can be better replicated. NCBP states that it is unable to suggest an alternative without OET Bulletin No. 69. NCBP did not submit a supplemental filing.

283. As discussed above, we are making a number of allotment changes to address potential DTV-to-DTV adjacent channel interference. To address such potential interference, we have modified the DTV allotment of WCCB-TV from channel 21 to channel 27. We note that this change will improve the service replication of WCCB-TV from 89% to over 95%.

284. Prairie Public Broadcasting, Inc. Petition and Supplemental Filing. Prairie Public Broadcasting, Inc. (Prairie) requests that we reconsider the DTV allotments provided for several of its noncommercial television stations in North Dakota. Prairie expresses concern that the DTV service of its KFME-TV in Fargo on channel 39 will receive interference from the DTV service of KXJB-TV in Valley City, North Dakota on adjacent channel 38. Prairie also raises concern that the DTV channel 56 allotment for its KGFE-TV in Grand Forks; the DTV channel 57 allotment for its KSRE-TV in Minot; the DTV channel 51 allotment for KWSE-TV in Williston; and DTV channel 22 for KBME-TV 3 in Bismarck, North Dakota will harm its seven-station network. It argues that conversion of these four low channel VHF stations to UHF DTV stations at the prescribed power levels in the DTV Table will require large increases in annual expenditures. Prairie also expresses concern that the DTV channels for KGFE-TV and for KSRE-TV are out of the core spectrum. It requests that we provide new noncommercial DTV allotments to replace the existing vacant noncommercial NTSC allotments on channel 22 at Devil's Lake, North Dakota and channel 33 at Crookston, Minnesota. In its supplemental filing, Prairie states that, despite its best efforts, it has been unable to identify specific alternative allotments. It limits its request to urging that we consider favorably the future substitution of appropriate and workable DTV channels if, as a result of other TV stations ceasing broadcasting on either NTSC or DTV channels or other changes in the Table, channels become available. It also urges that we attempt to identify and allot specific reserved DTV channels for Devil's Lake and Crookston at this time.

285. To the extent that alternative DTV channels become available, as a result of future negotiation and cooperation among local stations or parties ceasing operation, we have stated that we would act positively upon such requested changes, provided all affected broadcasters agree and the change does not result in additional interference to other stations or allotments. We are changing the DTV allotment for Prairie's KFME-TV from channel 39 to channel 23 to address DTV-to-DTV adjacent channel interference concerns. We also confirm that we are reserving DTV channels for noncommercial allotments at Devil's Lake and Crookston.

286. Pulitzer Broadcasting Company Petition. In its petition and comments, Pulitzer Broadcasting Company (Pulitzer) requests that the community of license of its DTV channel 8 allotment for its satellite station KOFT-TV in Gallup, New Mexico, be changed to Farmington, New Mexico. It states that the change is necessary to conform with its application for modification of its CP for KOFT-TV and is permissible with *de minimis* interference to NTSC station KJCT-TV. Pulitzer also asserts that existing licensees should have the right to object during the transition to DTV-to-NTSC interference, including the DTV-to-NTSC interference predicted in the Table. It submits that, if such complaints are not resolved through private negotiations, the Commission should impose a temporary transmission power limit on DTV interference sources until there is a significant DTV audience in the markets served by those DTV stations. Pulitzer opposes all requests for changes in the Table that would result in either new interference to its full service NTSC stations during the transition or a permanent reduction in DTV coverage on its DTV channels.

287. Paxson Media Group, Inc. (Paxson) submits that Pulitzer's request that a power cap be imposed on Paxson's WPSD-TV is based on a significant miscalculation of the interference that WSPD-TV will cause to Pulitzer's WLKY-TV. Paxson states that it has confirmed the FCC's prediction of interference to WLKY-TV during the DTV transition period and that this level of interference is similar to the interference that other NTSC stations will face.<sup>122</sup> Paxson states that Pulitzer's estimate that WLKY is predicted to receive nearly two to three times the interference predicted by both the FCC and Paxson is unexplained and is believed to be the result of an erroneous assumption of nondirectional rather than directional antennas. Paxson also notes that Pulitzer has itself asked to deviate from the DTV Table and cause additional interference to existing NTSC stations even though such additional interference is not explicitly permitted by the rules. In contrast, Paxson states that it is only seeking to preserve the right to operate its DTV channel within the constraints of the Sixth Report and Order. Paxson urges that Pulitzer's petition be denied since there is no additional interference to WLKY-TV beyond that which the Commission has already noted.

288. As indicated above, we have long recognized that the implementation of DTV would result in some interference to existing analog television service during the transition period. Our DTV buildout policies are intended to foster a rapid deployment of DTV to

---

<sup>122</sup> Paxson notes that the Commission predicted WLKY-TV's operations will receive interference in 5.6% of the area and 1.9% of the population and that its consulting engineers calculate interference to be 5.8% area and 1.8% population.

minimize the time period when such interference might occur. Our DTV Table was developed to minimize all interference to both analog and digital service. We believe that Pulitzer's proposal to further restrict DTV service and limit DTV power at the request of any affected broadcaster is not in the public interest. Pulitzer states that existing licensees should have the right to object during the transition to any DTV-to-NTSC interference, including the DTV-to-NTSC interference predicted in the Table and that power limits should be placed on the DTV stations until such time as there is a significant DTV audience. We believe that adopting such an approach would help to ensure that DTV may never achieve a significant audience in certain markets. We believe that restricting the power of DTV stations as suggested by Pulitzer would inhibit the acceptance of DTV and prolong the transition period and delay the benefits of this new technology to the public. In this regard, we note that interference into analog television may result in a slightly degraded picture and may be mitigated by improved antennas or cable carriage. On the other hand, reduced power for DTV operations would mean no DTV service for significant numbers of the public. Accordingly, we are denying Pulitzer's request to limit the power of DTV stations.

289. With regard to Pulitzer's request that we change the community of license for KOFT-TV's DTV channel allotment, we note that Pulitzer was granted recently a CP to relocate KOFT-TV to Farmington. As a general matter, service replication is based on authorized facilities or construction permits held as of April 3, 1997. Pulitzer's application to change its transmitter site does not meet this test. As indicated above, we generally believe that requests to change transmitter sites should be dealt with under the DTV allotment modification procedures provided for in the rules and not as a matter for reconsideration. In this particular instance, however, we believe that the public interest would be served by making this change at this time. The change would not affect any other stations and, because of KOFT-TV's proximity to the U.S.-Mexican border, making the change now would allow us to take it into account in our on-going coordination efforts with Mexico and could help facilitate those efforts by providing additional geographic spacing with certain Mexican allotments. Thus, we are modifying the transmitter site coordinates of KOFT-TV's DTV allotment and correcting the allotment's community designation from Gallup to Farmington.

290. RGV Educational Broadcasting, Inc. Petition. RGV Educational Broadcasting, Inc. (RGV), the licensee of KMBH-TV, Harlingen, Texas, observes that the channel 38 DTV allotment provided for KMBH-TV was designated in the DTV Table as reserved for noncommercial educational (NCE) use only. RGV requests that the NCE-reserved designation for this allotment be eliminated and that it be assigned channel 38 for DTV use without an NCE reservation. RGV submits that it is a noncommercial broadcaster that has chosen to provide NCE NTSC service, including the programming of the Corporation for Public Broadcasting, on channel 60, a commercial channel. RGV argues that classification of KMBH-TV's channel as an NCE-reserved allotment would significantly lower the value of the station and hinder its ability to raise the capital necessary to continue operations. RGV further states that reservation of an additional channel for NCE use in Harlingen would not be appropriate, as 33% of the channels allotted to that market are already so reserved.

291. We agree with the petitioner that the channel 38 DTV allotment for Harlingen, Texas should not have been designated in the DTV Table as reserved for NCE use only. We find that this designation was an administrative error resulting from licensing data concerning RGV's current service. Further, we believe that limiting the allotment to NCE use would be inconsistent with our DTV service replication policy of providing broadcasters with allotments capable of supporting equivalent service. Because RGV now operates on a commercial channel, we believe that providing it with an allotment that is limited to NCE use would conflict with this policy. Accordingly, we are amending the DTV Table to remove the NCE designation from DTV channel 38 in Harlingen.

292. Sangre de Cristo Communications, Inc. Petition and Supplemental Filing. Sangre de Cristo Communications, Inc. (SCC), the licensee of KOAA-TV, channel 5, in Pueblo, Colorado, requests reconsideration of the use of KOAA-TV's existing antenna site for its DTV assignment. It states that it has identified a new site at the Cheyenne Mountain antenna farm that serves the Pueblo/Colorado Springs communities and asks that this location be used for its assigned DTV channel 27 rather than its existing transmitter location. In its supplemental filing, SCC asks us to assign DTV channel 42 to KOAA-TV using the Cheyenne Mountain coordinates: 38° 44' 43.3" N and 104° 51' 41.3" W. SCC states that this change would satisfy the DTV spacing and interference criteria and would allow KOAA-TV to maximize its service to the Pueblo and Colorado Springs market.

293. AK Media Group, Inc. (AK Media) opposes the requests of Sangre de Cristo's (SCC) and Cordillera Communications, Inc. (Cordillera) that it move its transmitter site to Cheyenne Mountain. AK Media argues that these requests are the latest in a long series of attempts by the owners of KOAA-TV to move the station from a site on Baculite Mesa near Pueblo, KOAA-TV's community of license, to a site on Cheyenne Mountain near Colorado Springs. It argues such a move would be contrary to our requirements regarding a station's continuing obligation to maintain service to its community and viewing audience. It states that the requested change would move KOAA-TV's transmitter site over 30 miles from the station's existing site, more than 10 times the 3-mile limit permitted for DTV transmitter moves. AK Media submits that SCC and Cordillera have improperly used their petitions for reconsideration to attempt to obtain Commission consent to a modification of KOAA-TV's facilities rather than filing a Form 301 application to modify facilities. AK Media submits that it is reasonable to assume that a direct consequence of the attempt by SCC and Cordillera to achieve an over 30-mile change in KOAA-TV's DTV transmitter site would be a significant loss of primary off-air service to a large number of KOAA-TV's current viewers, and that such losses are *prima facie* not in the public interest.

294. We have reviewed SCC's request to modify the DTV allotment for its station KOAA-TV from channel 27 to channel 42. We find that this change can be made without impacting or causing additional interference to other stations. Accordingly, we are granting SCC's request in this regard and are modifying the DTV allotment for KOAA-TV from channel 27 to channel 42. With regard to SCC's request to move its transmitter site, as indicated above, we find that requests to change transmitter sites should be dealt with under the DTV allotment

modification procedures provided for in the rules and not as a matter for reconsideration. Accordingly, we are denying SCC's petition in this regard.

295. Scripps Howard Broadcasting Company Petition. Scripps Howard Broadcasting Company (SHBC), the licensee of KNXV-TV, channel 15 in Phoenix, Arizona, is concerned that its DTV channel 14 allotment could cause interference to adjacent channel land mobile services. It states that within 35 miles of the KNXV-TV transmitter there are more than 200 land mobile licensees operating on frequencies between 469.515 and 470 MHz. SHBC further expresses concern that these land mobile operations could also interfere with reception of KNXV-TV's DTV service. SHBC submits that based on the list of other available channels provided by MSTV, it appears that channel 56 would provide a suitable alternative for KNXV-TV's DTV service. It therefore requests that we change KNXV-TV's DTV allotment to channel 56 or another channel other than channel 14 as we may determine appropriate. SHBC did not submit a supplemental filing.

296. We have reviewed SHBC's request and find that channel 56 may be substituted for channel 14 without adverse impact to other stations. We therefore grant SHBC's request and modify the DTV allotment for station KNXV-TV from channel 14 to 56.

297. Shenandoah Valley Educational Television Corporation Petition and Supplemental Filings. Shenandoah Valley Educational Television Corporation (Shenandoah) is the licensee of full power public station WVPT-TV, channel 51, Staunton, Virginia, which received DTV channel 19.<sup>123</sup> Shenandoah currently operates a number of translator stations, including W19BB in Charlottesville, Virginia, which operates on channel 19 and is 75.7 km away from WVPT-TV. Shenandoah states that channel 11 would be a viable alternative to channel 19 for WVPT that would not hinder its provision of programming to Charlottesville and greater Albemarle County. In its supplemental filings, Shenandoah states that use of channel 19 would not affect any other full or low power operations. Fox supports Shenandoah's request for a DTV allotment other than channel 19 for WVPT-TV in Staunton because such a modification would eliminate any potential for co-channel interference between WVPT-TV's and its requested use of channel 19 for WTTG-TV.<sup>124</sup>

298. Our analysis indicates that the change Shenandoah requests would not impact or cause additional interference to other broadcast operations. We therefore grant Shenandoah's

---

123 Jefferson-Pilot Communications Company (Jefferson-Pilot) initially opposed Shenandoah's request that the DTV channel for Shenandoah's station WVPT-TV be changed from channel 19 to channel 11 because Shenandoah's proposed change would have conflicted with its own petition requesting DTV channel 11 for its station WWBT-TV in Richmond, Virginia. Jefferson-Pilot subsequently withdrew its request for channel 11.

124 Fox, in its comments, expresses concern that there will be interference problems between its WTVR-TV, channel 6 in Richmond, Virginia, and the channel 6 DTV service of Fox's WTTG-TV in Washington, DC. It agrees with Media General that another DTV allotment must be found for WTTG-TV. Fox states that the most promising option is channel 19, although that allotment would be slightly short spaced to land mobile operations in Philadelphia.

request to modify the DTV allotment for its WVPT-TV from channel 19 to channel 11.

299. Telemundo Group, Inc. Petition. Telemundo Group, Inc. (Telemundo), the licensee of KSTS-TV, channel 48 in San Jose, California and other full service and low power television stations, requests that we change the reference coordinates for the DTV channel 49 allotment provided for KSTS-TV to coincide with those specified in an application to relocate the KSTS-TV transmitter to a new site on Mt. Allison at 37° 29' 57" N and 121° 52' 16" W. Telemundo states that this application was filed on July 11, 1996, in anticipation of the termination of its lease for the existing KSTS-TV tower. Telemundo submits that the entity that controls the existing tower site, the Alameda Park District, has informed Telemundo that it cannot renew the station's lease beyond December 31, 1998 and that the tower will be torn down after that time. Thus, Telemundo states that there is no chance that the station will be able to continue to operate from its existing tower site. It argues that its pending modification application to relocate KSTS-TV's facilities atop Mt. Allison should have been considered in the DTV allotment process. It submits that ignoring this pending modification would have serious repercussions for KSTS-TV, as that station would have a DTV allotment where it has no tower. Telemundo also states that information from MSTV indicates that alternative channels are available that could be used to resolve any interference problems. Telemundo states that, without OET Bulletin No. 69, it has been unable to conduct an analysis of other channels that may be available. It did not submit a supplemental filing.

300. As stated above, it is our general service replication policy not to take into account pending modification applications in the development of DTV allotments. This is to ensure that DTV operations, to the extent possible, are capable of fully replicating existing analog television operations and the public's expectations of television service are preserved. In the case of KSTS-TV, we note that the new site on Mt. Allison is less than 2 km from its existing location. Under the rules, we permit stations to move their DTV facilities up to 5 km without any additional showing.<sup>125</sup> Accordingly, Telemundo may relocate its DTV operations to this site regardless of any final Commission action with respect to its pending application. We therefore find that there is no need to modify Telemundo's DTV allocation, as requested, to operate from a new location on Mt. Allison at 37° 29' 57" N and 121° 52' 16" W. This action does not, however, predetermine any future action we may take with regard to Telemundo's pending request to modify its NTSC transmitter site.

301. The University of Houston System Petition and Supplemental Filings. The University of Houston System (UHS) requests that the DTV allotment provided for its noncommercial educational station KUHT-TV in Houston, Texas, be changed from channel 53 to channel 9. KUHT-TV currently provides NTSC service on channel 8. UHS states that requiring KUHT-TV to use channel 53 for DTV service, rather than channel 9 as proposed in the Sixth Further Notice, would result in substantial and unnecessary hardship for the station. UHS notes that there is a concern that operation of KUHT's DTV service on channel 9 could possibly

---

<sup>125</sup> See Section 73.622(d)(1) of the rules, 47 CFR 73.622(d)(1).

result in interference to the NTSC service of KTRE-TV operating on channel 9 at Lufkin, Texas, 215 km away. UHS states that it would accept limitations in its power during the transition, to avoid any possibility of interference to KTRE-TV. However, it believes that operation of KUHT-TV's DTV service on channel 9 at the 20.9 kW power level proposed by the Broadcasters' Caucus would be possible without interference to KTRE-TV or any other NTSC or DTV stations. In a supplement to its petition, UHS submits that an engineering study indicates that KUHT-TV could operate on channel 9 with ERP up to 8.4 kW from the station's existing transmitter site and with its existing antenna. It states that, in the engineer's estimation, the lower power is required to reduce potential interference to co-channel NTSC station KTRE-TV in Lufkin, which is located 215.1 km from KUHT-TV's transmitter site. UHS submits that it has obtained the tentative agreement of Civic Communication Corp. (Civic), the licensee of KTRE-TV, to KUHT-TV's use of channel 9 for DTV service, with ERP up to a maximum of 8.4 kW. UHS states that it has committed to resolve interference problems that might result to KTRE-TV, including potential power reductions to 1.3 kW. On June 16, 1997, UHS submitted a letter from Mr. Errol R. Kapellusch, Senior Vice President and General Manager of Civic License Holding Company, the licensee of KTRE-TV, consenting to operation of KUHT's DTV service on channel 9, based on a maximum power of 8.4 kW. Mr. Kapellusch further conditions his consent on KUHT-TV's agreement that in the event such operations actually cause interference within KTRE-TV's Grade B contour, KUHT-TV will take whatever steps are necessary, including power reductions to as low as 1.3 kW, to resolve them. He further agrees to KUHT-TV's plan to convert the station's DTV service to its existing channel 8 at the end of the transition, without concerns for either station that would arise out of a continuing short-spacing.

302. Throughout this proceeding we have recognized that the implementation of DTV will be a dynamic process and that mechanisms would be needed to accommodate changes that will occur. In the Sixth Report and Order, we stated our intent to provide broadcasters with the flexibility to develop alternative allotment approaches and adopted an approach to accommodate voluntary industry coordination of DTV allotment and facility modifications.<sup>126</sup> We find that the change UHS requests is consistent with this approach and would be in the public interest. We believe that making this change, as requested by UHS and agreed to by Civic, would provide its noncommercial station with an easier and more economical transition to DTV service. We further find that such a change would be neutral in its impact on low power operations.<sup>127</sup> Accordingly, we are amending the DTV Table of Allotments to permit station KUHT-TV to operate on DTV channel 9 with ERP of up to 8.4 kW.

303. WHNS License Partnership Petition. WHNS License Partnership (WHNS), the licensee of WHNS-TV, channel 21 in Asheville, North Carolina, requests that we reconsider the allotment of DTV channel 21 for WCCB-TV in Charlotte, North Carolina. WHNS argues that operation of WCCB-TV's DTV service on channel 21 is likely to cause interference to WHNS-

---

<sup>126</sup> See Sixth Report and Order at paras. 172 and 182.

<sup>127</sup> In this regard, we estimate that this change may impact one low power station but would eliminate the impact on another low power station.

TV's NTSC service on channel 21. It further submits that, if WCCB-TV remains on channel 21 after the transition, WHNS-TV would be precluded from moving back to its NTSC channel for DTV operation. WHNS requests that we assign WCCB-TV a different DTV channel and submits that we could do so without undermining the principles underlying the DTV Table. WHNS did not submit a supplemental filing.

304. As discussed above, we are making a number of allotment changes to address potential DTV-to-DTV adjacent channel interference. We have changed the DTV allotment for NCBP's WCCB-TV from channel 21 to channel 27 in order to address potential adjacent channel DTV-to-DTV interference. Therefore, WHNS's request that we modify the DTV allotment of WCCB-TV to protect WHNS-TV's NTSC service on channel 21 is now moot.

305. Wichita Communications Petition. Wichita Communications (WC), the licensee of KWCV-TV, channel 33, Wichita, Kansas, submits that the reference coordinates for the transmitter site of the channel 34 DTV allotment provided for KWCV-TV in the Sixth Report and Order are incorrect. It states that the coordinates are for the site of its former transmitter site and that KWCV's transmitter site was relocated to 37° 47' 47" N and 97° 31' 59" W pursuant to a decision issued March 21, 1997. WC asks us to change the reference site for DTV channel 34 at Wichita to the site currently authorized for KWCV-TV's NTSC operation.

306. We agree with WC that our database was in error with regard to the coordinates of the transmitter site for its station and have corrected this error, as requested. Further, in order to address potential DTV-to-DTV adjacent channel interference, we have also changed the DTV allotment for KWCV-TV from channel 34 to channel 31.

307. WTNH Broadcasting, Inc., K-W TV, Inc., Post-Newsweek Stations, Connecticut, Inc., and Tribune Broadcasting Company Petition and Supplemental Filing. WTNH Broadcasting, Inc., licensee of WTNH-TV in New Haven, Connecticut, K-W TV, Inc., licensee of WBNE-TV in New Haven, Connecticut, Post-Newsweek Stations, Connecticut, Inc., licensee of WFSB-TV in Hartford, Connecticut, and Tribune Broadcasting Company, licensee of WPIX-TV in New York, New York (NY-CT Petitioners) request that we modify the DTV allotments for the Hartford-New Haven, Connecticut market. They submit that changes are warranted to avoid the unnecessary and destructive loss of free, off-the-air television service in that market and the adjacent New York market. NY-CT Petitioners submit that their consulting engineers have examined options for resolving these problems but have not found an answer, largely because of the daisy-chain effects of proposed channel changes in the northeast corridor and the lack of availability of OET Bulletin No. 69. They state that, after examining various possible localized solutions to the problems they have identified, their consulting engineers concur with MSTV's conclusion that a regional solution is needed. They submit that they will cooperate with MSTV to develop such a solution. NY-CT Petitioners urge us to reconsider the DTV Table for the northeast corridor and to provide MSTV and the industry an opportunity to develop alternatives for the region.

308. As indicated above, the DTV allotments are the result of balancing a number of



different factors, including full accommodation, service replication, and spectrum recovery. We find that the allotments for the New York/Connecticut region are consistent with our DTV policies and goals. While we recognize that this area is particularly congested and that a number of the DTV allotments are not ideal, we do not find that the many changes suggested by MSTV in its *ex parte* filing for this region would significantly improve the situation for all broadcasters. Rather, in many cases, the improvements in service and replication for some broadcasters come at the expense of increased interference or decreases in service and replication for other broadcasters. In addition, MSTV's use of more out-of-core channels and, in particular, more 60-69 channels has other consequences for both broadcasters and new service providers. Accordingly, with one exception, we continue to find that the channels allotted to stations in this area of the country are appropriate and that only targeted and limited changes are needed to address the new DTV-to-DTV adjacent channel data. In this regard, we are changing the DTV allotment of Post-Newsweek's WFSB-TV from channel 11 to channel 33 to address potential DTV-to-DTV adjacent channel interference.

309. Young Broadcasting of Sioux Falls, Inc. Petition. Young Broadcasting of Sioux Falls, Inc. (Young) is the licensee of television station, KELO-TV in Sioux Falls, South Dakota. Young submits that the DTV channel 32 allotment assigned to KELO-TV is based on the station's auxiliary transmitter facilities, rather than on its main transmitter facilities. Young points out that the transmitter site geographic coordinates, antenna height above average terrain (HAAT), and effective radiated power (ERP) used in establishing a matching DTV allotment for KELO-TV are the same as those indicated on an application to modify the station's auxiliary transmitter site and facilities. It asks that we correct this error. KELO-TV's existing main transmitter site is located at 43° 31' 07" N and 96° 32' 05" W. Young submits that, at a minimum, we should provide KELO-TV with the same antenna height and the same or nearly identical power as KSFY-TV, which is located on the same tower as KELO-TV. It also requests that we assign KELO-TV a DTV channel that is adjacent to the DTV channel 29 allotment provided for KSFY-TV, as proposed in the Sixth Further Notice. Young states that KELO-TV would thus be able to combine its DTV signal with KSFY's on one antenna, in the same manner as the stations provide NTSC service.

310. We have reviewed our records and have determined that an error was, in fact, present in the database entry for KELO-TV. As indicated by Young, the data used in establishing a matching DTV allotment for this station are those indicated on an application to modify the station's auxiliary transmitter and antenna facilities. To correct this error, we are revising the technical facilities for KELO-TV's DTV channel to reflect the correct transmitter site, HAAT, and replication power.<sup>128</sup> Operation of KELO-TV's DTV service on channel 32 with these corrected parameters will not result in additional interference to other full service analog or DTV stations. We are, however, denying Young's request to change its DTV allotment from channel 32 to channel 29. Our analysis indicates that use of channel 29 by

---

<sup>128</sup> Previously, in a letter to Young, our staff recognized this error and advised Young that we would accept an application from KELO-TV to operate its DTV service on channel 32 in conformance with these technical facilities.

KELO-TV would cause interference to other stations.

C. Requests for Changes by Low Power Interests

311. The following petitions for reconsideration were filed by low power interests seeking to change the DTV allotments of full power stations in order to protect their low power operations. Many of these petitions rely on the MSTV/NAB information on channel availability and either acknowledge that the alternative allotments presented would interfere with other stations or that the proposed frequencies have not been thoroughly analyzed. Many of the oppositions emphasized that protection of secondary LPTV operations cannot outweigh the public benefits of prompt initiation of DTV service by full power stations and suggested that the petitioners identify alternative channels for their own low power operations. Below, we briefly summarize these petitions and oppositions and then discuss our decisions. We next discuss petitions from low power interests that raise certain additional issues. As we have previously explained, in view of their secondary status, we are generally not making changes to protect low power services.

312. Alaska Broadcast Television Inc. Petition. Alaska Broadcast Television Inc. (ABT) is the licensee of an LPTV station on channel 20 in Anchorage, Alaska. To protect its station's operation, it requests that KTBY-TV be given DTV channel 36 instead of DTV channel 20 as assigned.

313. Capitol Television Corporation Petition. Capitol Television Corporation (CTC) is the permittee of LPTV station, W44BP, channel 44, Petersburg, Virginia. CTC requests that the allotment of DTV channel 44 to WCVW-TV in Richmond be changed to DTV channel 28. Central Virginia Educational Telecommunications Corporation (CVETC), licensee of WCVW-TV in Richmond, Virginia, opposed Capitol's request.

314. Entravision Holdings, LLC Petition.<sup>129</sup> Entravision Holdings, LLC, (Entravision) is the licensee of two full power television stations and a number of low power television stations. In its petition, Entravision expresses concern that its Spanish language LPTV stations K19BN in San Diego, California and KGHB-LP in Pueblo and Colorado Springs, Colorado will be displaced by DTV allotments. It argues that, in San Diego, instead of providing DTV channel 19 for KSWB-TV and DTV channel 18 for KUSI-TV, we could allot these stations two channels from 43, 47, 62, 63, 64 or 65; alternatively, we could reserve one of these channels for K19BN. Entravision asserts that, in Pueblo, there are over 40 channels that we could assign to KOAA-TV while allowing its KGHB-LP to remain on its current channel 27. Entravision submits that we should revise the DTV Table to either preserve co-channel or adjacent channel LPTV stations or reserve the allotments that are not needed for DTV for co-channel and adjacent channel displaced LPTV stations.

---

<sup>129</sup> Entravision filed a "Joint Petition of Licensees" with Paxson Communications Corporation, Univision Communications, Inc., and others. Entravision's requests regarding its full power stations are addressed in the alphabetical section.

315. KUSI opposes Entravision's petition to the extent that it urges changing the allotment of DTV channel 18 to KUSI-TV at San Diego to any one of six channels between channel 43 and 65. Fox submits that allotting DTV channel 65 to either KSWB-TV or KUSI-TV to protect Entravision's LPTV station would result in interference to KTTV-TV's DTV operation on channel 65. Sangre de Cristo Communications, Inc. (SCC), licensee of KOAA-TV, NTSC channel 5 in Pueblo, opposes Entravision's proposed change for KOAA-TV.

316. First Cullman Broadcasting, Inc. Petition. First Cullman Broadcasting, Inc. (FCB), the licensee of low power television station W52BJ, channel 52 in Cullman, Alabama, requests that in Birmingham, Alabama we consider assigning DTV channel 12 to WVTM-TV and DTV channel 9 to WBIQ-TV, instead of channels 52 and 53, respectively. Cosmos opposes FCB's proposed change to its own WVTM-TV, predicting that such a change would result in considerable interference and a co-channel short-spacing of nearly 100 km.

317. Innovative Technologies, Inc. Petition. Innovative Technologies, Inc. (Innovative), the licensee of LPTV station K17CT, channel 17, in Las Vegas, Nevada, asks that we change the channel 17 DTV allotment provided for KTNV-TV, Las Vegas to avoid displacement of K17CT, as well as other channel 17 low power stations in Pahrump, Nevada, Mohave Valley, Arizona, Needles, California, Lake Havasu, Arizona, and Daggett, California. Innovative states that these channel 17 stations have been able to coexist due to the protective characteristics of the mountain ranges in the area.

318. Journal was assigned DTV channel 17 for its station KTNV-TV, channel 13 in Las Vegas, Nevada. Journal opposes Innovative's petition but notes that the Commission could address Innovative's concern by granting Journal's own petition, which seeks the allotment of channel 9 in lieu of channel 17 for KTNV-TV.<sup>130</sup> Journal argues that this result would clearly serve the public interest by minimizing the costs and environmental risks to KTNV-TV while preserving an existing LPTV operation on its present channel.

319. Landmark Arts, Inc. Petition. Landmark Arts, Inc. (Landmark Arts), the licensee of LPTV station, WHRT-LP, channel 27 in Murfreesboro, Tennessee, asserts that the allotment of DTV channel 27 to the licensee of channel 2 in Nashville, approximately 30 miles away from WHRT-LP, will displace its station and cause Murfreesboro to lose its only local programming. Landmark Arts states that, if we do not allot a different DTV channel to Nashville, we should afford WHRT-LP an early opportunity to move to another channel rather than requiring it to wait for the Nashville station to apply for a construction permit. Landmark Arts states that its station provides 21 hours of locally-produced programming and recently gained access to the local cable system. It states that it has been granted a CP for a proposed major change, but that it would be financially imprudent to construct improved facilities if the station is to be displaced. It states that, at a minimum, we should allow WHRT-LP to change channels immediately prior to the expiration of its major change CP.

---

<sup>130</sup> We address Journal's petition below in the alphabetical section.

320. In its consolidated opposition,<sup>131</sup> YBI states that the petitions filed by low power and translator interests propose massive reassignments of DTV channels for full service stations instead of finding alternative channels for their own subordinate service. YBI opposes Landmark Arts' request to reassign YBI's station WKRN-TV to an unspecified alternative DTV channel. While YBI believes that Landmark Arts' petition lacks adequate justification, it does not oppose permitting Landmark Arts to file an application to switch its Murfreesboro LPTV channel at an early stage. YBI observes that it may make sense to permit low power parties such as Landmark Arts to file applications proposing channel switches before full service stations file construction applications for DTV service.

321. Liberty Christian Center Petition. Liberty Christian Center (Liberty), the licensee of LPTV station, W57BS in Alton, Illinois, requests that we change the DTV channel 56 allotment for KMOV-TV in St. Louis, Missouri to channel 16. Liberty submits that KMOV-TV's transmitter site is only 27 miles from the W57BS transmitter site and will cause and receive interference from KMOV-TV's DTV operations. Liberty submits that the NAB/ MSTV study shows that DTV channel 16 could be allotted for KMOV-TV without disrupting any LPTV service or otherwise affecting the DTV Table. Liberty indicates that it has lacked access to the software necessary to make a detailed study of this proposed change or to calculate interference among and between DTV and NTSC facilities. It also states that the NAB/MSTV study indicates that channels other than 16 could be assigned to KMOV-TV without adverse impact on the DTV Table or on W57BS's continued use of channel 57.

322. Third Avenue Television, Inc. (Third Avenue), the licensee of KMOV-TV, channel 4 in St. Louis, Missouri, opposes Liberty's request to change KMOV-TV's DTV channel. Third Avenue states that its engineering study indicates that the proposed allotment of DTV channel 16 would cause substantial interference to two other full-power stations.

323. Montgomery Communications, Inc. Petition. Montgomery Communications, Inc. (Montgomery) is the licensee of four LPTV stations, which it describes as the exclusive source of Fox network programming for the Topeka ADI. Montgomery states that the allotment of channel 17 for DTV use by KAAS-TV in Salinas, Kansas will force its LPTV station on channel 17 in Emporia, Kansas to cease operation. It submits that at least two other channels within the proposed core spectrum of channels 7-51 (channels 46 and 50) could be allotted to KAAS-TV for DTV without displacing its LPTV station or any other LPTV or translator operation. Clear Channel Television Licenses, Inc. (Clear Channel) opposes Montgomery's request that the DTV channel for its station KAAS-TV be changed.

324. Rapid Broadcasting Company Petition. Rapid Broadcasting Company (RBC) is the licensee of LPTV station KNBN-LP, channel 27 in Rapid City, South Dakota and the permittee of LPTV stations K27ED and K31DK, also in Rapid City. It argues that, because this area of the country is somewhat remote, alternative DTV allotments could avoid any potential

---

131 See Opposition of Young Broadcasting Inc. to Four Separate Petitions for Reconsideration filed July 18, 1997.

interference with its LPTV operations. RBC requests that we make the following changes in the DTV allotments:

<u>Station</u>	<u>NTSC Chan.</u>	<u>DTV Chan.</u>	<u>New DTV Chan.</u>
KPSD-TV	13	24	44
KIVV-TV	5	26	59
KHSD-TV	11	27	62
KOTA-TV	3	22	49
KBHE-TV	9	23	50
KCLO-TV	15	16	53

RBC argues that, although several of these allotments would be outside the core spectrum, each station would have at least one channel within the core and could eventually switch its DTV operations to that channel. Blackstar, Duhamel Broadcasting Enterprises (Duhamel), and Young Broadcasting Inc. (YBI)<sup>132</sup> opposed RBC's petition.

325. Ruarch Associates, L.P. Petitions. Ruarch Associates, L.P. (Ruarch), the licensee of LPTV station W28AZ, channel 28, in Winchester-Front Royal, Virginia, filed two petitions for reconsideration. In one petition, Ruarch states that, to avoid co-channel interference with W28AZ, DTV channel 62 should be allotted to noncommercial WFPT-TV in Frederick, Maryland instead of DTV channel 28. Ruarch observes that channel 62 is adjacent to WFPT-TV's NTSC channel 63 and would allow the station to diplex its NTSC and DTV signals on the same antenna, providing it considerable savings in its DTV transition. In its second petition, Ruarch suggests the substitution of DTV channel 38 for the channel 47 DTV allotment provided for WHSV-TV, Harrisonburg, Virginia.

326. The Maryland Public Broadcasting Commission (MPBC), the licensee of public television stations in Maryland, including noncommercial station WFPT-TV, channel 62 in Frederick, opposes Ruarch's petition. MPBC submits that Ruarch's request that we allot channel 62 for WFPT-TV's DTV service reflects the mistaken impression that WFPT-TV operates its NTSC service on channel 63, since Ruarch proposes to allot for WFPT-TV's DTV service the same channel that it uses for its NTSC service. MPBC suggests Ruarch is actually seeking substitution of DTV channel 63 for channel 28, as the engineering showing attached to the petition indicates. MPBC submits that relegating WFPT-TV to an out-of-core channel would be a financial catastrophe for the Maryland Public Television (MPT) network. MPBC argues that the proposal would give Ruarch's secondary service station a permanent DTV berth while jeopardizing the future of MPT's full service public station. MPBC argues that Ruarch's petition is not supported by the attached engineering statement that fails to identify an alternative channel for its LPTV station. MPBC observes that Ruarch's assurances regarding coverage and

---

132 Young Broadcasting Inc. (YBI) submitted a consolidated opposition to petitions for reconsideration filed by Rapid Broadcasting Company, South Central Communications Corporation, Trinity Christian Center of Santa Ana, Inc. d/b/a Trinity Broadcasting Network, and Landmark Arts, Inc. See Opposition of Young Broadcasting Inc. to Four Separate Petitions for Reconsideration, filed July 18, 1997.

interference of a channel 63 allotment are based on a report of an industry group that did not examine the suitability of possible alternative allotments.

327. South Central Communications Corp. Petition. South Central Communications Corp. (SCCC) is the licensee of 11 LPTV stations and an applicant for two full service TV stations.<sup>133</sup> It requests the following modifications to the DTV Table to avoid impact on four of its eleven LPTV stations, as follows: 1) change the DTV allotment for WVUT-TV, Vincennes, Tennessee from channel 52 to 33; 2) change the DTV allotment for WDRB-TV, Louisville, Kentucky from channel 49 to 51; 3) change the DTV allotment for WTNZ-TV, Knoxville, Tennessee from channel 34 to 46; and 4) change the DTV allotment for WNAB-TV, Nashville, Tennessee from channel 23 to 34. SCCC states that MSTV indicates that these changes would not occasion new or additional interference to proposed DTV operations.

328. To the extent that SCCC's petition seeks protection of its LPTV station which is not extended to all similarly-situated LPTV stations, Telemundo opposes it. Independence Television Company (Independence) opposes SCCC's petition and challenges its unsupported assertion that its proposal would create no new interference. Independence asserts that the use of channel 51 by WDRB-TV would raise co-channel spacing concerns with Dayton, Ohio and Hendersonville, Tennessee, as well as adjacent channel concerns with Owenton, Kentucky.

329. Speer Communications Holdings I Limited Partnership (Speer) also opposes SCCC's petition. Speer notes that SCCC has proposed that the DTV allotment for Speer's WNAB-TV be changed from channel 23 to channel 34.<sup>134</sup> Speer states that the proposed substitution can be effected only if Knoxville's DTV channel 34 is also changed. Moreover, Speer reports that because it uses a directional antenna, it may be unable to maximize its coverage, or even replicate its existing analog coverage, on DTV channel 34. Given these uncertainties, Speer states that the DTV Table should not be changed at this time, particularly at the request of an LPTV station not entitled to a DTV channel. Young Broadcasting Inc. (YBI) opposes SCCC's proposal to change the DTV allotments for six full service television stations, including YBI's Knoxville station, WATE-TV, in order to preserve its existing LPTV operations and protect its application for an NTSC station in Knoxville on channel 26.<sup>135</sup>

330. Sunnycrest Media, Inc. Petition. Sunnycrest Media, Inc. (Sunnycrest), the licensee of low power station WSOT-LP in Marion, Indiana, requests that the assignment of DTV channel 24 to WPTA-TV in Fort Wayne and DTV channel 25 to WRTV-TV in Indianapolis be changed to DTV channels 31 and 34, respectively, to protect its station.

---

133 SCCC's requests regarding the allotments for WKGB-TV, Bowling Green, Kentucky and WATE-TV, Knoxville, Tennessee are addressed below in the alphabetical section.

134 Speer, in its own petition, urges that its DTV allotment be changed but did not propose an alternative channel, citing the unavailability of OET Bulletin No. 69.

135 Opposition of Young Broadcasting Inc. to Four Separate Petitions for Reconsideration, filed July 18, 1997.

331. Max A. Trevino Petition. Max A. Trevino (Trevino) is the licensee of an LPTV station in Albuquerque, New Mexico. Trevino requests that the DTV channel 17 allotment provided to a full service broadcaster be changed to another channel, such as DTV channel 54, that would not interfere with his LPTV station.

332. Trinity Christian Center of Santa Ana, Inc./Trinity Broadcasting Network Petition. Trinity Christian Center of Santa Ana, Inc./ Trinity Broadcasting Network (Trinity) is the licensee of numerous full service and translator TV stations throughout the country. Trinity seeks reconsideration of the overall DTV allocation scheme and service replication requirement, citing the grounds set forth in Sinclair's petition. Trinity also requests the assignment of different channels for certain full power stations to permit the continued operation of many of its translators. Trinity submitted a list of 56 DTV channel changes, based on a MST/NAB computer study, and asserted that they would not increase interference.

333. Channel 3 of Corpus Christi, Inc. (KIII) conditionally supports the portion of Trinity's petition that seeks the substitution of DTV channel 35 for channel 47 for use by its station KIII-TV, but only if the substitution is not accompanied by widespread changes which would result in poorer service.

334. Several other parties, representing both low power interests and full service broadcasters, submitted oppositions to Trinity's petition. HSN, Inc. states that it objects to the wholesale rearrangement of the DTV Table and asserts that Trinity has not explained why its stations merit this unique treatment. HSN argues that, to the extent that Trinity suggests that the Commission should scrap its DTV allocations in more than 100 communities because Trinity's programming is "diverse and unique," its reasoning is constitutionally suspect and makes no sense as a practical matter. HSN states that the Commission cannot monitor each LPTV or television translator station's programming in order to assure that the programming remains sufficiently "diverse" or "unique" to be worthy of interference protection. HSN supports the systematic protection of LPTV and translator stations from displacement in the DTV transition process but states that Trinity's proposal does not accomplish this goal. Telemundo also states that it cannot support Trinity's petition, since it seeks special protection of one entity's LPTV stations, although it does believe parties should be able to request a change in the DTV allotment of a full power station to preserve a LPTV station if no other operational LPTV or full power outlets are displaced.

335. Alamo Public Telecommunications Council (Alamo), Benedek, Cedar Rapids Television Company (CRTC), Citadel Communications Company, Ltd. (Citadel), Gannett Co., Inc. (Gannett), GOCOM, Heritage Media Corporation (Heritage), Hubbard Broadcasting, Inc. (Hubbard), Sinclair, St. Lawrence Valley Educational Television Council, Inc. (St. Lawrence), Tribune, The University of North Carolina Center for Public Television (UNCTV), Virginia Broadcasting Corp. (Virginia), YBI and other full service broadcasters oppose Trinity's request that we assign different DTV channels to their full service DTV stations, in order to permit the continued operation of many of Trinity's TV translator facilities.

336. For example, Alamo notes that Trinity acknowledges that it was not able to verify that any of its proposed changes would not displace any other authorized LPTV or TV translator facility. Bendek states that Trinity's petition ignores the secondary nature of these facilities. CRTC states that Trinity provides no showing to demonstrate that its proposed alternative DTV channels are viable with respect to replication and interference protection. Citadel observes that the Commission has recognized the significant interference concerns raised by broadcast operation on both channels 3 and 4 and has developed a DTV Allotment Table to avoid such situations. Gannett opposes Trinity's request that we change the DTV allotments for its stations in Austin, Texas; Knoxville, Tennessee; St. Louis, Missouri; and Kingman, Arizona. GOCOM states that Trinity does not even attempt to show what, if any, study it made of how changes in its own translator station channels might be used to resolve its problems. Heritage is concerned that grant of the requested modifications could place Heritage-owned stations at a competitive disadvantage in their respective markets. Hubbard opposes Trinity's petition to the extent that it affects Hubbard's station WNYT-TV in Albany, New York. Hubbard states that Trinity's proposed allotment change for WNYT-TV from DTV channel 15 to channel 60 will impose unnecessary burdens on its station.

337. Sinclair protests that Trinity's proposal to change the DTV allotment for Sinclair's KUPN-TV from channel 20 to channel 29 is based solely on the MSTV/NAB study. St. Lawrence opposes Trinity's proposed substitution of DTV channel 46 for channel 41 for its station WNPE-TV, as the channel 41 allotment is already the highest channel in its market and moving to an even higher channel would impose more costs on its noncommercial station. Tribune states that Trinity's suggested change for its Denver station, KWGN-TV, to DTV channel 68 rather than channel 34, would result in substantial loss of service and would require KWGN to relocate twice. UNCTV states that Trinity's proposed changes would exacerbate the disadvantage that UNCTV already suffers under the current DTV Table by moving its flagship station to one of the channels 60-69 proposed for reallocation to other services. Virginia, the licensee of WVIR-TV in Charlottesville, Virginia, characterizes Trinity's request for 56 changes as an attempt to seek reconsideration of the basic underpinnings of the Commission's DTV decision.

338. In a joint filing, Apple Valley Broadcasting, Inc., KHQ, Incorporated, and Spokane Television (Caucus Parties) indicate that they are members of the Eastern Washington and Northern Idaho DTV Channel Allocation Caucus. They oppose Trinity's petition insofar as it proposes alternative DTV channels for their stations that conflict with the EWNIC's negotiated alternative DTV allotment plan. The Caucus Parties note that the EWNIC's DTV plan was designed to minimize adverse impact on LPTV and TV translator stations and that the EWNIC members intend to continue efforts to accommodate these secondary services. To this end, the Caucus Parties invite Trinity to supplement its petition in order to coordinate its proposed Yakima and Spokane DTV channels with EWINC's proposal.

339. In a joint opposition filing, the Board of Regents of the University of Wisconsin System (UWS), Maine Public Broadcasting Corporation (MPBC), Northeastern Educational Television of Ohio, Inc. (NETO), Ohio University (OU), and South Carolina Educational



Television Commission (SCETV) (collectively, Public TV Licensees) state that Trinity's proposed changes to the DTV Table would significantly impair public television service.

340. Univision Communications Inc. Petition and Supplemental Filing. Univision Communications Inc. (Univision), owns and operates the Univision Network along with both full service and low power television stations.<sup>136</sup> Univision argues that LPTV stations that provide unique service, such as Spanish-language broadcasting, should be given greater protection against displacement. It predicts that, in the major Hispanic markets where LPTV stations owned by or affiliated with Univision operate, there will be little, if any, chance of channels becoming available. Univision requests that the DTV allotment for KAJW-TV in Tolleson, California be changed from channel 52 to 47 to protect Univision's LPTV station in Tucson, Arizona; that the DTV allotments of KUSI-TV and KSWB-TV in San Diego, California be changed from channels 18 and 19 to channels 43 and 47, respectively; and that the DTV allotment for KOAA-TV in Pueblo, Colorado be changed from channel 27 to 17.

341. In its supplemental filing, Univision revises and provides additional engineering support for its reallocation proposal for the Tucson, Arizona television market. Univision amends its request to substitute DTV channel 53 for KAJW-TV, stating that this change would eliminate interference to KAJW-TV from first adjacent channel operation and would eliminate the need for co-location by that station. According to its engineering statement, the only new interference from KAJW-TV's use of channel 53 would be to NTSC station KASW-TV on taboo channel 61 and would affect only 0.1% and 0.2%, respectively, of the area and population served by KASW-TV. Telemundo supports Univision's position that LPTV stations offering Spanish language are worthy of protection, but it believes that such a policy must be applied uniformly and not just to protect the LPTV stations of a single entity.

342. W36BM TV-36 Petition. W36BM TV-36 (W36BM), a LPTV station in Augusta, Georgia, requests that it be allowed to maintain its existing use of channel 36. W36BM submits that channels 2, 43, 47, 49, and 56 are not being used in its area.

343. Warwick Communications, Inc. Petition. Warwick Communications, Inc. (WCI) the licensee of a new low power station, K22EH, channel 22 in Longview, Texas,<sup>137</sup> seeks reconsideration of the allotment of the DTV channel 22 allotment for KETK-TV, channel 56 in Jacksonville, Texas. It states that K22EH currently operates on channel 22 and would have to cease its operations if DTV channel 22 were activated at Jacksonville. WCI indicates that it has invested substantial sums in building, promoting and branding its LPTV outlet, which serves as the primary United Paramount Network (UPN) outlet in the Longview-Tylers-Jacksonville

---

<sup>136</sup> Univision's other specific requests, including a request to preserve the channel of its low power operation in Fort Worth, Texas or provide an alternate channel for its operations, are addressed below in the alphabetical section.

<sup>137</sup> WCI also filed a separate petition with regard to its full power station KFXK-TV, which we address below in the alphabetical section.

DMA. It states that moving to another channel would undermine its efforts to offer new network competition and provide programming of interest to minorities and local audiences. WCI states that assigning channel 57 to KETK-TV for paired DTV use would not create short-spacing problems, nor would it cause displacement of any licensed LPTV service.

344. Max Television of Tyler L.P. (Max Television), the licensee of KETK-TV, channel 56 in Jacksonville, Texas, opposes WCI's request. It argues that LPTV stations are secondary to full service DTV operations. It states that, if assigned channel 57 for DTV service, it would have to bear the considerable and needless expense of a second move. Max Television also argues that KETK-TV's operation on DTV channel 22 is predicted to cause no interference and would receive interference to only 3 sq. km of its predicted service area, while operation on DTV channel 57 would create 41 sq. km of interference to other stations and would receive interference in 337 sq. km of the predicted service area.

345. As indicated above, using the software developed by CBA, we have modified the DTV Table in a limited number of cases to avoid co-channel conflicts with one or more low power stations. We have also provided a number of rule changes for low power stations to minimize the impact of DTV on their operations and to provide them with additional flexibility to find replacement channels when necessary. At the same time, we have reaffirmed our initial decision with regard to their secondary allocation status. Low power stations and TV translators remain secondary to both the analog and the digital operations of full service broadcasters. Apart from these adjustments, we have decided to generally decline to grant requests by low power interests to change the DTV allotments of full power stations in order to protect their low power operations. For these reasons, we are denying the preceding requests that we modify the DTV Table in order to protect existing LPTV and TV translator stations. With respect to those petitions that suggest that a full power station may be moved to an alternative channel, we note that, if spectrum is indeed available, the petitioner may be able to switch its own low power operations to an adequate replacement channel, given the rule changes we have adopted, or it may attempt to obtain the agreement of the licensee of the full power station to request such a channel change. With regard to Trinity's proposed substitution of DTV channel 35 for channel 47 for use by station KIII-TV, to which KIII conditionally consented, we have determined that this change would cause interference to other full power stations and should not be granted.

346. Several petitions were filed by low power interests seeking to protect their operations which raised certain additional issues. We address these petitions below.

347. KXII-TV Broadcasters, Inc. Petition. KXII-TV Broadcasters, Inc. (KXII) is the licensee of KXII-TV, channel 12 in Sherman, Texas, and TV translator K02EQ in Paris, Texas. KXII's full power station in Sherman was provided DTV channel 20 in the DTV Table. KXII states that Paris is a "white area" that is unserved by any over-the-air television stations but has been served by KXII-TV/K02EQ for the last 27 years. KXII requests that we allot channel 36 to Paris for DTV service and issue KXII an "Initial Modification License for DTV," thereby modifying the license of K02EQ to specify operation on channel 36. In its opposition, Fox submits that providing DTV channel 36 to KXII for its Paris translator could cause interference

to Fox's KDFW-TV channel 35 DTV operations in Dallas, Texas. Fox also questions the advisability of using a potential full service DTV allotment for low power DTV operations, in light of the shortage of spectrum for DTV in much of the country.

348. In the Sixth Report and Order, we retained the secondary status of low power stations, and we indicated that the provision of DTV service by low power stations would be addressed in a future proceeding. To the extent that KXII requests that a new allotment be established for Paris, such a request is beyond the scope of this proceeding. To the extent that KXII requests that we allot its low power station, KO2EQ, a DTV channel at this time, we have decided that only certain full service broadcasters are eligible for an initial DTV channel. KXII has presented no information that was not considered previously. Accordingly, KXII's petition for reconsideration is denied.

349. Los Cerezos Television Company Petition. Los Cerezos Television Company (Los Cerezos), the licensee of LPTV station WMDO-LP, channel 48 in Washington, D.C., states that its station is the only source of local television news and information programming for Washington's Spanish-speaking community. Los Cerezos expresses the concern that because WRC-TV, Washington, D.C. has committed to begin broadcasting on DTV channel 48 by November 1998, WMDO-LP will be among the first LPTV stations to be displaced. Los Cerezos submits that its consulting engineers have determined that no alternative channels are available for WMDO-LP's use under the current rules. Los Cerezos submits that giving DTV channel 69 to WRC-TV would allow WMDO-LP to remain on channel 48.

350. As stated above, we do not believe that requiring a full service broadcaster to change channels, and in this case incur the added expense of a second move, in order to protect a secondary low power operation is appropriate. Furthermore, as stated previously, we find that increased use of channels 60-69 would be inconsistent with our statutory mandate under Section 337(a) of the Balanced Budget Act of 1997. We recognize the situation faced by Los Cerezos with regard to its LPTV station WMDO-LP. We note that we have amended our rules to provide displaced LPTV stations with a preference over pending low power applications, and that this change may provide Los Cerezos with some relief.

351. Pappas Stations Partnership and Valley Public Television, Inc. Petition. Pappas Stations Partnership (Pappas) is the licensee of LPTV station K40DQ, channel 40 in Tulare, California. Valley Public Television, Inc. (Valley) is the licensee of KVPT-TV, channel 18 in Fresno, California. In a joint filing, Pappas and Valley note that KVPT-TV has been assigned DTV channel 40. They state that K40DQ's proximity to KVPT-TV would force the LPTV station to cease operation if KVPT-TV activates DTV operation on channel 40. Valley has consented to use channel 32 for KVPT-TV's DTV service instead of channel 40, so that K40DQ could continue to operate on channel 40. Pappas and Valley ask us to allot DTV channel 32 or another channel for KVPT-TV instead of channel 40. They submit that the MSTV/NAB list of alternative DTV channels indicates that the change would not displace any licensed or authorized LPTV or TV translator facilities and would not affect the DTV facilities of KVPT-TV or other stations. They did not submit a supplemental filing.

352. Our analysis indicates that use of channel 32 by KVPT-TV would impact and cause additional interference to other broadcast stations. We also find that there are no available channels that would not impact other full or low power broadcast stations. Pappas and Valley's request that the DTV allotment for KVPT-TV be changed is therefore denied.

353. Siete Grande Television, Inc. Petition. Siete Grande Television, Inc. (SGT), the licensee of WSTE-TV in Ponce, Puerto Rico, requests that service area replication take into account WSTE-TV's unique licensed facilities, which include four licensed booster stations. SGT indicates that, because of the extraordinary terrain in WSTE-TV's service area, it was granted authority to operate with multiple transmitters. It states that WSTE-TV's current four-site multi-transmitter booster facilities operate from Arecibo, Mayaguez, San Juan, and Ponce, Puerto Rico. SGT submits that the Sixth Report and Order did not consider this unique technical setup for overcoming terrain factors and that the DTV Table therefore fails to address signal replication of WSTE-TV's full coverage area, which is achieved through use of booster facilities. It requests that we take into account WSTE-TV's multi-site transmitting system in service area matching calculations. It states that, in doing so, we should assign replicating DTV channels to each of the station's boosters and that this could be accomplished because of the terrain shielding and additional losses that characterize the area.

354. As indicated above, we are not protecting or assigning initial DTV channels to secondary low power stations, including TV translator and booster stations. We recognize that the mountainous terrain characteristics of this region of Puerto Rico does provide some terrain shielding of television signals. At the same time, we believe that these unique terrain characteristics should permit broadcasters, such as SGI, to implement future booster stations, if desired. We believe that coverage enhancements through the use of secondary low power stations are best addressed through local engineering solutions rather than as part of the DTV allotment process. We therefore are denying SGI's request.

355. Skinner Broadcasting, Inc. Petition and Supplemental Filing. Skinner Broadcasting, Inc. (Skinner), the licensee of TV translator W27AQ, channel 27 in Ft. Lauderdale, Florida, states that W27AQ will be displaced by the channel 27 and 28 DTV allotments for WXEL-TV and WFLX-TV in West Palm Beach. It states that an engineering study of the Ft. Lauderdale area indicates that, under the channel configuration adopted in the Sixth Report and Order, no other channel is available for W27AQ, and that even the alternative DTV Table prepared by CBA could not provide displacement relief. As a remedy, Skinner suggests that we either award Skinner a Class-A FM radio license to serve as a substitute for taking channel 27 or compensate Skinner financially. In its supplemental filing, Skinner offers a third option, a "seniority" policy whereby the last licensed LPTV or TV translator facility in the market would be the first to be displaced or lose its channel to make room for full power DTV channels. Skinner asks that we amend the DTV Table to substitute channel 41 for channel 28 and channel 58 for channel 27, so that W27AQ is spared while two other LPTV stations licensed later (W41BF and W58BU), are displaced.

356. South Florida Public Telecommunications, Inc. (SFPT), the licensee of public

television station WXEL-TV in West Palm Beach, Florida, states that the licensee of a secondary facility cannot claim unfair treatment when it is displaced to accommodate a full service station. SFPT objects to either the change of its assigned DTV channel 27 to a less desirable channel or the imposition of a requirement to reimburse Skinner.

357. For the reasons stated above, Skinner's request that we modify the DTV Table to protect its low power operation is denied. We also deny Skinner's request that it receive a Class A FM radio station license or compensation. Skinner's request for a Class A FM radio station license is beyond the scope of this proceeding. Moreover, as indicated above, we are not requiring full service broadcasters to compensate low power stations for displacement. With regard to Skinner's request that we adopt a seniority policy for LPTV displacement, we find that such a request conflicts with the secondary status of low power television and would not result in providing the best channels for full service DTV operations.

358. Venture Technologies Group Petition and Supplemental Filing. Venture Technologies Group (VenTech) states that the DTV Table should have accounted for an NTSC station on channel 38 in Santa Barbara, California and therefore channel 38 should not have been used for DTV anywhere in Southern California. VenTech submits a new DTV plan for the southern California region. It claims that this plan is consistent with allotments for Mexico and would allow for the preservation of LPTV stations operating in the Southern California area on UHF channel 38. VenTech therefore requests that we reconsider the DTV Table for Southern California and instead use its proposed Table submitted in response to the Sixth Further Notice of Proposed Rule Making. VenTech's supplemental filing includes a new proposal for the Southern California-Baja, Mexico area. It submits that this proposal allows for greater spectrum efficiency. It further states that channel 38 would no longer be used for DTV in the Los Angeles region, thus preserving a viewable signal on NTSC channel 38 in Santa Barbara and five LPTV stations operating on channel 38 in Southern California.

359. A number of parties representing full power stations in the southern California area oppose VenTech's requests. Channel 51, for example, states that VenTech proposal would result in it being assigned a channel not in the core spectrum. Similarly, the Los Angeles Unified School District (LAUSD) opposes VenTech's proposal that LAUSD use channel 69 rather than channel 41 for its DTV operation. LAUSD states that channel 69 is virtually unusable. It states that channel 69 is not in the core spectrum and that use of channel 69 would require eliminating interference to adjacent land mobile users a virtually impossible task. Golden Orange also opposes VenTech's filings. It states that VenTech's proposed DTV allocations for its station KDOC-TV are markedly less satisfactory than the DTV channel assigned by the Commission.

360. As indicated above, except in certain limited circumstances, we are not making changes in the DTV Table to protect secondary low power operations. We note that VenTech's proposed changes would impact other full power stations. Accordingly, we are denying VenTech's request that we adopt its proposed changes for the southern California region. With regard to VenTech's comment that the DTV Table should have taken the use of channel 38 into

account in Santa Barbara, as noted above in response to Coast TV's petition, the DTV table did take into account the use of channel 38 in Santa Barbara.

D. Petitions Addressing Service Replication and Maximization Issues

361. A number of petitions for reconsideration focus on issues of service replication and maximization. Below, we address the requests of several petitioners that primarily seek increases in the power level and/or antenna height provided for their stations in the DTV Table of Allotments.

362. Malrite Communications Group, Inc. Petition. Malrite Communications Group, Inc. (Malrite) argues that we provided unacceptably low power to certain DTV channels placed on VHF frequencies, with the concomitant result that the affected facilities will serve less than 95% of their existing service areas. Malrite states that the assignment of DTV channel 10 at a power level of 3.5 kW to its WOIO-TV in Shaker Heights, Ohio will allow only 90% replication of the station's existing grade B coverage. It suggests that we grant WOIO-TV interim experimental operating authority so that it may assess the appropriateness of its channel assignment. Malrite did not submit a supplemental filing.

363. Harish Puri Supplemental Filing. Harish Puri (Puri) is the permittee of WJNW-TV, NTSC channel 57 in Janesville, Wisconsin. Puri was allotted DTV channel 32 with 75.9 kW ERP. In a supplemental filing, Puri states that the power level provided WJNW-TV will not be sufficient to replicate its authorized Grade B contour.<sup>138</sup> Puri's attached engineering statement seeks the same power (363.9 kW) as WISC-TV, the largest powered station in the Madison DMA. The engineering statement indicates that, while additional interference may result, the amount appears to fall within the acceptable range of the DTV allotment process.

364. Sullivan Broadcasting Company Supplemental Filing. In a supplemental filing, Sullivan Broadcasting Company (Sullivan) states its concerns with regard to the UHF power disparity and requests that we increase the DTV power and/or antenna height for a number of its stations.<sup>139</sup> It requests the following specific DTV power increases: for WTAT-TV in Charleston, South Carolina, from 315.1 kW to at least 403 kW; for WXLV-TV, in Winston-Salem, North Carolina, from 143.2 kW to 316 kW; for WMSN-TV in Madison, Wisconsin, from 3.2 kW to at least 8.2 kW; for WUTV-TV in Buffalo, New York, from 50 kW to 500 kW; for WUHF-TV, in Rochester, New York, from 50 kW to 500 kW; for WZTV-TV in Nashville, Tennessee, from 116.6 kW to 500 kW; and for WVAH-TV in Charleston, West Virginia, from 68.3 kW to at least 460 kW. Sullivan attaches technical exhibits to show that such increases would comport with its *de minimis* interference standard and would cause little or no additional

---

<sup>138</sup> Puri was a party to the "Joint Petition of Licensees" filed by Entravision Communications Company, L.L.C., Paxson Communications Corporation, Univision Communications, Inc., *et al.*

<sup>139</sup> Sullivan did not file an individual petition but was party to a joint filing addressing general DTV allotment matters.

interference to other stations and to provide technical details on proposed directional antenna patterns. It requests that we act on these requests in a time frame that will enable the formulation of a business plan appropriate to each station.

365. Weigel Broadcasting Co. Petition. Weigel Broadcasting Co. (Weigel) is the licensee of WCI-TV, channel 26 in Chicago, Illinois, and WDJT.-TV, channel 58 in Milwaukee, Wisconsin. Weigel states that the power levels assigned for the DTV operations of its stations (67.5 kW ERP for WCI-TV and 133.7 kW ERP for WDJT.-TV) are substantially below the levels assigned to all of the other stations in the Chicago and Milwaukee markets. It states that we have correctly recognized that DTV power levels must be set not only to achieve replication, but also to ensure "that all stations are able to provide DTV service competitively within their respective markets." Weigel states that, unless its stations are allowed higher power levels, they will be competitively disadvantaged. It requests that we assign WCI-TV a maximum ERP of 208.7 kW and WDJT.-TV a maximum ERP of 1,000 kW, the power levels assigned to competing stations in their respective markets. If this is not possible, Weigel requests power levels that are roughly comparable to the power levels awarded to their competitors.

366. Western New York Public Broadcasting Association Petition and Supplemental Filing. Western New York Public Broadcasting Association (WNYPBA) is the licensee of two noncommercial public television stations in Buffalo, New York: WNED-TV, NTSC channel 17, and WNEQ-TV, NTSC channel 23. WNYPBA submits that because several other Buffalo television stations have been allotted DTV facilities with a power of 1 MW, its stations must be authorized to maximize their DTV facilities. It states that our plan allows WNED-TV to replicate its coverage but grants other, larger stations in the market substantial coverage increases and thus aggravates an already noncompetitive situation. WNYPBA submits that increases in coverage for its stations do not appear feasible under our DTV interference rules, as an increase in power for either one would cause interference to and receive interference from other stations. WNYPBA makes an additional request that we confirm the protection of its pending application for a new noncommercial station on reserved channel 46 in Jamestown, New York with an in-core DTV allotment.

367. Westwind Communications, L.L.C. Petition. Westwind Communications, L.L.C. (Westwind) is the licensee of KBAK-TV, channel 29 in Bakersfield, California. KBAK-TV was allotted DTV channel 33, and its power output was limited to 67.1 kW. In its petition, Westwind seeks a power increase to 68.1 kW, stating that this change would not cause any additional interference. Alternatively, it requests a different DTV channel, if such a channel proves superior to channel 33. Westwind also states that the Commission's methodology assumes a directional antenna pattern without regard to whether the NTSC signal is directional and without regard to the azimuth pattern limits of the licensee's NTSC signal. Thus, according to Westwind, a nondirectional antenna may not be usable at the full power authorized by the Commission, and the FCC's assumed DTV pattern may differ from the NTSC pattern, producing a disparity in service area. In the case of KBAK-TV, Westwind states that a directional antenna that meets the presently authorized NTSC azimuth pattern limits, instead of the assumed replication pattern, could be operated at 68.1 kW, rather than the 67.1 kW authorized in the

DTV Table. Westwind did not submit a supplemental filing.

368. As indicated above, we have addressed the issue of UHF power in a manner in which we believe will lessen the disparity between existing UHF and VHF stations with DTV that will operate on UHF frequencies. As we have also noted, service replication of DTV allotments is based on the facilities licensed as of April 3, 1997. We find that the power levels and antenna heights provided in the DTV Table of Allotments for the stations at issue -- Malrite's WOIO-TV; Puri's WJNW-TV; Sullivan's WTAT-TV, WXLV-TV, WMSN-TV, WUTV-TV, WUHF-TV, WZTV-TV, and WVAH-TV; Weigel's WCI-TV and WDJT-TV; WNYPBA's WNED-TV and WNEQ-TV; and Westwind's KBAK-TV -- are appropriate for service replication of their respective licensed facilities as of April 3, 1997. With regard to the requests of Malrite, Puri, Sullivan, Weigel, WNYPBA and Westwind for power increases for their stations, we are not providing for maximization of DTV station facilities at this time. We have adopted specific provisions in our rules to allow licensees to request an increase in their DTV facilities and believe that considering maximization requests in this proceeding would unfairly disadvantage parties that have expected such maximization requests to be dealt with under the rules. Accordingly, the petitions for reconsideration filed by Malrite, Puri, Sullivan, Weigel, and WNYPBA<sup>140</sup> are denied. To the extent that Malrite wishes to obtain an experimental license for DTV operation, it may request an experimental license under our rules for such operation. In addition, these petitioners may submit requests for increased power and/or antenna height for their stations under the procedures for maximization of DTV facilities contained in the rules.

369. Several parties filed petitions in which they requested power increases and/or recognition, for service replication purposes, of applications for modification of their NTSC stations that were pending as of April 3, 1997. Below, we summarize and respond to many of these petitions.

370. Educational Television Association of Metropolitan Cleveland Petition and Supplemental Filing. Educational Television Association of Metropolitan Cleveland (ETAMC) is the licensee of WVIZ-TV, NTSC channel 25 in Cleveland, Ohio. ETAMC requests reconsideration of the channel 26 DTV assignment made to WVIZ-TV to take into account its proposed modification application. It states that on January 1, 1996, it filed a minor modification to increase the power to 5 MW. It states that its preliminary review of the DTV Table indicates that this modification was not considered in the assignment of DTV channel 26 to WVIZ-TV. It states that WVIZ-TV was allotted a maximum power of 64 kW, while other stations in its market were allotted 897 and 1000 kW. It further states that it appears that increasing power on its assigned DTV channel may be precluded because of interference. It therefore requests that the engineering database be corrected to include the technical parameters proposed to increase power of WVIZ-TV and that additional time be provided to supplement the

---

140 In response to WNYPBA's additional request, we note that one of the goals in developing the DTV allotments was to provide for replication of stations' existing service areas, and that because the channel 46 allotment in Jamestown was in the freeze area, it was not protected.



petition and offer alternative solutions. In its supplemental filing, ETAMC submits that a study conducted by its engineering consultant finds that increasing the power of the ETAMC's DTV operation would create new interference. It also indicates that a study was conducted regarding a possible alternative channel, but that this study could not be completed because of uncertainties about protection requirements for Canadian facilities.

371. Family Stations of New Jersey, Inc. Petition. Family Stations of New Jersey, Inc. (Family), the licensee of WFME-TV, channel 66 in West Milford, New Jersey, objects to the 50 kW limit on power specified for its channel 29 DTV allotment. Family states that it has a pending valid application for a minor modification of a construction permit to increase its effective radiated power to 5,000 kW. It argues that it has a reasonable expectation to duplicate this 5,000 kW facility with its DTV service and that the 50 kW facility adopted in the Sixth Report and Order is not a reasonable substitute. It states that it has spent many years and a great deal of money to overcome obstacles in order to activate WFME-TV, including severe limitations on acceptable antenna site locations in northern New Jersey. Family states that when it originally constructed the station, it constructed a modest facility so that it could begin operating as soon as it found an acceptable antenna site. It submits that its intention from the beginning was to modify WFME-TV's facilities and operate the station at full power as originally approved by the Commission. Family states that it filed its application for modification of its construction permit on June 12, 1996, almost nine months before we released the Sixth Report and Order. It argues that had we acted on its application with the time frame we typically act on such applications, its upgraded facilities would have been protected when we adopted the DTV Table. Family therefore requests that we modify the DTV Table in such a way that will permit it to operate WFME-TV in a manner that duplicates the service proposed in its pending application. It did not submit a supplemental filing.

372. Pegasus Communication Corporation Petition and Supplemental Filing. Pegasus Communication Corporation (Pegasus) states that its station WILF-TV in Williamsport, Pennsylvania was allotted DTV channel 29 and its station WWLF-TV in Hazleton, Pennsylvania was allotted DTV channel 9. It states, however, that both allotments were made to the transmitter sites specified in its current licenses and not to the sites specified in its granted construction permits (CPs). It notes that these CP applications were on file since 1996 and that grant of these applications were delayed beyond the April 3, 1997, cut-off date through no fault of its own. The CPs were granted on April 21, 1997. In its supplemental filing, Pegasus again requests that the new sites for its stations be considered for DTV purposes. It submits an engineering statement that indicates that the DTV coverage for WWLF-TV would be significantly greater than from the site specified in the Sixth Report and Order. Pegasus states that, in granting the construction permit, we determined that operation from the new site, even though it required waivers of the spacing rules with respect to other stations, was in the public interest because it would allow service to a substantially greater population and equalized WWLF-TV with other network affiliates in the Wilkes-Barre/Scranton market. It argues that for these reasons, the reference coordinates for DTV allotment for this station should be at the new site, which is the same site to be used by other stations in that market, rather than the more isolated site up to now used by WWLF-TV.

373. Sainte Partners II, L.P. Petition. Sainte Partners II, L.P. (Sainte II) is the licensee of three television stations in California: KBVU-TV in Eureka; KCVU-TV in Paradise; and KNSO-TV in Merced. Sainte II states that KBVU-TV's assigned power level of 50 kW should be reconsidered because of adjacent channel considerations and because it does not take into account its pending application to increase NTSC power. With regard to KCVU-TV, Sainte II states that its pending application to increase power to 5,000 kW was not taken into account. With regard to KNSO-TV, it states that it supports the comments of Sinclair Broadcasting and seeks maximum DTV power for this station. Finally, Sainte II proposes liberal opportunities for it and other licensees to supplement their comments after OET Bulletin No. 69 is released. Sainte II did not submit a supplemental filing.

374. Mike Simons Petition. Mike Simons (Simons) is the licensee of KTAQ-TV, channel 47 in Greenville, Texas. In his petition, Simons seeks reconsideration of the HAAT and power authorized for KTAQ-TV's channel 46 DTV allotment. He argues that the station has had a modification application seeking an increase in antenna height and transmitter power pending since July 10, 1996. He states that this application was later amended on December 13, 1996 to reduce the requested height to accommodate the FAA. He states that assuming normal processing that his application should have been granted in time to be considered in the Sixth Report and Order. Simons argues that he should not be penalized due to FCC processing delays. Simons requests that he be allocated an increase in power and HAAT to reflect his pending modification application, or, at a minimum, that he be allocated DTV facilities which would provide a reasonable degree of market competitiveness.

375. T.V. 17 Unlimited, Inc. Petition and Supplemental Filing. T.V. 17 Unlimited, Inc. (TV 17), the licensee of WXMI-TV, channel 17 in Grand Rapids, Michigan, submits that in July, 1996, it filed an application for a construction permit to increase the station's ERP to 5,000 kW, which was accepted for filing on August 26, 1996 but remains pending. TV 17 states the power and antenna parameters for the channel 19 DTV allotment provided for WXMI-TV are based on the station's existing facilities, rather than the improved station for which it sought authority almost a year ago. It requests that, given the clear, long-standing intention of WXMI-TV to improve its service, we reconsider our decision and provide for replication of the station's service area as proposed on the modification application.

376. WMTW Holdings Inc. Petition and Supplemental Filing. WMTW Holdings Inc. (WMTW) is the licensee of WMTW-TV, NTSC channel 8 in Poland Springs, Maine, which received DTV channel 46. WMTW requests reconsideration to the extent that the DTV Table did not incorporate its proposed facility modifications. It states that on April 22, 1996, it filed a minor modification to relocate its transmitter from Mount Washington, New Hampshire to a site closer to Portland, Maine. On June 5, 1997, it amended its application to specify an alternative site. WMTW states that its pending modification application filed prior to July 25, 1996 should have been taken into account in the DTV allotment process. It also argues that factors beyond its control militate in favor of designating an alternative site for construction of WMTW-TV's digital transmission facilities. It asserts that aesthetic and environmental concerns would impede its ability to build at its existing site. In addition, it states that Dartmouth has sold adjoining

properties and has granted an option to purchase the parcel, on which WMTW-TV's current facilities are located, to the State of Maine in 2010. In its supplemental filing, WMTW submits that a recent technical study conducted by Denny & Associates, in accordance with the methods of OET Bulletin No. 69, indicates that the new transmitter site may marginally increase the area that might receive interference from WMTW-TV's DTV operations on channel 46 but will reduce the total number of people projected to experience interference by almost 50,000. It urges us to revise WMTW-TV's facilities specifications to reflect the pending application that would relocate WMTW-TV's NTSC channel 8 service to a new site at 43° 50' 33" N and 70° 45' 22" W.

377. As we have indicated above, service replication of DTV allotments is based on the facilities licensed as of April 3, 1997, the date of adoption of the Sixth Report and Order. Requests for modification of NTSC facilities that were pending on that date are not taken into account in the DTV allotment process for the purposes of service replication. We find that the power level and antenna height provided for the stations of ETAMC, Family, Pegasus, Sainte II, Simon, TV 17, and WMTW in the DTV Table of Allotments are appropriate for replication of the service of their licensed facilities as of that date. With regard to Sainte II's KBVU-TV and Simon's KTAQ-TV, we note that these stations were each assigned a maximum power of 50 kW. In both cases, 50 kW is the minimum power assigned to UHF stations, and not the power required for service replication; thus, the DTV service area and population served by KBVU-TV and KTAQ-TV in fact may be significantly greater than their existing NTSC service area and population served.<sup>141</sup> As noted previously, we have adopted specific provisions in our rules to allow licensees to seek to increase or alter their DTV facilities and believe that considering maximization and modification requests in this proceeding would unfairly disadvantage parties that have expected such requests to be dealt with under the rules. Accordingly, we are making no changes in the DTV allotments with regard to the stations of ETAMC, Family, Pegasus, Sainte II, Simon, TV 17, and WMTW, and their petitions for reconsideration are denied. We note, however, that ETAMC, Family, Pegasus, Sainte II, Simon, TV 17, and WMTW may submit future requests regarding power, antenna height, or transmitter site changes under the procedures for maximization and modification of DTV facilities contained in the rules. In addition, while we are denying WMTW's request that we modify its DTV allotment to incorporate its pending modification, we note that its proposed changes may be acceptable under the *de minimis* interference standard adopted herein.

378. Some petitions primarily sought to change the transmitter sites of their stations. We address three below.

379. HSN, Inc. Petition. HSN, Inc. (HSNI) requests that the DTV Table be modified to

---

<sup>141</sup> For example, MSTV estimates that KBVU's service area will increase from 5,900 to 13,429 sq. km. and that its population reach will increase from 86,000 to 98,000. See MSTV's *Ex Parte* Filing, Exhibit 1B, FCC DTV Table with Corrected Coverage and Interference Figures. Similarly, MSTV estimates that KTAQ's service area will increase from 2579 to 11031 sq. km. and that the population served by that station will increase from 70,000 to 847,000 people. *Id.*

permit adequate service by its station, WHSP-TV, NTSC channel 65 in Vineland, New Jersey. It states that this station operates about 30 miles outside of Philadelphia and will be impacted by interference to a much greater extent than the Commission has estimated. It asserts that, although we assumed the use of directional reception equipment, it is likely that most viewers will use nondirectional equipment. It suggests three ways to resolve this problem: 1) reduce power for the adjacent channel 64 DTV operation of WPVI-TV, Philadelphia, Pennsylvania from 1000 kW to 50-100 kW; 2) change the DTV channel allotment for WPVI-TV; or 3) permit the relocation of WHSP-TV to the Philadelphia antenna farm. HSNI states that the third option would resolve its interference concerns without a reduction in power or change in channels. It states that, to move to the antenna farm, WHSP-TV would require a waiver of the NTSC short-spacing limitations with respect to WTVE-TV, Reading, Pennsylvania. HSNI states that its engineering analysis indicates that WHSP-TV should be able to demonstrate that such short-spaced operation, using a directional antenna and taking into account terrain shielding, would not cause interference to WTVE-TV. HSNI states that this reallocation would resolve interference to WHSP-TV's DTV channel 66 allotment from WCAU-TV's adjacent DTV channel 67 operation.

380. Jacksonville Educators Broadcasting, Inc. Petition and Supplemental Filing. Jacksonville Educators Broadcasting, Inc. (JEB) is the licensee of noncommercial educational WTCE-TV, NTSC channel 21 in Fort Pierce, Florida. JEB states that it cannot co-locate its assigned DTV channel 38 with its existing NTSC operation and will have to construct or locate another tower. JEB states that, due to environmental concerns, its DTV tower site would have to be located significantly south of its existing transmitter site. Because use of DTV channel 38 in such a location would raise spacing concerns with WTVX-TV, channel 34 in Ft. Pierce, JEB proposes that it be allotted DTV channel 57, which will afford WTCE-TV the flexibility of locating its DTV operation to the south. JEB submits an engineering statement indicating that channel 57 is the best alternative based on MSTV's list and would meet the no interference increase standard.

381. Pensacola Junior College Petition and Supplemental Filing. Pensacola Junior College (PJC), the licensee of WSRE-TV, channel 23 in Pensacola, Florida, requests that we modify the reference coordinates for its channel 31 DTV allotment. PJC states that it is currently working with another station in the market, WEAR-TV, to relocate their NTSC operation to a new, taller tower. It states that in order to make operation on DTV channel 31 possible from the relocated WSRE-TV transmitter site, a change in reference coordinates is needed. PJC submits that WSRE-TV's coverage is currently constrained by a relatively low antenna HAAT on a 149 m (500 foot) tower. It states that FAA considerations limit WSRE-TV's ability to increase its tower height at any location within the 5 km limit. PJC states that it has been working to locate a better site that would accommodate a tower providing antenna height of the maximum 2000 feet and that it appears that a move of about 20 miles would be required to do so. It states that it cannot now specify the exact coordinates at which the new tower would be located and that it will strive to complete its engineering studies and locate a suitable site at the earliest possible time. PJC states that at that time it will amend its petition to specify the coordinates for its DTV allotment. PJC submits that, if necessary, based on mileage

separation and interference considerations, it may also propose power limitations on channel 31 or a change in its DTV channel.

382. In its supplemental filing, PJC submits that it has now identified 30° 35' 18" N and 87° 33' 16" W as the approximate location of its new tower. It states that these coordinates are for reference only, as this is the current location of the tower of WJTC-TV in Pensacola, and the actual location of the new tower will be nearby, but not precisely at the WJTC-TV site. PJC submits that a study by its engineering consultants indicate that WSRE-TV could operate with the DTV channel 31 allotment at the requested site with a power of 316 kW ERP using a directional antenna mounted at 614 m. above mean sea level (AMSL). PJC states that this study indicates that this operation would provide significant coverage improvements for WSRE-TV and would not cause interference to Grade B service of the only relevant co-channel station, WGBC-TV in Meridian, Mississippi.

383. We have reviewed the specific requests made by HSNI, Jacksonville, and PJC. With regard to HSNI's requested modifications to WPVI-TV's DTV allotment, as indicated above, we are not granting requests to modify DTV allotments unless the licensee of the affected station concurs with the requested change. We have no indication that the licensee of WPVI-TV has agreed to the changes suggested by HSNI. We therefore are denying HSNI's requests to modify the channel or power of WPVI-TV's DTV allotment. Because our analysis indicates that WTCE-TV's use of channel 57 would impact other stations, we are denying Jacksonville's requested channel allotment change. With regard to the petitioners' requests to change their transmitter sites and/or increase power and antenna height, as indicated above, we find that such requests should be handled under the DTV allotment modification procedures provided for in the rules and not as a matter for reconsideration. We further note that, as presented by HSNI, the requested change to relocate WHSP-TV to the Philadelphia antenna farm would entail a number of detailed engineering solutions that are best dealt with as part of a specific application or a regional solution requiring agreement from any affected stations. Accordingly, we are denying the requests made by HSNI, Jacksonville, and PJC.

384. Certain other petitioners requested more power and alternative channels for their stations. We address many of these petitions below.

385. Channel 51 of San Diego, Inc. Petition. Channel 51 of San Diego, Inc. (Channel 51) is the licensee of KUSI-TV in San Diego. In its petition, Channel 51 requests an increase in its DTV power limit to maintain the present competitive balance among stations in San Diego. It also urges the Commission to inaugurate negotiations with Mexico looking towards the possible use of channel 17 for DTV purposes at San Diego. KUSI has been allotted DTV channel 18, and Channel 51 submits that its limited power, combined with the interference it would receive, would prevent it from replicating its present service and would result in KUSI serving significantly less population than its competitors. It states that KUSI would serve only 86.5% of its present area, while all other stations would serve between 95.7% and 100% of their current service areas. Channel 51 states that operation on DTV channel 17 would offer a solution. It notes that this allotment is precluded by an agreement with Mexico but speculates

that Mexico might agree to this change, as it has apparently not authorized any operation on channel 17. Channel 51 states that, if the Commission could successfully negotiate such a change, all domestic stations involved in this narrow matter would benefit.

386. We note that channel 17 is now allotted to Mexico for use in Ensenada, only 60 miles from San Diego. Thus, the channel is not available for use in San Diego. As indicated above, to the extent that Channel 51 wishes to increase the power of its station, it should ask to do so under the appropriate rule provisions. Accordingly, Channel 51's request that the DTV allotment for KUSI-TV be changed, and its power limit increased, is denied.

387. Family Stations, Inc. Petition. Family Stations, Inc. (FSI), the licensee of KFTL-TV, channel 64 in Stockton, CA, expresses concern that we have provided KFTL-TV with DTV channel 62 and only 60.7 kW ERP. It argues that, given the terrain conditions in the Stockton area, a power limit of 60.7 kW will reduce KFTL-TV's direct service area to dozens of communities and several hundred thousand people. It requests that we allot DTV channel 63 for KFTL-TV, with 144 kW ERP, as proposed in the Sixth Further Notice.

388. We find that the DTV channel and power level assigned to FSI's KFTL-TV are appropriate for service replication. We estimate that use of DTV channel 64 at 60.7 kW of power would provide 99.9% service area replication based on the technical parameters contained in the Sixth Report and Order. In addition, we estimate that this channel and power level would provide KFTL with a significant increase in its DTV service area over its existing Grade B NTSC service during the transition area. In this regard, we estimate that KFTL's service would increase to 27,091 square kilometers and 6,636,000 people versus 25,391 square kilometers and 5,855,000 people. To the extent that FSI desires a further improvement in its DTV facilities, we have indicated that such requests are to be addressed under our rules and regulations for maximization of DTV facilities. Accordingly, we are denying FSI's request that we change the channel and power of its DTV allotment.

389. Holston Valley Broadcasting Corporation Petition. Holston Valley Broadcasting Corporation (HVBC), the licensee of WKPT-TV, channel 19 in Kingsport, Tennessee, requests reconsideration of the channel 27 DTV allotment and 51.6 kW power level provided for WKPT-TV. HVBC expresses concern that the power level will prove insufficient to penetrate buildings and will provide an inferior signal, even where outdoor antennas are employed, and that the allotment is adjacent to the channel 28 DTV allotment provided for another station in its market, WCYB-TV in Bristol, Virginia. It indicates that WCYB-TV was allowed 1,000 kW for its DTV station, almost 20 times the power allowed to WKPT-TV. HVBC states that the nearly 13 dB difference between these signals would result in interference even if the stations were co-located, and that they are, in fact, two miles apart.

390. HVBC submits that one solution to this problem would be to find an alternate channel for either WCYB-TV or WKPT-TV, and it notes several possibilities based on the MSTV/NAB list of alternative DTV channel assignments. As a practical matter, it observes that there are problems with all of the potential substitute channels it has identified and asks that

WKPT-TV be allowed to operate on channel 27 at a power level comparable to WCYB-TV on channel 28. It states that, if WKPT-TV were afforded 1000 kW of power on channel 27, or even half that amount, the disparity between the signal strengths of the two DTV operations would be minimized. It further submits that it has had on file with the FCC since July 11, 1996, an application to increase WKPT-TV's NTSC power to 3,890 kW, the maximum power allowed at its antenna height. HVBC states that this higher NTSC power should be a mitigating factor in favor of a decision to allow WKPT-TV a higher power level on DTV channel 27. It also states that, in the event that WKPT-TV is given a higher DTV power level, it pledges to work with Appalachian Broadcasting Corporation, the licensee of WCTB-TV, toward the possibility of sharing a common transmitting site and even a common antenna. HVBC did not submit a supplemental filing.

391. Service replication is based on facilities licensed as of the date of the Sixth Report and Order. We find that the 51.6 kW power level assigned to WKPT-TV comports with our service replication criteria. In fact, we note that MSTV in its *ex parte* filing estimates that HVBC's WKPT-TV would be able to serve a greater population with its DTV channel than it currently serves with its analog operations. We do not believe that it is appropriate to consider HVBC's request to increase power for its station WKPT-TV at this time. We have adopted rules and procedures for power increases and maximization requests. We find that such requests are more appropriately considered under these procedures rather than in the context of a petition for reconsideration. Accordingly, HVBC's petition is denied.

392. Sonshine Family TV Corp. Petition. Sonshine Family TV Corp. (Sonshine), the licensee of WBPH-TV, channel 60 in Bethlehem, Pennsylvania, alternatively requests either that the authorized ERP for the channel 59 DTV allotment provided for WBPH-TV be increased from 64.5 kW to at least 150 kW or that the DTV channel assigned to WBAL-TV, Baltimore, Maryland be changed from channel 59. Sonshine notes that WBAL-TV was allowed to operate its DTV service with an ERP of 1,000 kW and that Bethlehem and Baltimore are located only about 100 miles apart. It is concerned that, with the existing difference in power levels, there will be significant interference to WBPH-TV's DTV service. Sonshine further argues that the DTV power provided for WBPH-TV is inconsistent with our goal of providing for replication of NTSC service areas. It states that on August 12, 1996, we granted its application to increase the power and antenna HAAT of WBPH-TV's NTSC service to 2,950 kW and 294 m., respectively. It states that, while this grant was initially conditioned on the outcome of the DTV Allotment Table, we developed the Table using a database that included all modification applications granted as of April 3, 1997. Sonshine submits that it appears that the table did not reflect WBPH-TV's new operating parameters. Sonshine did not submit a supplemental filing.

393. Hearst, the licensee of WBAL-TV in Baltimore, Maryland, indicates that it would not oppose an alternative DTV channel, so long as the new channel improved coverage for WBAL-TV. Hearst states that it would prefer an allotment in the core spectrum rather than channel 59, but it notes that, due to extreme congestion along the eastern seaboard, the likelihood of finding an alternative DTV channel allotment is probably greater for WBPH-TV. Hearst opposes Sonshine's request to increase WBPH-TV's DTV power to 150 kW and states

that this would increase interference to 68,000 persons and 25,000 households within WBAL-TV's coverage area. For this reason, it requests that Sonshine's petition be denied.

394. We find that the power level and antenna height associated with the DTV allotment for Sonshine's WBPH-TV is appropriate and is based on WBPH-TV's new operating parameters. Accordingly, Sonshine's request for a further increase in power and antenna height is denied. Sonshine may, however, submit a separate request for increased power and/or antenna height under the procedures for maximization of DTV facilities contained in the rules. With regard to Sonshine's request to change the DTV channel assigned to WBAL-TV in Baltimore, Sonshine has not identified an alternative channel for that station that would provide it with comparable coverage. As Hearst notes, given the congestion along the eastern seaboard, the prospects of finding an alternative DTV channel allotment are probably greater for Sonshine's WBPH-TV than for Hearst's WBAL-TV. In the absence of any specific request for a different channel by Sonshine for itself or WBAL-TV or information that the DTV channel provided to its station did not adequately comport with our DTV allotment principles and goals, we continue to believe that the DTV channel 59 allotment provided for WBPH-TV is appropriate. Accordingly, Sonshine's petition is denied.

395. Speer Communications Holdings I Limited Partnership Petition and Supplemental Filing. In its petition, Speer Communications Holdings I Limited Partnership (Speer), the licensee of WNAB-TV, channel 58 in Nashville, Tennessee, argues that the DTV allotments provided for Nashville stations, including the channel 23 allotment provided for WNAB-TV, would seriously disrupt both analog and digital television service for a large number of viewers in that market. It noted that WNAB-TV would be required to operate its DTV service on channel 23 with a directional antenna and power limited to 50.3 kW ERP. Speer states that it will be competing against four other UHF stations, all with power levels greater than 100 kW and including two that would be allowed to broadcast at 1 MW.

396. In its supplemental filing, Speer submits that its engineering study shows that any attempt to increase the DTV power of WNAB-TV above 50.3 kW would result in new or increased interference to at least five existing NTSC or proposed DTV stations, and that, because of the nature of the required directional antenna pattern, it may even be necessary for Speer to broadcast at less than 50.3 kW. It states that these constraints make it impossible for WNAB-TV to provide the level of service to Nashville areas viewers that Speer currently provides and to compete on an equal technical footing with other stations in its market. Speer indicates that it conducted a search for a different channel that would alleviate these problems and could find no workable alternative within the core spectrum.

397. Speer also notes that we have assigned DTV channel 56 to Landmark Television of Tennessee, Inc, the licensee of WTVF-TV in Nashville. Speer states that this assignment, which is located only 39 km from WNAB-TV's transmitter, does not comply with the separation requirements for second-adjacent channels. It is concerned that WTVF-TV's DTV signal will cause interference to WNAB-TV's service throughout most of Nashville, its city of license. Speer submits that the Nashville DTV allotments would not only prevent WNAB-TV from



becoming a strong competitor in DTV, but also threaten its existing service. Speer asks that we thoroughly reconsider the DTV Table for Nashville area to address its concerns.

398. We find that the DTV allotment plan developed for the Nashville area is appropriate and consistent with our policies. As stated above, the powers and antenna heights assigned to the Nashville stations are based on replicating the existing television service based on the facilities licensed as of April 3, 1997. We find that the power level and antenna height provided for Speer's WNAB-TV are correct. The fact that other Nashville stations are authorized higher power merely reflects that those stations' existing service areas are currently larger than that of WNAB-TV. With regard to Speer's concern about second-adjacent channel interference, we find no reason to re-examine such situations and any interference from such operation is already reflected in our service and interference estimates. As indicated in the Sixth Report and Order, Speer's WNAB-TV would receive less than 4% interference to its existing NTSC service. We therefore are denying Speer's requests to increase the power and antenna height of its WNAB-TV or revise the DTV channel allotments for the Nashville area.

399. WRNN-TV Associates L.P. Petition. WRNN-TV Associates L.P. (WRNN) is the licensee of WRNN-TV, channel 62 in Kingston, New York. In its petition, WRNN requests that we substitute DTV channel 48 for WRNN-TV's channel 21 DTV allotment and increase its power on that channel to ensure service replication. WRNN argues that we estimate that channel 21 will allow the station to replicate 99% of its existing service area, but it believes that the DTV service area will actually be significantly smaller. It argues that, even if the ERP authorized for its DTV service on channel 48 is increased, use of DTV channel 21 still would result in additional interference. WRNN did not submit a supplemental filing.

400. We have reviewed WRNN's request, and our analysis indicates that operation of WRNN-TV's DTV service on channel 48 would cause additional interference to other stations. We further note that MSTV in its *ex parte* filing confirms our estimate that WRNN's channel 21 DTV allotment would provide a very high degree of service replication, as well as a substantial increase in coverage and population served for its station. We therefore are denying WRNN's request that its DTV allotment be changed to channel 48. To the extent that WRNN desires a further improvement in its DTV facilities, we have indicated that such requests are to be addressed under our rules and regulations for maximization of DTV facilities.

#### E. Petitions Requesting Unspecified Alternative Channels

401. A number of petitioners question the adequacy of the DTV channels allocated to their stations but do not request specific alternative channels or supply any information to show that the DTV channels provided to their stations do not adequately comport with our DTV allotment principles and goals. In the discussion below, we first address these petitions. We next address certain petitions that fail to request specific alternative channels and also raise additional, related concerns. Because we have already adequately addressed the issue of the petitioners' initial lack of access to OET Bulletin 69, we do not discuss that topic here. However, we note that several of the petitioners who raised this issue nevertheless did not avail

themselves of the opportunity to submit a supplemental filing after the publication of OET Bulletin No. 69.

402. GOCOM Licensees Petition. GOCOM Licensees (GOCOM), the licensee of several broadcast stations, states that it is unable to make a meaningful assessment of whether the DTV channels allocated to its stations are the most desirable for DTV; whether other channels may be available which may better serve the public without adversely affecting other DTV channels; or whether the channels allocated provide for the possibility of an increase in power. It states that it has no recourse but to seek reconsideration pending release of OET Bulletin No. 69. GOCOM did not file a supplemental filing requesting any specific changes.

403. Golden Empire Television Corporation Petition. Golden Empire Television Corporation (GETC), the licensee of KHSL-TV, channel 12 in Chico, California. GETC supports the petition submitted by MSTV and other broadcasters. It states that it wishes to make us aware of the special circumstances relating to KHSL-TV and to maintain the ability to seek improvement of the DTV Table. GETC states that the programs of KHSL-TV are extended to remote areas, from the far side of Mount Shasta to Paradise, California through a network of two dozen translator stations, 16 of which are licensed to itself. GETC states that it is important to achieve the optimum set of channel allotments and procedures for preservation of translator service rather than push toward implementation of a less than optimal plan. It submits that we have taken a number of steps reasonably calculated to minimize the impact on translators such as those which rebroadcast KHSL-TV. GETC also expresses concern about the DTV channel 43 allotment provided for KHSL-TV, as compared to those of other stations in the Chico-Redding market, which are between channels 14-20. It states that, without OET Bulletin No. 69, it is unable to ascertain whether allotment of a different DTV channel to Chico is feasible and would serve the public interest. It states that it reserves the right to supplement its petition within 30 days of the release of OET Bulletin No. 69. GETC did not submit a supplemental filing requesting any specific channel change.

404. KMVT Television Inc. Petition. KMVT Television Inc. (KMVT) is the licensee of KMVT-TV, channel 11 in Twin Falls, Idaho. KMVT states that it is unable to assess the impact of DTV without OET Bulletin No. 69 and requests that it be given the opportunity to file for reconsideration after the Commission releases the technical guidelines and criteria it used to develop the DTV Table. KMVT did not submit a supplemental filing.

405. Mission Broadcasting I, Inc., and Mission Broadcasting II, Inc. Petition. Mission Broadcasting I, Inc., and Mission Broadcasting II, Inc. (Mission) are the licensees of WUXP-TV, channel 30 in Nashville, Tennessee and WUPN-TV, channel 48 in Greensboro, North Carolina. Mission states that it has been unable to thoroughly assess the DTV Table and its specific channel assignments without OET Bulletin No. 69. It requests the opportunity to seek reconsideration after the Commission makes public the technical guidelines and criteria used to develop the Table. Mission did not submit a supplemental filing.

406. Oklahoma Educational Television Authority Petition. Oklahoma Educational

Television Authority (OETA) is the licensee of five noncommercial television stations in the state of Oklahoma. OETA requests that the time for parties to seek reconsideration of the DTV Table of Allotments be postponed until after the Commission publishes OET Bulletin No. 69. It notes that, from the outset, the staff of the Commission has been able to complete the staggering task of establishing rules and a DTV Allotment Table that will enable the entire television industry to have a smooth and efficient transition to DTV. OETA also recognizes the flexibility for public stations. It states that because it makes extensive use of TV translators to fill in gaps in coverage, it is concerned that its new allocations will allow it to continue its comprehensive coverage through the use of transmitters and translators. OETA did not file a supplemental filing or request any specific channel changes.

407. Pappas Stations Partnership Petition. Pappas Stations Partnership (Pappas), the licensee of KPTM-TV, channel 42 in Omaha, Nebraska, requests that we change the allotment for KPTM-TV from channel 43 to a non-adjacent DTV channel. Pappas states that, while it understands that adjacent channel NTSC and DTV allotments were made in a limited number of cases to the same entity, such allotments raise the specter of DTV-to-NTSC interference and would preclude the operation of its NTSC and DTV services from a single antenna combiner. Pappas expresses a preference for operating its NTSC and DTV channels from a combined antenna, in order to reduce the capital costs. While Pappas indicated that it could not recommend an alternative, it expressed confidence that we could find a DTV channel for KPTM-TV that is not first adjacent to its existing channel 42, given the relatively low density of channel use in the Great Plains region. Pappas did not submit a supplemental filing.

408. Puerto Rico Public Broadcasting Corporation Petition. Puerto Rico Public Broadcasting Corporation (PRPBC), the licensee of noncommercial station WIPR-TV, channel 6, in San Juan, Puerto Rico, expresses concern that it cannot verify the efficacy of the channel 55 DTV allotment provided for WIPR-TV and is thus unable to determine which equipment and technical configuration will be suitable on that channel. It is also concerned about potential interference from the DTV operation of WLII-TV, Caguas-San Juan, Puerto Rico on first adjacent channel 56. PRPBC submits that because Puerto Rico is isolated and its DTV allotments do not impact continental DTV allotments, implementation of DTV there can be delayed without significant impact on the overall DTV allotment plan. It asks that we extend the date for DTV implementation in Puerto Rico until information and materials identified by its consulting engineer in an attached appendix are available. The appendix states that OET Bulletin No. 69 is needed to assess whether WIPR-TV's service area is adequately protected and replicated, and asserts that we have not provided information on how the DTV allotments were made. The engineering statement states that, without such information, no meaningful technical evaluations can be performed. PRPBC did not submit a supplemental filing.

409. Rural California Broadcasting Corporation Petition. Rural California Broadcasting Corporation (RCB) is the licensee of noncommercial station KRCB-TV, channel 22, in Cotati, California. In its petition, RCB states that KRCB-TV currently operates with 67.7 kW ERP, a power significantly below the maximum permissible for its channel. RCB is concerned that the DTV channel 23 allotment that was provided for KRCB-TV is short-spaced to an adjacent DTV

channel 24 allotment provided for KGO-TV in San Francisco. It indicates that KRCB-TV's transmitter site is only 67.6 km from the site where KGO-TV's DTV transmitter will operate. RCB also notes that the channel 62 noncommercial NTSC allotment for Santa Rosa, California was deleted and that no noncommercial DTV allotment was provided in replacement. It submits that, as the only noncommercial station in the area north of San Francisco, KRGB-TV may need to increase its DTV power in the future to provide service to the entire area. It is concerned that, since KRCB-TV's DTV channel is short-spaced to an adjacent channel DTV station, the provision of universal noncommercial service to the area may be jeopardized. RCB submits that it lacks a solution but is studying this problem and awaiting actions by the Broadcasters' Caucus and the release of OET Bulletin No. 69. RCB did not submit a supplemental filing.

410. Smith Broadcasting of Santa Barbara Limited Partnership Petition. Smith Broadcasting of Santa Barbara Limited Partnership (Smith), the licensee of KEYT-TV, channel 3 in Santa Barbara, California, states that, in operating on its allotted DTV channel 27, KEYT-TV would lose approximately 8.4% of the population (7.7% of the geographic area) it now serves and that this coverage loss is exacerbated by the comparative superiority of the DTV allotments its competitors have received. Smith notes that KEYT-TV's competitors, KSBY-TV in San Luis Obispo and KCOY-TV in Santa Maria, lose 3.4% and gain 1.9% population coverage, respectively. It argues that, while service replication is one of the bedrock principles of the DTV Table, we failed to develop a DTV allotment for KEYT-TV that would protect viewers' ability to receive the station. Smith states that, without OET Bulletin No. 69, it has been unable to either fully analyze the engineering principles that resulted in our reducing KEYT-TV's coverage or formulate any solutions. It requests that we develop a DTV allotment for KEYT-TV that would better replicate the station's existing NTSC coverage. Smith did not submit a supplemental filing.

411. We have reviewed the above requests and continue to find that the allotments provided for these stations are appropriate and that there are no alternative in-core channels that would improve their service without affecting other stations.<sup>142</sup> Furthermore, in the absence of any specific requests for the use of different channels by GOCOM, GETC, KMTV, Mission, OETA, Pappas, PRPBC, Smith, and RCB, or of any information that the DTV channels provided to their stations do not adequately comport with our DTV allotment principles and goals, we will maintain the channels allotted for these petitioners' stations in the Sixth Report and Order.<sup>143</sup> Accordingly, we are making no changes in the DTV allotments provided for their

---

<sup>142</sup> With regard to Smith's comparison of its station's DTV allotment to those of its competitors, while we agree that service replication is a fundamental principle of the DTV Table, it must also be balanced against our other goals and policies, such as full accommodation, minimal interference, and spectrum reclamation. Therefore, full service replication is not always possible. Nonetheless, we believe that the channel 27 allotment for KEYT-TV is more than sufficient to provide for competitive DTV service. Although Smith asserts that two competitors were given superior DTV channels, we note that the DTV channel 27 allotment for KEYT-TV would have coverage far superior both in terms of population and of area to the coverage of either of its competitors.

<sup>143</sup> In fact, we believe that the DTV channel 23 allotment provided for RBC in the Sixth Report and Order will provide for more than adequate replication of the present service of its station during the DTV transition period.

stations, and we are denying their petitions for reconsideration.

F. Petitions Objecting to Allotment of Channels Outside the Core Spectrum

412. A number of petitioners with DTV allotments on channels that were out of the range of the core spectrum discussed in the Sixth Report and Order on channels 2-6 or 47-51 that could potentially have been out of the core request that we modify their allotments provide them with channels in the core. We address these petitions below.

413. We first address three requests for reallocation to channels within the core spectrum that are moot, as the channels originally assigned to those petitioners now fall within the redefined core spectrum, and a petition objecting to an out-of-core DTV channel allotment on the claim that the channel at issue would not be acceptable even if we redefined the core spectrum to include it.

414. Clear Channel Television Licensees, Inc. Petition and Supplemental Filing. Clear Channel Television Licensees, Inc. (CCTL), requests that its DTV channel 4 allotment for WXXA-TV, channel 23, in Albany, New York, be changed to DTV channel 7, as channel 4 may be ultimately outside the DTV core spectrum.

415. University of New Hampshire d/b/a New Hampshire Public Television Petition and Supplemental Filing. University of New Hampshire d/b/a New Hampshire Public Television (NHPT) is the licensee of public stations WEKW-TV, Keene, New Hampshire; WENH-TV, Durham, New Hampshire; and WLED-TV, Littleton, New Hampshire. NHPT is concerned about the problems posed by its multiple out-of-core DTV allotments. It states that the initial DTV allotments for the NHPT stations include channel 57 for WENH-TV, channel 49 for WEKW-TV, and channel 48 for WLED-TV. It states that while the initial allotments were made using channel 2 to 51, the Commission has not made a decision whether the ultimate core spectrum will encompass channels 2-46 or 7-51. It states that, if channels 2-46 are designated as the core, then all three of its allotments will fall outside the core. In its supplemental filing, NHPT expresses concern that both the NTSC and DTV channels for WLED-TV and WEKW-TV will be outside the core spectrum if channels 2-46 are selected as the core. NHPT also requests that we determine the core spectrum at an early date. In addition, it requests that WLED-TV's DTV allotment be changed to channel 40 and WEKW-TV's DTV allotment be changed to channel 14, if channels 2-46 become the core.

416. West Tennessee Public Television Council, Inc. Petition and Supplemental Filing.

---

We note that RBC's KRCB-TV was assigned a maximum power of 50 kW. This power is the minimum power assigned to UHF stations, not the power required for service replication by KRCB-TV; thus, KRCB's DTV service area and population served is likely to be significantly greater than its existing NTSC service area and population served. For example, MSTV estimates that KRCB's service area will increase from 8,719 to 18,957 sq. km., and its population reach will increase from 1,014,000 to 2,477,000. See MSTV's *Ex Parte* Filing, Exhibit 1B, FCC DTV Table with Corrected Coverage and Interference Figures.

West Tennessee Public Television Council, Inc. (WTPTC), the licensee of WLJT-TV, channel 11 in Lexington, TN, states that it was assigned channel 47 for its DTV service, a potentially out-of-core channel. WTPTC states that the expense for DTV conversion will place great strains on its current budget and the prospect for moving twice is virtually impossible for a small rural public station. It asks, consistent with the requests of AAPTS and PBS, that we assign public television stations paired allotments between channels 7-46 to ensure that their DTV assignments will be within the core spectrum. WTPTC also requests that WLJT-TV be assigned a DTV allotment within the core and that the Commission provide it additional time after the release of OET Bulletin No. 69 to supplement its petition.

417. As indicated above, we are expanding the DTV core spectrum to include channels 2-51. We find that both CCTL's request to substitute DTV channel 7 for its channel 4 allotment for WXXA-TV in Albany, New York, and WTPTC's request to assign a new channel to WLJT-TV for its DTV service, are now moot, as the original DTV channel allotments for those stations now fall within the core spectrum. Our expansion of the DTV core spectrum also mitigates NHPT's stated concerns with regard to its channel allotments, as the DTV allotments for NHPT's WEKW-TV and WLED-TV and the existing NTSC channel for WENH-TV are within the core spectrum. Thus, no DTV allotment changes are needed to provide stations WEKW-TV and WLED-TV with in-core allotments, and NHPT's request is moot. As stated above, we generally are not granting requests by broadcasters to change their DTV channel allotments based solely on the fact that the broadcaster received an out-of-core allotment. Therefore, we deny WTPTC's petition to the extent that it requests that all public television stations receive DTV channel allotments within the core spectrum.

418. Guy Gannett Communications Petition and Supplemental Filing. Guy Gannett Communications (Guy Gannett), the licensee of seven television stations, states that it strongly supports our objectives in this proceeding. However, it submits that at least one of its stations, WTWC-TV, channel 40 in Tallahassee, Florida, may face unacceptable interference and reductions in service area for its DTV service. Guy Gannett is concerned that WTWC-TV's DTV channel 2 allotment may be unacceptable due to noise concerns and its possible location outside the core spectrum. In its supplemental filing, Guy Gannett states that further analysis confirms that channel 2 is not a viable DTV assignment for WTWC-TV. It argues that television transmissions on channel 2 often experience interference, and that this interference, coupled with the low ERP specified and the generally poor performance of commercially-available receive antennas, makes it unlikely that WTWC-TV could achieve the necessary service replication. Guy Gannett does not request a specific DTV channel.

419. Channel 2 now falls within the DTV core spectrum. As indicated above, we have no engineering data showing that channels 2-6 will be unsuitable for the provision of DTV service. On the contrary, as noted by several petitioners seeking inclusion of channels 2-6 in the DTV core spectrum, the testing and analysis completed to date indicate that the propagation characteristics of these channels provide superior coverage capabilities for DTV service and that the potential for interference is minimal.

420. Some licensees filed petitions protesting their allotment of DTV channels outside the core spectrum. We first address those petitions that primarily object to out-of-core allotments but do not request specific alternative channels.

421. University of North Carolina Center for Public Television Petition. The University of North Carolina Center for Public Television (UNCTV) requests that it be permitted to file a technical supplement after the release of OET Bulletin No. 69. It states that WUNC-TV, Chapel Hill, North Carolina and WUNE-TV, Linville, North Carolina were assigned DTV channels 59 and 54, respectively, which are outside the core spectrum. In addition, it states that two new proposed stations are on channels outside the core spectrum. It states that the assignment of non-core channels exposes public stations to greater risks. UNCTV requests that the Commission make every effort to provide public television stations with assignments between channels 7-46, confirm protection of pending applications, and provide substitute channels for these stations within the core spectrum. UNCTV did not submit a separate supplemental filing requesting specific DTV channels.<sup>144</sup>

422. Educational Broadcasting Corporation Petition. Educational Broadcasting Corporation (EBC), the licensee of noncommercial educational station WNET-TV, NTSC channel 13 in Newark, New Jersey, submits that WNET-TV will be burdened by the assignment of DTV channel 61. It states that the additional costs and diminished service area associated with this channel make it particularly inappropriate for a public broadcaster. First, EBC submits it will face higher costs as the channel 61 allotment will require WNET-TV to build one DTV facility on channel 61 and then a second station on its existing channel 13 at the end of the transition period. It states that these costs are onerous for a noncommercial licensee and that New York City presents costly obstacles to new television construction. Second, EBC states that, as long as it operates on channel 61, WNET-TV will run up extremely high electricity bills, due to the inefficiency of high-frequency transmitters. Finally, it submits that the chance of obtaining compensation from new users of channels 60-69 for expenses incurred in relocating DTV operations to core spectrum will be remote, since the channels users are expected to be public safety agencies rather than commercial entities. EBC argues that channel 61 would provide for replication of only 94.3% of WNET-TV's existing coverage area. It states that portions of its service area on Long Island will receive NTSC interference from co-channel WTIC-TV, Hartford, Connecticut and, secondarily, from co-channel WTGI-TV, Wilmington, Delaware and WACI-TV, channel 62, Atlantic City, New Jersey. EBC submits that the two co-channel stations are significantly short-spaced to WNET-TV. It argues that any adjustments made to the DTV Table for the Northeast Corridor should incorporate a preference for allotting core DTV channels to noncommercial educational broadcasters and a penalty for assigning channels 60-69 to such broadcasters, particularly in cases like WNET-TV's, where co-location with commercial broadcasters makes non-interference-causing channel changes feasible. EBC did not submit a supplemental filing.

---

144 As noted above, UNCTV did submit an opposition to the petition of TBN. UNCTV opposed TBN's proposal that its stations be given DTV allotments in channels 60 to 69.

423. As stated above, we are not granting requests by broadcasters to change their DTV allotments based solely on the fact that the broadcaster received a DTV allotment out of the core spectrum. In developing the DTV Table of Allotments, we attempted to provide all eligible broadcasters with an initial DTV allotment within channels 2 to 51. However, this was not always possible because of the limited availability of spectrum and the need to accommodate and replicate all existing facilities with minimal interference. Although we recognize that the implementation of DTV will present a number of unique challenges for noncommercial educational broadcasters, we have stated that in considering changes in the DTV allotments, including changes to eliminate out-of-core channels, the interests of service replication and minimizing interference generally supersede other station characteristics, such as whether the station is a noncommercial operation. We agree that allotment of out-of-core channels and, in particular, channels 60-69, should be avoided for DTV; to the extent possible, we have attempted to do so in the development of the DTV Table of Allotments. Unfortunately, it was not possible to avoid the allotment of these channels and still provide all broadcasters with a DTV allotment, particularly in congested regions, such as the northeastern United States. We find that the channel 61 allotment provided for EBC's WNET-TV, the channel 59 allotment provided for UNCTV's WUNC-TV, and the channel 54 allotment provided for UNCTV's WUNE-TV are fully consistent with our DTV allotment policies and accordingly deny those petitioners' requests for new allotments.

424. KVIE, Inc. Petition and Supplemental Filing. KVIE, Inc., the licensee of noncommercial educational television station KVIE-TV, channel 6 in Sacramento, California, seeks reconsideration of the allotment of DTV channel 53 to KVIE-TV. It states that requiring KVIE-TV to use channel 53 would result in additional electrical power costs of between \$200,000 and \$250,000 per year and would require it to change channels after the transition period. It urges that the Commission work with it to find an acceptable substitute channel and indicates that it is working diligently with its engineering consulting firm to identify an alternative channel that would avoid interference to other NTSC and DTV allotments and stations. In its supplemental filing, KVIE states that, despite analysis by its engineering consultant, no other channel within the core spectrum could be identified for use, even at relatively lower power and antenna height combinations. KVIE therefore limits its request on reconsideration to urging that we consider favorably the future substitution of a core channel for KVIE-TV's DTV channel 53 if such a channel becomes available for use at Sacramento. In this regard, KVIE-TV states that, as a result of its participation in this proceeding, it would expect to have a priority over parties not participating here.

425. As stated above, to the extent that in-core channels become available during the transition, we will attempt to further reduce the number of out-of-core allotments, such as the channel 53 allotment to KVIE-TV, in any future amendments to the DTV Table. We do not find, however, it is appropriate to give such parties priority in our allotment process merely because they participated in this proceeding. We note that other matters, such as providing first service to a community, are also important, and we believe that, in making future DTV allotments available, all relevant issues should be considered.



426. Other licensees filed petitions objecting to their receipt of out-of-core DTV allotments and suggesting specific alternative channels. We discuss several of them below.

427. Buck Owens Production Company, Inc. Petition. Buck Owens Production Company, Inc. (Owens), licensee of KUZZ-TV, channel 45, Bakersfield, California, asks that we change its DTV allotment from channel 55 to channel 31. It states that the MSTV study indicates that channel 31 can be allotted to KUZZ-TV without affecting other allotments, and it notes that allotment of an in-core channel would avoid the expense and viewer confusion of a second move to a new channel. Owens did not submit a supplemental filing.

428. Central Michigan University Petition and Supplemental Filing. Central Michigan University (CMU) is the licensee of four educational TV stations serving central and northern Michigan; three of its stations were allocated out-of-core DTV channels. CMU states that, as a noncommercial education licensee and a public institution, it will suffer substantial hardship from the allotment of out-of-core channels. In its supplemental filing, CMU requests that the following channels be substituted for those currently provided for its stations: for WCMU-TV, DTV channel 42 instead of 56; for WCML-TV, DTV channel 23 instead of 57; and for WCMV-TV, DTV channel 10 instead of 58. CMU requests that we determine appropriate power levels for its stations on these proposed DTV allotments. CMU states that its consulting engineers believe that WCMU-TV could operate on channel 42 with power and antenna height that would replicate and improve the station's existing coverage. It further states that WCML-TV could operate on DTV channel 23 with maximum power and height combinations that would essentially replicate and improve this station's existing coverage while meeting applicable DTV spacing requirements. CMU also states WCMV-TV could operate on DTV channel 10 with power and antenna height that would replicate the station's existing coverage with less interference than that resulting from the use of channel 58.<sup>145</sup>

429. Citadel Communications Co., Ltd. Petition. Citadel Communications Co., Ltd. (Citadel), the licensee of WHBF-TV, channel 4 in Rock Island, Illinois, WOI-TV, channel 5 in Ames, Iowa, and other television stations, submits that, regardless of whether we adopt a core spectrum plan that includes channels 2-6, we should assign channel 29 for DTV service by both WHBF-TV and WOI-TV in lieu of their respective assigned DTV channels 58 and 59. During the transition, Citadel expects to employ DTV transmission facilities based on replication of its stations' current NTSC Grade A contours. It submits a technical study that indicates that WHBF-TV and WOI-TV could use channel 29 for DTV service within their Grade A contours without causing or receiving objectionable interference. Citadel states that, because it does not intend to construct maximum power interim DTV facilities (that at full power would cause and receive interference on channel 29), there would be no advantage in assigning out-of-core channels for these stations. Citadel did not submit a supplemental filing.

---

<sup>145</sup> According to CMU, the channel 10 DTV allotment for WCMV-TV would, however, be short-spaced 46 km to the NTSC co-channel service of WILX-TV in Onondaga, MI; short-spaced 38.6 km to the NTSC co-channel service of WWUP-TV in Sault Ste. Marie, MI; and short-spaced 7.4 km to the NTSC co-channel service of WMVS-TV in Milwaukee, WI.

430. Community Television of Southern California Petition and Supplemental Filing. Community Television of Southern California (KCET) is the licensee of non-commercial educational television station channel 28, KCET-TV in Los Angeles, California, which was assigned DTV channel 59. In its petition, KCET states that, as a non-commercial station, it can ill afford to assume the expense of constructing two digital facilities and observes that an in-core allotment would spare it this expense. It states that, in view of the Commission's recognition of the financial plight of public broadcasting, it would have expected the Commission to try to assign core channels to public stations. KCET notes that several other DTV allotments for Los Angeles stations that operate from Mount Wilson received DTV channels in the core. It states that, while it recognizes that revisiting the DTV Table is not feasible, minor adjustments might be possible. It argues that it has been unable to make alternative suggestions for KCET-TV without OET Bulletin No. 69.

431. In its supplemental filing, KCET states that its consulting engineers have identified channel 45 as an in-core DTV channel on which KCET-TV could operate in substantial compliance with the DTV allotment rules. It states, however, that a DTV channel 45 allotment for KCET-TV would be short spaced to a vacant co-channel NTSC allotment in Tijuana, Mexico, under the mileage separation requirements established in the Memorandum of Understanding between the U.S. and Canada on DTV allotments (MOU). It urges us to institute negotiations with Mexican authorities to permit KCET-TV to operate on DTV channel 45. It states that the short spacing could be resolved by deleting the channel 45 allotment from Tijuana, substituting another channel in Tijuana for channel 45, or waiving the separation requirements of the MOU. KCET also submits that allotting DTV channel 45 to KCET-TV would make DTV channel 59 available for use in Los Angeles by another station. It states that its attached engineering statement shows that KCET-TV could operate from the station's current transmitter site at the Mount Wilson antenna farm and provide the same service that it would using channel 59. KCET states that operation on channel 45 would cause substantially less interference to other stations than would operation on channel 59.

432. Gilmore Broadcasting Corporation Petition and Supplemental Filing. Gilmore Broadcasting Corporation (Gilmore) is the licensee of WEHT-TV, channel 25 in Evansville, Indiana. In its petition, Gilmore submits that, without OET Bulletin No. 69, it does not have sufficient information to estimate the replication that can be achieved with the channel 59 DTV allotment provided for WEHT-TV or to determine whether that channel will afford it sufficient flexibility to remain competitive. Gilmore states that a channel within the core DTV spectrum would be more desirable than channel 59 because an in-core channel would allow it to avoid business planning uncertainties, substantial additional equipment expenses, and viewer confusion. Gilmore also states that it is concerned that operation on DTV channel 59 may present problems with adjacent DTV channel 58, which has been allotted to WFIE-TV, Evansville, Indiana. Gilmore requests that we provide WEHT-TV and WFIE-TV with DTV allotments that do not present this adjacent channel problem. In its supplemental filing, Gilmore proposes that its DTV allotment be modified to channel 26. It asserts that this allotment is consistent with the FCC's rules and policies, would reduce interference, and would permit an easier DTV transition for its station. While it states that this change would still present a first

adjacent channel situation, it notes that the two facilities will be owned by the same licensee, the antennas will be on the same tower, and the transmitters will be in the same building. Gilmore states that these features confer a greater ability to correct problems and thus decrease the risks associated with such situations. Gilmore provides an engineering statement that indicates that use of channel 25 will meet almost all spacing requirements, with the following exceptions: (1) the DTV-to-NTSC spacing to WLCN-TV, channel 19 is 50.4 km rather than less than 24.1 km or greater than 80.5 km (but WLCN-TV operates at less than full facilities); and (2) the DTV-to-DTV spacing to channel 26, WLKY-TV, Louisville, Kentucky, is 162 km rather than 217.3 km.

433. Cosmos, the licensee of WFIE-TV, NTSC channel 14 in Evansville, Indiana, opposes Gilmore's petition to the extent that it proposes a change in the DTV Table for WFIE-TV to address concerns about adjacent channel interference. Cosmos states that it is unfair to ask it to shoulder the burden solely due to the request of another broadcaster. It states that it would not oppose GBC's attempt to modify its allotment or take other action but it does object to GBC's burden-shifting approach. It also notes that the DTV Allotments for WFIE-TV and GBC's WEHT-TV are in compliance with the Commission's rules, which would suggest that the interference problem may not exist.

434. Jet Broadcasting Co. Petition. Jet Broadcasting Co. (Jet), the licensee of WJET-TV, channel 24 in Erie, Pennsylvania, seeks reconsideration of its assignment of out-of-core DTV channel 58. It states that channel 58 would require a new wave guide and could not be used on its existing tower, while in-core channel 42 would permit it to finalize its DTV plans. Jet states that WJET-TV cannot follow through with its plan to be the first to operate DTV in Erie unless it is allocated a frequency it can use at its present site. In its supplemental filing, Jet indicates that channel 42 appears to be consistent with our allotment guidelines and should be available for allotment to Erie. It states that, while operation on this channel could have the potential for minor interference to co-channel DTV operation of WPTT-TV in Pittsburgh, Pennsylvania and co-channel NTSC operation of Canadian station, CDCO-TV3 in Sarnia, Ontario, WJET-TV could use lower power or a directional antenna to protect these stations. Jet states that, under the separation standards in the rules, a channel 42 DTV allotment at Erie would be short spaced 16.2 km to WPTT-TV and 31.2 km to CKCO-TV3.

435. As stated above, we generally are not granting requests by broadcasters to change their DTV allotments based solely on the fact that the broadcaster received a DTV allotment out of the core spectrum. In developing the DTV Table of Allotments, we attempted to provide all eligible broadcasters with an initial DTV allotment within channels 2 to 51.<sup>146</sup> However, this was not always possible, because of the limited availability of spectrum and the need to accommodate and replicate all existing facilities with minimal interference, and was particularly difficult to accomplish in congested areas. To facilitate second channel transitions, we stated that we will allow broadcasters with DTV channels out of the core spectrum to switch their DTV

---

146 Our allotment software includes a penalty for the use of out-of-core DTV allotments and such channels were used only where the use of such channels would outweigh the penalties for interference and service replication.

service to their existing in-core NTSC channels at the end of the transition, if they so desire. Thus, with regard to Owens' station, we note that KUZZ-TV now operates on channel 45 and can shift its DTV operations to this channel at the end of the transition period. Although we recognize that the implementation of DTV will present a number of unique challenges for noncommercial educational broadcasters, we have stated that, in considering changes in the DTV allotments, including changes to eliminate out-of-core channels, the interests of service replication and minimizing interference generally supersede other station characteristics, such as whether the station is a noncommercial operation. In addition, we stated that we would consider alternative allotment/assignment plans that are the result of negotiations and coordination among broadcasters and other parties within their communities. We stated, however, that such changes must have the agreement of all affected broadcasters and must not result in additional interference to other stations or allotments. Our analysis indicates that the use of specific alternative DTV channels suggested by Owens, Citadel, CMU, Gilmore, and Jet would result in increased interference to other stations and that none of these petitioners have obtained the concurrence of the affected stations.<sup>147</sup> Similarly, our analysis indicates that allotment of channel 45 for KCET-TV's DTV service would impact other stations and would not be consistent with required protection of Mexican operations and allotments. Accordingly, the requests of Owens, Citadel, CMU, Gilmore, Jet, and KCET for changes to their stations' DTV allotments are denied.

436. Certain petitioners emphasized that both their NTSC channels and their DTV channels fell outside the core spectrum. We address these petitions below.

437. Central Virginia Educational Telecommunications Corp. Petition and Supplemental Filing. The Central Virginia Educational Telecommunications Corp. (CVETC), licensee of noncommercial station WNVC-TV, channel 56 in Fairfax, Virginia. In its petition, CVETC requests that we change WNVC-TV's DTV allotment from channel 57 to channel 36. CVETC submits this request as a supplement to the petition for reconsideration submitted by AAPTS. It states that it was a party to the petition filed by AAPTS, which noted the status of WNVC-TV as a public television station with both its NTSC and DTV channels outside of the DTV core. CVETC is concerned that having to build two new DTV facilities will create substantial financial difficulties for a noncommercial educational station with a limited operating budget. CVETC submits that assignment of DTV channel 36 to WNVC-TV will provide it with virtually full replication of its current channel 56 service area.<sup>148</sup> CVETC argues that its requested

---

<sup>147</sup> We note that Citadel indicates that it will operate at reduced facilities and therefore will not cause or receive objectionable interference. However, the analysis contained in its engineering statement assumes that its stations would be operating at the maximum power permitted for DTV stations in the UHF band and shows that some interference would be caused to other stations. Accordingly, at this time, we are denying Citadel's petition. If Citadel desires to resubmit its request, it should specify reduced powers and antenna heights for its stations and provide supporting engineering data that such reduced operation would not affect other stations, or show that any affected station has concurred with such interference.

<sup>148</sup> To accommodate this change, CVETC asks that the DTV allotment for WVVI-TV, channel 66 in Manassas, Virginia be changed from channel 36 to channel 43. As indicated above, we have made several channel changes

changes can be made in accordance with our rules, will meet the DTV spacing requirements at the stations' licensed NTSC transmitter sites, and will benefit the public by providing two stations, including one public station, with in-core DTV channels. It states that substitution of channel 36 for channel 57 will eliminate potential first adjacent channel incompatibility with WNVC-TV's NTSC channel 56, which might otherwise require WNVC-TV to invest in transmission isolation systems to preserve an acceptable signal.

438. WGBH Educational Foundation Petition. WGBH Educational Foundation (WGBH) is the licensee of noncommercial educational station WGBY-TV, channel 57 in Springfield, Massachusetts. WGBH states that, as a noncommercial station with both its NTSC and DTV channels (57 and 58) outside of the core band, WGBY-TV will be among the most severely handicapped licensees. WGBH indicates that, for more than five years, it has been preparing for DTV by holding a capital campaign and purchasing equipment. It states that the cost of moving from DTV channel 58 to an in-band channel could be as much as \$261,000. It states that it recognizes that the allotment of DTV channels was a monumentally complex task and that some channel assignments will change. If changes are made in the Northeast, WGBH asks that its concerns be considered and WGBY-TV be reassigned an in-core channel. WGBH did not submit a supplemental filing.

439. WNAC Argyle Television, Inc. Petition. WNAC Argyle Television, Inc. (Argyle) is the licensee of WNAC-TV, channel 64 in Providence, Rhode Island. Argyle states that the fact that both its existing NTSC channel and its new channel 52 DTV allotment are outside the core spectrum will cause it substantial additional expense and will make viewer confusion likely. It states that, without OET Bulletin No. 69, it has been unable to determine whether a suitable alternative is available. Argyle did not submit a supplemental filing. Rhode Island Public Telecommunications Authority (RIPTA) opposes any future proposals by Argyle for the allotment to RIPTA of a DTV channel less desirable than channel 21.

440. As stated above, we are not granting requests by broadcasters to change their DTV allotments based solely on the fact that the broadcaster received a DTV allotment out of the core spectrum. In developing the DTV Table of Allotments, we attempted to provide all eligible broadcasters with an initial DTV allotment within channels 2 to 51, and to eliminate to the extent possible the assignment of out-of-core channels to stations with NTSC channels outside the core spectrum. However, this was not always possible, because of the limited availability of spectrum and the need to accommodate and replicate all existing facilities with minimal interference, and was particularly difficult in congested areas such as the northeastern United States. As noted above, there are only 13 stations that have both their NTSC and DTV channels outside the core spectrum. We stated that stations in this position would be assigned new channels within the core from recovered NTSC spectrum at the end of the transition period. We further stated that, to the extent that in-core channels become available during the transition, we

---

to address DTV-to-DTV adjacent channel interference concerns, including modifying the DTV allotment of WVVI-TV from channel 36 to channel 43. However, this change does not alter our assessment below that WNVC-TV's use of channel 36 would impact other stations and that there are no in-core channels available.

will attempt to further reduce the number of out-of-core allotments in any future amendments to the DTV Table. In addition, we stated that we would consider alternative allotment/assignment plans that are the result of negotiations and coordination among broadcasters and other parties within their communities, but that such changes must have the agreement of all affected broadcasters and must not result in additional interference to other stations or allotments. In this regard, we note that the allotment of channel 36 for WNVC-TV's DTV service suggested by CVETC would create increased interference to other stations, and that CVETC has not received the concurrence of those affected stations. While we recognize the additional burdens placed on stations such as CVETC's WNVC-TV, WGBH's WGBY-TV, and Argyle's WNAC-TV, we find that there are no available in-core channels that would not cause significant interference to other stations. Accordingly, we are denying these petitioners' requests that the DTV channels for their stations be changed to in-core channels.

**G. Other Petitions Requesting Specific Changes to the DTV Table of Allotments**

441. The remaining petitions for reconsideration of specific allotments, which raise a number of different issues, are addressed below in alphabetical order.

442. ABC, Inc. Petition. ABC requests that the DTV allotments for its stations WPVI-TV in Philadelphia and WTVG-TV in Toledo, Ohio, be changed.<sup>149</sup> ABC also asks that the DTV allotments of two non-ABC stations, WTTG-TV in Washington, DC, and WMBC-TV in Newton, New Jersey, be changed. Finally, ABC submits that the DTV Table should be amended to make Fresno, California an all-UHF DTV market. ABC states that its requested changes are all located within the three regions identified by the Joint MSTV Petitioners as the areas in which existing NTSC service and future DTV service are most in jeopardy under the DTV Table. ABC states that, in seeking reconsideration, it recognizes that changing an individual allotment potentially will affect other stations, both NTSC and DTV. It submits that since the coordination process has not yet been completed, it is not proposing alternative allotments at this time. ABC did not submit an individual supplemental filing but was party to MSTV's *ex parte* filing of November 20, 1997.

443. With regard to WPVI-TV in Philadelphia, Pennsylvania, ABC states that the transmitter site for this station, which will operate on DTV channel 64 with 1000 kW, is only 48 km from existing NTSC station WHSP-TV, in Vineland, New Jersey, which operates on adjacent channel 65. ABC states that the only way to avoid harmful interference to WHSP-TV would be for WPVI-TV to reduce its DTV power.

444. Although we attempted to provide for full service replication for all stations and to ensure that the DTV allotments would not cause interference, this was not always possible. As ABC notes, WPVI-TV is located in one of the most congested areas of the country. We note that in this case WPVI-TV's DTV allotment provides almost full replication and is estimated to

---

<sup>149</sup> We address ABC's request regarding its station KABC-TV in section IV B above.

## Federal Communications Commission

---

serve a larger population base than its companion NTSC facility. In addition, we note that MSTV in its *ex parte* filing estimates that less than 3% of the population served by WHSP-TV would receive interference. We therefore find that the DTV allotment provided for ABC's WPVI-TV is consistent with our DTV service replication policies and goals and that the interference to WHSP-TV is within acceptable limits. Accordingly, ABC's request for a change in the DTV allotment of WPVI-TV is denied.

445. For WTVG-TV, ABC is concerned that the DTV channel 19 allotment for this station will cause interference to the NTSC service of WOIO-TV in Shaker Heights, Ohio and that the 146.8 km short spacing between these stations will also limit the ability of WTVG-TV to replicate that station's existing NTSC Grade B service. In comments responding to ABC's petition, Cannell Cleveland, L.P. (Cannell), the licensee of WUAB-TV in Lorain, Ohio, notes that ABC has requested assignment of a different but unspecified DTV channel for WTVG-TV. Cannell is uncertain whether any channel or technical change requested by ABC would affect its station but to the extent that such a change may do so, it states that it reserves the right to oppose any supplement to ABC's petition for reconsideration.

446. Although we attempted to provide for full service replication for all stations and to ensure that the DTV allotments would not cause interference, this was not always possible. As ABC notes, WTVG-TV is located in one of the most congested areas of the country. We further note that, while this station's DTV allotment does not provide for full replication, the DTV channel assigned to it does, in fact, provide for estimated coverage of a larger population base than its companion NTSC facility. We find that the DTV allotment provided for ABC's WTVG-TV is consistent with our DTV service replication policies and goals and that the interference to WOIO-TV is within acceptable limits. ABC's request for a change in the DTV allotment of WTVG-TV is therefore denied.

447. ABC also requests that the DTV allotments of two non-ABC stations, WTTG-TV in Washington, DC and WMBC-TV in Newton, New Jersey, be changed. It submits that WTTG's use of DTV channel 6 in Washington would cause co-channel interference to the NTSC service of its WPVI-TV in Philadelphia. It further submits that WMBC-TV's DTV channel 8 allotment would result in adjacent channel interference to WABC-TV's NTSC channel 7 service area in New York. It also states that NTSC channel 9 in New York would also suffer a similar loss of service. Further, it is concerned that the DTV allotment for its Chicago station, WLS-TV, DTV channel 52 to be located on the Sears Tower is adjacent to the channel 53 DTV allotment provided for another station located on the Hancock Building, 2.5 km away. It believes that non-exact co-location of DTV channels 52 and 53 will result in substantial interference between the two stations. It argues that the antenna elevation and pattern differences will result in substantially different multipath conditions, and that the partial shielding due to buildings or other obstructions will reduce the signal level of one station relative to another.

448. As stated above, we are generally not changing the DTV allotment of one broadcaster at the request of another. We have provided for parties to negotiate allotment

## Federal Communications Commission

---

changes and will typically grant requested changes only where all affected parties agree. We have reviewed the situation discussed by ABC and find that there are no changes that can be made for WMBC-TV that would improve this situation for all involved stations. This is one of the most congested areas of the country, and we find that the allotments provided for these stations are the most appropriate under our DTV allotment policies. With regard to WTTG-TV, we have granted Fox's request to change the DTV allotment of WTTG and believe that this addresses ABC's concerns. Accordingly, ABC's request that the DTV allotment of WMBC-TV be changed is denied and its request that the DTV allotment of WTTG-TV be changed is now moot. We have also examined ABC's concern with regard to the adjacent channel DTV 52 and 53 allotments in Chicago. Our analysis indicates that DTV operations on these allotments will be able to satisfactorily replicate the existing service areas of the respective stations. We further believe that the improved out-of-band emissions requirements will ensure that any interference is minimized. Accordingly, we are not making a change to eliminate this adjacent channel situation.

449. Finally, ABC states that its KFSN-TV, channel 30 in Fresno, California was assigned DTV channel 9. It requests that the DTV Table be amended to make Fresno an all-UHF DTV market. It states that, while it has no interference or replication concerns, the Fresno market is an all-UHF NTSC TV market and that most viewers there have receive antennas designed for UHF reception only. ABC believes that UHF allotments for DTV service in this market would make sense because the installed base of UHF antennas will help reduce or eliminate the viewer's need to install an antenna for DTV reception.

450. We note that the Fresno market was allotted two DTV channels in the VHF band. While it would be possible to change one of those allotments to a UHF channel, it would not be possible to create two additional UHF DTV allotments without creating unacceptable interference or creating additional out-of-core concerns. We therefore will retain the present DTV allotments for the Fresno market and are denying ABC's request.

451. Acme Television Licenses of Oregon, L.L.C. Petition. Acme Television Licenses of Oregon, L.L.C. (Acme) is the proposed assignee of KWBP-TV, channel 32 in Salem, Oregon. In its petition, it requests that its station be allotted DTV channel 31, which was proposed in the Sixth Further Notice, rather than DTV channel 33, as contained in the Sixth Report and Order. Acme states that it recently purchased a transmitter that would be compatible with operations on channel 31. It argues that forcing it to relocate to channel 33 will result in a significant increased expense to KWBP-TV with no apparent gain. Acme did not submit a supplemental filing.

452. We find that Acme's request to substitute DTV channel 31 for channel 33 conflicts with a request by California Oregon Broadcasting, Inc. (COBI) to use channel 31 to address DTV-to-DTV adjacent channel interference. As discussed above, we are granting COBI's request. We find that addressing and eliminating potential interference is on balance more important than preventing the additional expense that Acme may incur in its DTV implementation. We note that we cautioned parties that the DTV Table of Allotments presented



## Federal Communications Commission

---

in the Sixth Further Notice was a draft and that the DTV allotments for individual stations were subject to change. We therefore are not granting allotment change requests based on premature plans or commitments by broadcasting parties. Accordingly, Acme's request that its KWBP-TV be allotted channel 31 rather than channel 33 is denied.

453. AK Media Group, Inc. Petition and Supplemental Filing. AK Media Group, Inc. (AK Media) is the licensee of KFTY-TV, channel 50 in Santa Rosa, California. It states that the assignment of out-of-core DTV channel 54 to KFTY-TV puts its station at a competitive disadvantage, and it asks that KFTY-TV be provided a DTV channel within the core spectrum.<sup>150</sup> In its supplemental filing, AK Media requests that KFTY be allotted DTV channel 11, with 3.2 kW ERP. It submits that DTV channel 11 would fully replicate KFTY-TV's current NTSC service area and that the potential interference either caused or received by KFTY-TV would be minimal and within our allowable limits. AK Media reports that the station that would receive the most interference from this change would be the NTSC service of KNTV-TV in San Jose, California, which is licensed to Granite Broadcasting Corporation (Granite). AK Media submits that there would be an 8% increase in predicted interference to KNTV-TV, but that the increased interference would occur only in sparsely populated mountainous areas and would likely affect less than 5% of the total population served by KNTV-TV. It also states that KFTV-TV's operation on channel 11 would provide DTV service to almost 600,00 additional people.

454. Granite opposes AK Media's request that the DTV allotment KFTY-TV be changed from channel 54 to channel 11. Granite states that this change would cause co-channel interference to KNTV's channel 11 operations and that AK Media underestimates its extent. Granite states that AK Media calculates increased interference to less than 5% of its population coverage, while its own analysis suggests an impact to 9.2% of the population.

455. Throughout this proceeding, we have stated that we intend to provide broadcasters with the flexibility to develop alternative allotment approaches and plans.<sup>151</sup> We specifically stated that we would consider alternative allotment/assignment plans that are the result of negotiations and coordination among broadcasters and other parties within their communities. We stated, however, that such changes must have the agreement of all affected broadcasters and must not result in additional interference to other stations or allotments. We find that AK Media's request to change its KFTY-TV's DTV channel from channel 54 to channel 11 would cause increased interference to other stations, such as Granite's KNTV-TV in San Jose, and that such interference would not meet our standards for *de minimis* additional interference. We further find that AK Media has not obtained the consent of any such affected stations. Accordingly, we are denying AK Media's request that the DTV allotment for its KFTY-TV be

---

<sup>150</sup> As discussed previously, AK Media requested alternatively that stations which have both a DTV and NTSC channel within the range 7-46 be required to identify their permanent DTV channel so that stations like KFTY can select their ultimate DTV channel now; it also requested that we address certain compensation issues.

<sup>151</sup> See, for example, Sixth Report and Order at para. 172.

## Federal Communications Commission

---

changed from channel 54 to channel 11.

456. AK Media, in its supplemental filing, also states that its studies show that the DTV service of its KVOS-TV in Bellingham, Washington on channel 35 would receive interference from the DTV channel 36 operation of KSTW-TV in Tacoma, Washington. It states that at this time no alternative channel for either station is readily apparent. In order to avoid the predicted interference between these DTV operations, AK Media requests that we review the DTV allotments provided for KVOS-TV and KSTW-TV.

457. We have reviewed the allotments provided for KVOS-TV and KSTW-TV and find that those allotments are consistent with the allotment principles and policies adopted in the Sixth Report and Order. We find that the DTV channel 35 provided for AK Media's KVOS-TV in Bellingham, Washington would provide for 99.7% service replication and would significantly improve both the station's service area coverage and its population served. Accordingly, we deny AK Media's request that the DTV allotments for KVOS-TV or KSTW-TV be changed.

458. Allbritton Communications Company Petition and Supplemental Filing. In its petition for reconsideration, Allbritton Communications Company (Allbritton) asks that its stations KTUL-TV in Tulsa, Oklahoma; WHTM-TV in Harrisburg, Pennsylvania; WCIV-TV in Charleston, South Carolina; WSET-TV in Lynchburg, Virginia; and WJSU-TV in Anniston, Alabama, be permitted to retain their out-of-core DTV channels after the transition. Alternatively, it asks that we either require the spectrum auction winner to compensate these stations for relocating back into the core spectrum or consider alternative proposals for new allotments for these stations within 90 days of issuing OET Bulletin No. 69.

459. In its supplemental filing, Allbritton submits that the non-core DTV channels allotted to these five stations are unnecessary and that, as demonstrated in technical studies by its consulting engineers, DTV allotments within the core spectrum are available for each of these stations. It further asserts that these substitute allotments will not cause unacceptable levels of interference and therefore requests that the DTV Table be amended, as follows: 1) allot DTV channel 27 for KTUL-TV in Tulsa, rather than channel 58; 2) allot DTV channel 42 for WHTM-TV in Harrisburg, rather than channel 57; 3) allot DTV channel 42 for WCIV-TV in Charleston, rather than channel 53; 4) allot DTV channel 34 for WSET-TV in Lynchburg, rather than channel 56; and 5) allot DTV channel 40 for WJSU-TV in Anniston, rather than channel 58, and increase the assigned power and antenna height for this allotment to 222 kW ERP and 396 m HAAT to ensure that WJSU-TV's DTV signal is able to replicate its NTSC service. Allbritton states that WJSU-TV's construction permit was recently modified to permit the station to operate with a substantially higher ERP and antenna height. It states that to permit replication of the area to be served by the modified WJSU-TV NTSC operation, both the power and antenna height specifications for the station's DTV allotment need to be increased. In its attached engineering statement, Allbritton indicates that these proposed changes would not satisfy some of the minimum distance requirements, but that most of the co-channel and adjacent channel

## Federal Communications Commission

---

operations are located far enough away so that there would not be any significant impact.<sup>152</sup>

460. We have reviewed Allbritton's requests. With regard to Allbritton's objection to the fact that its DTV allotments are outside the core spectrum, we note that we generally are not granting requests by broadcasters to change their DTV allotments based solely on their preference for an in-core allotment. Because of the limited availability of spectrum, along with the need to accommodate and replicate existing facilities with minimal interference, it was not possible to give every broadcaster an allotment in the core spectrum. We continue to believe that the DTV allotments made for Allbritton's stations are appropriate for service replication. With regard to Allbritton's requested increases in the power level and antenna height specified for its WJSU-TV in Anniston, we note that our service replication policy takes into account facilities licensed as of April 3, 1997, and that the power and antenna height allotted for WJSU-TV adequately replicates its facilities licensed as of that date. To the extent that Allbritton desires to improve WJSU-TV's DTV facilities, we have stated that such requests are to be addressed under our procedures for maximization of DTV facilities.

461. Benedek License Corporation Petition. In its petition, Benedek License Corporation (Benedek), the licensee of WHSV-TV, channel 3 in Harrisonburg, Virginia, requests that we modify the DTV allotment provided for this station. It submits that operation of WHSV-TV's DTV service on channel 49 with 91.1 kW ERP, as provided in the Sixth Report and Order, would result in loss of service to roughly 100,000 viewers due to avoidable interference. Benedek points out that operation on this channel would allow WHSV-TV to replicate only 76.1 percent of the station's service area. It further states that population growth is expected in the area not replicated. Benedek submits that it is studying the available VHF channels but that because of the limited time available for engineering evaluation and the unavailability of OET Bulletin No. 69, it has not been able to determine the most appropriate alternative. Benedek states it will supplement its filing once concrete engineering analysis becomes available. Benedek did not submit a supplemental filing.

462. Allbritton opposes Benedek's request that we change the DTV allotment for WHSV-TV to a VHF channel to the extent that such a change might create interference to the channel 7 NTSC service of Allbritton's WJLA-TV, Washington, DC. Allbritton states that, as Benedek did not specify which VHF channel it wished to be assigned to WHSV-TV, we should be able to resolve Benedek's request without endangering WJLA-TV. It requests that we take all necessary steps to protect WJLA-TV from interference.

---

<sup>152</sup> For example, Allbritton's engineering statement indicates that the channel 27 allotment for KTUL-TV would be short spaced 47.5 km to the co-channel DTV service of KFOR-TV, Oklahoma City, OK. The channel 42 allotment for WHTM-TV would be short spaced 25.7 km to the co-channel NTSC service of WVPY-TV, Front Royal, VA, short-spaced 48.4 km to the co-channel DTV service of WPMT-TV, Annapolis, MD, and short-spaced 47.3 km to the co-channel DTV service of WTXF-TV, Philadelphia, PA. The channel 34 allotment for WSET-TV would be short spaced 37.9 km to a new co-channel NTSC station at Raleigh, NC. The channel 40 allotment for WJSU-TV would be short spaced 26.6 km to the +7 UHF channel 47 DTV service of WDEF-TV, Chattanooga, TN, and short spaced 14.7 km to the +7 UHF taboo channel 47 service of WTVM-TV, Columbus, GA.

## Federal Communications Commission

---

463. We have reviewed Benedek's request. Our analysis indicates that there are no available VHF channels that could be allotted to WHSV-TV without causing significant interference to other stations. Although we attempted to provide for full service replication for all stations, this was not always possible. Service replication of low VHF stations is very difficult at UHF frequencies, particularly where terrain is a factor, as it is in the Harrisonburg area. We therefore deny Benedek's request that WHSV-TV be allotted a VHF DTV channel.

464. Brazos Broadcasting Company Petition. Brazos Broadcasting Company (Brazos), the licensee of KBTX-TV, channel 3 in Bryan, Texas, seeks reconsideration of its allotted DTV channel 59. Brazos states that it would be better able to serve the public in the Bryan-College Station region were it to operate on DTV channel 17. It states that channel 17 will not conflict with any other DTV allocation. Brazos did not submit a supplemental filing.

465. We have reviewed Brazos' request. Our analysis indicates that the change requested by Brazos would impact and cause unacceptable interference to other stations. We therefore are denying Brazos' requested change for its station KBTX-TV.

466. Cannell Cleveland, L.P. Petition and Supplemental Filing. Cannell Cleveland, L.P. (Cannell), the licensee of WUAB-TV, channel 10 in Lorain, Ohio, originally argued that we should not finalize the DTV Table until broadcasters have had the opportunity to comment on OET Bulletin No. 69. In its supplemental filing, Cannell states that, using the technical criteria provided in the Bulletin, it has confirmed that the DTV operations of WTVS-TV on channel 43 in Detroit and WGGN-TV on channel 42 in Sandusky, Ohio will cause significant interference to WUAB-TV's existing NTSC service. It requests that we take steps to ensure against this type of interference. In its engineering statement, Cannell estimates that WGGN-TV's operation on DTV channel 42 will cause interference in an area within WUAB-TV's Grade B contour compromising 69,000 households and 183,000 individuals. It estimates that the interference from WTVS-TV's DTV operation on channel 43 will be even more significant, affecting 215,000 households and 586,000 individuals within WUAB-TV's Grade B service area. Cannell requests that neither WTVS-TV nor WGGN-TV be permitted to increase DTV power until WUAB-TV has ceased NTSC operation. Cannell argues that, where such interference is predicted or actual, stations should be able to rely on FCC rules to protect their NTSC service areas. It states that a case-by-case approach will not provide stations with sufficient certainty, and it urges the adoption of rules to govern interference to NTSC operations during the DTV implementation period.

467. The Detroit Educational Television Foundation (DET Foundation) opposes Cannell's request that its WTVS-TV not be allowed to increase power until WUAB-TV has ceased NTSC operation. The DET Foundation states that Cannell's adjustments to propagation calculations in the Great Lakes region are not recognized in the Commission's rules and are unjustified. It states that the rules already provide protection with regard to power increases and that no further restrictions are warranted.

468. We agree with the DET Foundation that Cannell's estimates of the impact of

interference on its station WUAB-TV are overstated. In the Sixth Report and Order, we estimated that WUAB-TV will receive interference to 5.1% of the station's existing NTSC coverage area affecting 2.3% of the population now served. We continue to believe that these estimates are valid. We further note that the calculated interference would occur principally at the edge of WUAB-TV's service area and may be mitigated or reduced by factors such as cable carriage and improved receiving antennas. Notwithstanding these considerations, we have long recognized that providing all broadcasters with a new channel to implement DTV will result in some stations receiving new interference during the transition period. One of the principal efforts in developing the DTV Table has been to minimize the likelihood of such new interference. Cannell's request that additional measures be taken to ensure against interference to NTSC service could only be satisfied by taking measures that we believe would significantly reduce the provision of new DTV service. We do not find that such measures are warranted or desirable. We believe that the existing rules provide sufficient protection to existing NTSC operations and that no further restrictions are needed.

469. CBS, Inc. Petition and Supplemental Filing.<sup>153</sup> CBS indicates that the operation of its Chicago, Illinois station WBBM-TV on DTV channel 3 with only 2.5 kW ERP, as allotted, will experience co-channel interference from existing NTSC channel 3 assignments in Champaign, Illinois, in Kalamazoo, Michigan, and in Madison, Wisconsin. CBS is concerned that the Grade B contour of NTSC station on channel 4 in Milwaukee, Wisconsin, which is only 134 km (84 miles) from WBBM-TV, will overlap its station's DTV service contour. CBS believes that viewers in the overlap area may experience operational difficulties because both channels 3 and 4, the only available channel selections for tuners on most VCRs, will be in use for over-the-air broadcasting.

470. We have reviewed CBS's request and find that the channel 3 DTV allotment for WBBM-TV is consistent with our service replication policies. We note that MSTV's *ex parte* filing estimates that WBBM's channel 3 DTV allotment would provide over 98% service replication and would provide for an increase in population served. We find that CBS's concerns about operational difficulties for tuners and VCRs when both channel 3 and 4 are in use are unfounded. We find that the separation between these stations is sufficient to avoid any operational difficulties with set-top devices such as VCRs. Accordingly, CBS's request for a substitute DTV allotment for station WBBM-TV is denied.

471. With regard to its Denver station KCNC-TV, CBS states, in its supplemental filing, that the service area of this station encompasses North Table Mountain, an FCC-recognized "quiet zone" where new RF transmissions are restricted. CBS states that we did not take this quiet zone into account in computing the DTV service area and population figures for the Denver market that accompany the Table. It notes that the North Table Mountain quiet zone was established to protect research operations-related radio transmissions conducted at that site by the Department of Commerce and other government agencies. CBS submits that it is not

---

<sup>153</sup> We address CBS's requests regarding its station WWJ-TV in section IV B above.

clear to what extent this site is currently used, or is intended to be used in the future, for such research operations. It urges that we consult with the relevant governmental agencies to evaluate the continuing need for this quiet zone, taking into account its potential impact on DTV service. CBS states that if the quiet zone is maintained for North Table Mountain, it is possible that KCNC-TV's DTV coverage of key areas of its DMA will be substantially impaired. It submits that it lacks sufficient information to propose a solution.

472. We note that CBS is correct that the DTV service area and population figures for the Denver market that accompany the DTV Table do not take into account restrictions that may be necessary to protect the North Table Mountain quiet zone. However, we also note that our NTSC service estimates were not reduced to account for the existing protection provided for this area. We further believe that it may be possible for stations to take certain measures, such as blocking or "notching" the DTV antenna pattern, to protect Table Mountain without significantly affecting their audience coverage. In addition, as requested, we have initiated discussions with NTIA and the Department of Commerce regarding the protection of the Table Mountain quiet zone and whether the same level of protection is required for lower power DTV operations. Any changes in protection would be addressed in a future rule making. Until that time, DTV facilities will be required to comply with the protection limits set forth in Section 73.1030 of the rules.

473. Clear Channel Television Licensees, Inc. Petitions. Clear Channel Television Licensees, Inc. (CCTL), submitted three separate petitions for reconsideration.<sup>154</sup> CCTL did not submit any supplemental filings. In one petition, CCTL requests that we allot DTV channel 23 rather than channel 25 for the DTV operations of its station KSAS-TV, channel 24 in Wichita, Kansas. CCTL submits that channel 23 would allow KSAS-TV to continue using its existing antenna, while operation on channel 25 would require the construction of a new antenna, adding significantly to the cost of the station's DTV conversion. Washburn University of Topeka (Washburn), in response to CCTL's petition, states that it is concerned that DTV operation on channel 23 by CCTL's KSAS-TV might interfere with the co-channel operation of its own KTWU-TV, Topeka, Kansas.

474. We have reviewed CCTL's request regarding KSAS-TV. We find that the change it seeks would impact other broadcast operations. We find that reducing the cost of implementation of DTV for one station at the cost of more interference for another is not warranted. For these reasons, we deny CCTL's request that the allotment for KSAS-TV be changed to channel 23.

475. In another petition, CCTL requests that DTV channel 22 rather than channel 32 be allotted to its station, WAWS-TV, NTSC channel 30, in Jacksonville, Florida. It is concerned that DTV 32 channel allotment is second-adjacent to its NTSC channel and that the level of intermodulation interference is likely to be considerable.

---

<sup>154</sup> CCTL's third petition is discussed in the out-of-core section above.

## Federal Communications Commission

---

476. We have reviewed CCTL's requests with regard to WAWS-TV. We find that the requested changes would impact other broadcast operations. In addition, we find that CCTL's concerns about second-adjacent channel interference from DTV channel 32 to its NTSC channel are unsupported by the test data of the DTV system. We believe that intermodulation interference from second-adjacent operation is unlikely to occur, provided that reasonable engineering care is taken in the implementing the new DTV channel. We find that a change in the DTV allotments for this reason is unwarranted. Accordingly, we are denying CCTL's request that the allotment for WAWS-TV be changed to channel 22.

477. Cosmos Broadcasting Corporation Petition and Supplemental Filing. Cosmos Broadcasting Corporation (Cosmos) is the licensee of eight television stations located in the eastern United States. In its petition and supplemental filing, Cosmos requests modifications of the DTV allotments provided for several of its stations.<sup>155</sup> Cosmos states that it is prepared to modify further parameters such as power, antenna height, and directionality where necessary to reduce interference. As indicated above, we do not believe that these are appropriate matters for reconsideration. Our DTV Table is intended to provide each eligible broadcaster with a DTV allotment that replicates its existing service area. To the extent that Cosmos desires to make changes in the technical operation of its stations to operate on particular channels or in a specific manner, there are rule provisions to request consideration of such changes or other modifications of the allotments in DTV Table.

478. Cosmos further states that the merits of its requested substitutions extend beyond technical showings and submits that factors such as whether allotments are in the core spectrum or on lower-numbered channels and whether stations can minimize capital investment by sharing facilities should also be considered. We note that we have considered these factors in our DTV allotment decisions. We have attempted to provide broadcasters with an in-core channel wherever possible and have provided broadcasters flexibility to make transmitter site changes and negotiate local and regional solutions.

479. Cosmos also requests that we reserve its initial allotment until such time that its proposed modified allotment has been fully engineered and field tested. It additionally requests that, for each of its stations, regardless of whether the requested modification is granted, we allow maximization of its DTV allotments. It states that maximization would optimize spectrum use and ensure that the highest numbers of viewers have access to DTV programming. As indicated above, we do not find that reserving an additional second DTV channel for a broadcaster is warranted. We have awarded each eligible broadcaster a DTV allotment that we believe on balance is best for its operations. If a broadcaster requests an alternative channel and we approve that request, we do not believe reserving both of those channels until the broadcaster decides which channel it will use for its DTV operations is appropriate given our spectrum management responsibilities. Cosmos' specific requests with respect to its stations are

---

<sup>155</sup> Cosmos's requests regarding its own stations KAIT-TV and KPLC-TV and regarding Dispatch's station WBNS-TV are addressed in section IV B above.

## Federal Communications Commission

---

considered below.

480. In its petition, Cosmos states that its engineers have determined that 10% of the existing NTSC service of its WFIE-TV, NTSC channel 14 in Evansville, Indiana will be lost, far exceeding our estimate of 0.4%. Cosmos also argues that the DTV Table severely limits its ability to maximize and expand the coverage areas of its DTV and NTSC channels, as both channels are short-spaced to broadcasters in adjacent markets. In addition, Cosmos complains that WFIE's assignment of DTV channel 58 is outside the core spectrum. It states that these factors handicap its ability to compete. Cosmos, in its supplemental filing, makes two requests with respect to WFIE. First, it requests that we change the channel 14 DTV allotment of WTIU-TV, Bloomington, Indiana to provide a channel that will not interfere with WFIE-TV's NTSC service. Second, it requests that WFIE-TV's DTV allotment be changed from channel 58 to channel 46. It states that this change meets the required spacing distances to all licensed and authorized facilities. It notes that the only short spacing would be with respect to three vacant noncommercial NTSC allotments, which will be deleted.

481. As indicated above, we have attempted to provide all stations with a DTV allotment in the core spectrum of channels 2 to 51. We also attempted to make allotments that would provide for full service replication and ensure that no interference would be caused to other stations. Achieving all of these goals was not always possible, and our allotments are based on finding a solution that is best for all eligible broadcasters in a fair and equitable manner. With regard to Cosmos' specific concerns, we note that MSTV's *ex parte* filing confirms our estimate of 0.4% interference. MSTV also estimates that WFIE-TV will be able to replicate almost 95% of its existing service area. We further note that WFIE-TV's service area is not significantly smaller than a number of other stations in the Evansville market, and we do not find that its ability to compete in this market will be affected. We believe that the DTV allotment provided for Cosmos' WFIE-TV is consistent with our DTV service replication policies and goals. Our analysis indicates that the use of DTV channel 46 by WFIE-TV would impact and cause interference to other stations. Cosmos' request for a change in the DTV allotment of WFIE-TV is therefore denied. Finally, our analysis finds that WTIU-TV's channel 14 DTV operation will not cause unacceptable interference to WFIE-TV's NTSC service and therefore are denying Cosmos' request that we change WTIU-TV's DTV allotment.

482. In its petition, Cosmos requests that the DTV allotment for its station, WIS-TV in Columbia, South Carolina, be changed from DTV channel 41 to channel 11. In its supplemental filing, Cosmos states that this allotment would meet the separation requirements except with regard to three stations: co-channel WTOC-TV in Savannah, Georgia; co-channel WTVD-TV in Durham, North Carolina; and adjacent channel WRDW-TV in Augusta, Georgia. Cosmos states that the new interference to these stations resulting from its request would be minimal. It states that channel 11 would be short spaced to WTOC-TV by only 35 km and would be expected to create new interference affecting 2.4% of the population of WTOC-TV's service area. However, it submits that the affected population would not lose their network service, as they would remain within the Grade B contours of other stations with the same affiliation. Moreover, Cosmos states that cable penetration in the affected counties averages 78%. Cosmos



## Federal Communications Commission

---

next states that channel 11 would be short spaced only 7.8 km to WTVD-TV, and so populations in the Durham market served by WTVD-TV would only be slightly affected. It submits that only 2.6% of the population in WTVD-TV's service areas would be affected. Again, Cosmos notes that much of the affected area is located within the Grade B contours of other stations with the same network affiliation as WTVD and that cable service in the affected counties is 50%. Finally, Cosmos states that the short spacing to WRDW would be 18 km, with new interference expected to affect 5.1% of the station's population. It states that those who would be affected are in areas encompassed within the Grade B contour of WTLX-TV in Columbia, South Carolina, which has the same network affiliation as WTRW-TV, and that only 0.2% of WRDW-TV's actual viewing audience would be affected.

483. Lewis Broadcasting Corporation (Lewis), the licensee of WLTX-TV, channel 19 in Columbia, South Carolina, states that, while it does not object specifically to Cosmos' request that we change WIS-TV's DTV allotment to channel 11, it is concerned that the requested changes to the DTV Table proposed by Cosmos and many others could create a daisy chain effect that would affect other DTV allotments in the Columbia market and elsewhere. It recommends that modifications that are motivated by less serious technical matters, and in particular those creating additional short spacing problems, be discouraged, due to the likelihood that wholesale changes will result in significant problems for broadcasters who are satisfied with their assignments. Lewis states that many of the changes, including the one in Columbia, would result in short spacing to other DTV allotments.

484. WRDW Licensee Corp. and Raycom-U.S., Inc. (WRDW and Raycom), in a joint filing, also oppose Cosmos' request for changes in the DTV Table. They state that, although the Commission requires that parties requesting a change show that the modification will not cause new interference, Cosmos' request fails this test. They note that Cosmos concedes that its change would result in short-spacing to other stations, including WRDW's WRDW-TV in Augusta, Georgia and Raycom's WTOC-TV in Savannah, Georgia. They also state that Cosmos has represented that interference could be resolved through technical means such as adjusting power and antenna directionality but that the engineering statement accompanying its supplement clearly shows that there is new substantial interference to 5.1% of the population served by WRDW-TV and to 2.4% of the population served by WTOC-TV.

485. We have reviewed Cosmos' request regarding WIS-TV. Our analysis indicates that such a change would impact and create additional interference to other broadcast operations. We therefore deny Cosmos' request to allot DTV channel 11 to WIS-TV.

486. With regard to its WSFA-TV, NTSC channel 12 in Montgomery, Alabama, Cosmos states that it filed a tower registration in January, 1997 that changed the transmitter coordinates for this station. It states that we have used outdated data in many instances and suggests that we actively solicit broadcasters to collect up-to-date station information. At a minimum, it requests that, when petitioners inform us of outdated data, we adjust the DTV Table accordingly. Cosmos also requests that WSFA-TV be allotted DTV channel 11 rather than channel 57. In its supplemental filing, it states that this change would meet the requirements of

## Federal Communications Commission

---

the DTV allotment rules except with regard to three co-channel stations (WFSU-TV in Tallahassee, Florida; WTOK-TV in Meridian, Mississippi; and WXIA-TV in Atlanta, Georgia) and that the new interference to these stations would be minimal.

487. Pacific and Southern Company, Inc. (P&S) opposes Cosmos' request that WSFA-TV be permitted to operate on DTV channel 11. P&S states that Cosmos' petition ignores the bright-line spacing and non-interference rules to other broadcast stations, such as P&S's WXIA-TV, NTSC channel 11 in Atlanta, Georgia. P&S notes that although Cosmos' concern about its out-of-core channel is not unreasonable, the Commission has expressed its intention to take steps to deal with such issues in the future, and, in any event, the resolution of core problems should not disregard spacing and non-interference rules.

488. We have reviewed Cosmos' request with regard to WSFA-TV. Our analysis indicates that such a change would impact and create additional interference to other broadcast operations. As indicated above, we are generally not changing allotments merely because a station received an allotment of an out-of-core channel. While we attempted to provide all stations with an in-core channel, this was not always possible. Therefore, we are denying Cosmos' request that the allotment for its WSFA-TV be changed to channel 11. With regard to Cosmos' concern that we are using up-to-date station information, we have made considerable efforts to ensure that our television engineering data base is current and correct. Further, parties have had several opportunities to review this information during the comment and reconsideration phases of this proceeding. We do not find that at this stage in this proceeding it is necessary to actively solicit and collect additional information.

489. In its petition, Cosmos requests that the DTV allotment channel for WLOX-TV in Biloxi, Mississippi be changed from channel 36 to channel 16. However, in its supplemental filing, Cosmos seeks to maximize the ERP and increase the antenna HAAT of the DTV channel 36 operation of WLOX-TV. It states that WLOX-TV was provided with 742.1 kW ERP and an antenna HAAT of 408 meters and requests that the power be increased to 1 MW ERP and the antenna HAAT be increased to 561 m. Cosmos submits that this facilities increase would decrease NTSC interference from WHLT-TV, the only station short spaced to WLOX-TV. WHLT-TV operates on channel 22, the 14<sup>th</sup> adjacent channel to channel 36. Cosmos states that the separation between these stations is 76.9 km, while the standard is less than 24.1 km and greater than 96.1 km. It estimates that the interference to WHLT-TV would decrease by approximately 50 sq. km, apparently due to the effect of the vertical plane radiation of the WLOX-TV DTV facility. Cosmos notes that, as the WLOX-TV radiation center would be increased substantially, more locations close to the WLOX-TV tower, which are more susceptible to interference to WHLT-TV, come within the "minor lobes" of the WLOX-TV vertical pattern and consequently have a lower predicted field strength and desired-to-undesired ratio from WLOX-TV.

490. As noted above, we are not granting requests to maximize facilities as a matter of reconsideration. We have adopted specific provisions in our rules to allow licensees to request an increase in their DTV facilities and believe that considering maximization requests at this

## Federal Communications Commission

---

time would unfairly disadvantage parties that have expected such maximization requests to be dealt with under the rules. Accordingly, we are denying Cosmos' request to increase the power and antenna height of its station WLOX-TV.

491. Cosmos requests that the transmitter reference coordinates for its WAVE-TV, NTSC channel 3 and DTV channel 47 in Louisville, Kentucky, be relocated from its existing site at 38° 27' 23" N and 85° 25' 28" W to 38° 21' 00" N and 85° 50' 57" W, a location closer to Louisville. Cosmos states that it is concerned that new interference during the transition may force the station to move its transmitter closer to its city of license. Cosmos states that its requested relocation would comply with the separation standards and would not be expected to cause new interference to any station. It states that, while it has sufficient information to raise concerns about new interference, if after actual experience is gained it finds out that WAVE-TV's current tower location is adequate, it would not necessarily seek to relocate. For example, it states that it is uncertain of how well receivers can obtain signals in light of adjacent channel interference. Cosmos requests the right to relocate its tower to the specified new location (or nearby) and remedy the potential interference, subject to field tests.

492. Independence Television Company (Independence), the licensee of WDRB-TV in Louisville, Kentucky, opposes Cosmos' request to change the DTV transmitter site of WAVE-TV. Independence states that Cosmos' request is premature and notes that Cosmos' need to specify an alternative site is speculative at this point since it merely wants the right to relocate subject to field test results. Independence argues that it would not be fair to limit other interested parties' options just to reserve Cosmos an additional site it may or may not use.

493. DTV allotments are chosen to best replicate a station's existing NTSC service, using a station's existing antenna site. As noted above, we are not granting requests by licensees to modify their DTV facilities as a matter of reconsideration. We have adopted specific provisions in our rules to allow licensees to request such changes. We believe that reserving a "right" for a licensee to relocate its transmitter to a new location, if at some future time it finds such a new site desirable, is not warranted. As Independence notes, granting such a request may unfairly limit changes by other parties. If Cosmos desires to modify its transmitter site in the future, it should make a request under the rules provided for such changes. Accordingly, we are denying Cosmos' request with regard to WAVE-TV.

494. Delta Broadcasting, Inc. Petition. Delta Broadcasting, Inc. (Delta) is the licensee of WKFT-TV, channel 40 in Fayetteville, North Carolina. Delta asks us to reconsider the allotment of DTV channel 38 to its station or, alternatively, to allow an increased ERP for channel 38. Delta states that its allotment has the lowest DTV/NTSC match (92.7%) in its DMA. While the channel 38 allotment provides for a 1.3% increase in geographic area, it decreases the population served by 4.3%, due to loss of viewers in the densely populated Raleigh-Durham-Chapel Hill area. Delta states that it has identified alternative channels 34 and 46 but has been unable to evaluate them without OET Bulletin No. 69. Delta requests either of these channels, if they prove superior to channel 38, and alternatively requests an increase in power to better replicate its NTSC service area. Delta did not submit a supplemental filing.

## Federal Communications Commission

---

495. WSOC Television, Inc. (WSOC) opposes Delta's request to change DTV channels or increase power. WSOC states that, as Delta has provided no evidence that such changes would not cause substantial harmful interference to WSOC-TV's DTV channel 34 operations, its proposal does not meet the minimum standards for modifying the DTV Table.

496. We have reviewed Delta's request and found that the channel 38 DTV allotment provided for WKFT-TV is appropriate and consistent with our DTV allotment policies. Delta has not submitted any technical information indicating that its alternative suggested channels would not impact other stations or operations. With regard to Delta's request for an increase in power to improve service replication, we note that our service replication approach is meant to allow all existing broadcasters to provide DTV service to a geographic area that replicates, to the extent feasible, the service area of their existing NTSC station. Delta's station, WKFT-TV, received a DTV allotment that would provide for over 90% replication of its service area and would serve a population base equal to almost 96% of its existing population coverage. We find that WKFT-TV's channel 38 DTV allotment meets our DTV allotment goals, including service replications, and we are denying Delta's request.

497. Duhamel Broadcasting Enterprises Petition. Duhamel Broadcasting Enterprises (Duhamel) is the licensee of several television stations serving Nebraska, South Dakota, and Wyoming. In its petition, it states that its stations KDUH-TV, channel 4 in Scottsbluf, Nebraska, KSGW-TV, channel 12 in Sheridan, Wyoming, and KHSD-TV, channel 11 in Lead, South Dakota were assigned DTV channels in the UHF band. Duhamel submits that its stations operate in areas where the broad coverage of VHF channels is used to build a market large enough to make small market television feasible and that its stations must preserve these geographically-large markets as they move to DTV. It asserts that VHF channels are available to be used for DTV service without interfering with other DTV allotments. To allow it to avoid financial and technical hardships, Duhamel requests that we make the following alternative DTV allotments for its stations: for KDUH-TV, NTSC channel 4, DTV channel 7 instead of DTV channel 19; for KSGW-TV, NTSC channel 12, DTV channel 13 instead of DTV channel 21; and for KHSD-TV, NTSC channel 11, DTV channel 12 instead of DTV channel 27. Duhamel includes a technical exhibit for each requested change. Duhamel did not submit a supplemental filing.

498. Nebraska Educational Telecommunications Commission (NETC), the licensee of noncommercial station KRNE-TV, NTSC channel 12 in Merriman, Nebraska, states that Duhamel's proposed change for KHSD-TV's DTV allotment would be short spaced to its station, KRNE-TV, with 251.3 km between them rather than the required 273.6 km, and could adversely affect its station's co-channel NTSC operations. NETC states that it understands the factors underlying Duhamel's request and would be prepared to consider analyses prepared by Duhamel in accordance with OET Bulletin No. 69 and discuss appropriate power limitations or other commitments that might ameliorate NETC's concerns, such as moving to channel 11 after the transition. In the meantime, however, NETC opposes the proposed channel change.

499. Throughout this proceeding, we have stated that we intend to give broadcasters the

flexibility to develop alternative allotment approaches and plans.<sup>156</sup> We stated that we would consider alternative allotment/assignment plans that are the result of negotiations and coordination among broadcasters and other parties within their communities. We stated, however, that such changes must have the agreement of all affected broadcasters and must not result in additional interference to other stations or allotments. We do not find that Duhamel's requests, as currently crafted, meet this test. Our analysis indicates that Duhamel's suggested channel changes would impact and cause additional interference to other stations.

500. Entravision Holdings, LLC Petition. Entravision Holdings, LLC, (Entravision) is the licensee of KINC-TV, channel 15 in Las Vegas, Nevada, KCEC-TV, channel 50 in Denver, Colorado and a number of low power television stations.<sup>157</sup> With regard to its full service stations, Entravision expresses concern that the DTV Table provides some allotments on channels immediately adjacent to a broadcaster's existing NTSC channels. It is concerned that KINC-TV's NTSC channel 15 has been paired with DTV channel 16 and that KCEC-TV's NTSC channel 50 has been paired with DTV channel 51. Entravision submits that the MSTV/NAB information indicates that there are multiple opportunities in its two markets that will permit allotment of non-adjacent channels for its stations. Entravision states that in Las Vegas we could consider channels 26, 27, 28, or 29 for KINC-TV's DTV channel and that in Denver the best DTV allotment for KCEC-TV would be either channel 23 or 38.

501. We have reviewed Entravision's request. Our analysis indicates that the suggested alternative channels would impact and cause interference to other stations. Further, we have no information to indicate that co-located adjacent channel DTV/NTSC operation should be a concern, as suggested by Entravision. Accordingly, Entravision's request to change the DTV allotments for its stations KINC-TV and KCEC-TV is denied.

502. Fayetteville-Cumberland Telecasters, Inc. Petition. Fayetteville-Cumberland Telecasters, Inc. (FCTI), the licensee of WFAY-TV, channel 62 in Fayetteville, North Carolina, states that WFAY-TV operates from Lumber Bridge, North Carolina and cannot provide coverage to portions of the Raleigh-Durham DMA. FCTI states that it had hoped that its DTV assignment would have afforded it greater latitude for a future transmitter move but that its assigned DTV channel 36 would not provide this relief. FCTI believes that giving WFAY-TV channel 34 would not disrupt the table but would permit the station to relocate its transmitter site and expand its DMA coverage. FCTI did not submit a supplemental filing.

503. WSOC Television, Inc. (WSOC), the licensee of WSOC-TV in Charlotte, North Carolina, states that it opposes FCTI's request to change DTV channels. WSOC states that, as FCTI has failed to provide any evidence that such a change from DTV channel 36 to DTV channel 34 would not cause substantial harmful interference to WSOC-TV's DTV channel 34 operations, its proposal fails to meet the minimum standards for modifying the DTV Table.

---

<sup>156</sup> See, for example, Sixth Report and Order at para. 172.

<sup>157</sup> Entravision's requests regarding its low power stations are addressed in that section.

## Federal Communications Commission

---

504. We have reviewed FCTI's request and have determined that such a channel change would impact other broadcast operations. We therefore are denying FCTI's request that the allotment for its WFAY-TV be changed to channel 34.

505. Florida West Coast Public Broadcasting, Inc. Petition and Supplemental Filing. Florida West Coast Public Broadcasting, Inc., (WEDU) is the licensee of noncommercial educational television station, WEDU-TV, NTSC channel 3 in Tampa, Florida. WEDU states that its station was allotted channel 54 for DTV and urges that we consider the future substitution of a core channel if, as a result of other stations ceasing broadcasting on either their NTSC or DTV channels, an in-core channel becomes available for WEDU-TV's use.<sup>158</sup>

506. As stated above, to the extent that in-core channels become available during the transition, we will attempt to reduce the number of out-of-core allotments, such as the channel 54 allotment to WEDU-TV, in any future amendments to the DTV Table.

507. WEDU also states that the Sixth Report and Order specifies reference coordinates for a new vacant reserved DTV channel 5 at Bradenton, Florida. It believes that this allotment replaces the NTSC channel 19 allotment at Bradenton for which WEDU was the sole applicant. WEDU states that it intends to apply at the earliest opportunity for the right to construct on the new channel 5 and to request permission to amend its application to specify DTV channel 5. WEDU requests that it be permitted to locate the channel 5 facility at the Riverview Antenna Farm, at 27° 50' 52" N and 82° 15' 48" W. It states that WEDU-TV could operate DTV channel 5 from the Riverview site without causing interference to other NTSC or DTV operations and still provide a 28 dBu or better signal over Bradenton. It states that, as indicated in the engineering statement, the DTV station at this location could be operated with maximum directional power of 26 dbW (389 watts) at 491 m. antenna HAAT. WEDU requests that the reference coordinates, power, and antenna height for DTV channel 5 at Bradenton be modified to permit use of that channel at the Riverview site.

508. The issues raised by WEDU in its petition and supplement are beyond the scope of this proceeding. To the extent that WEDU desires to modify its pending NTSC application to operate DTV on a new channel and change the location of a vacant allotment, there are existing procedures in place for such requests. These matters are beyond those being considered herein. Therefore, WEDU's petition is denied.

509. Fort Wayne Public Television Petition. Fort Wayne Public Television, Inc., (Fort Wayne PTV), licensee of WFWA-TV, channel 39 in Ft. Wayne, Indiana, states that it is concerned that operation of its DTV service on adjacent channel 40 is likely to result in

---

<sup>158</sup> WEDU originally requested an alternative DTV allotment. In its supplemental filing, however, it indicated that it had not identified an alternative channel in the core spectrum for its use at this time. WEDU therefore withdrew its request for reconsideration on that point.

## Federal Communications Commission

---

considerable intermodulation interference. In light of the unavailability of OET Bulletin No. 69, it requests that it be allowed at least 90 days following the Bulletin's release to supplement its petition, should it determine that another channel would avoid the anticipated intermodulation interference problem. Fort Wayne PTV did not submit a supplemental filing.

510. We find that the concern raised by Fort Wayne PTV regarding adjacent channel interference between co-located NTSC and DTV operations is unsupported by the DTV system test data. All available information and testing to date indicate that adjacent channel DTV and NTSC operations are possible and that intermodulation interference will not occur, provided that reasonable engineering care is taken in implementing the new DTV channel and an appropriate balance in power is maintained between the NTSC and DTV operations. Fort Wayne PTV has provided no information refuting this conclusion, nor has it submitted a supplemental filing requesting another channel. We find the suggested change in the DTV allotment for Fort Wayne's WFWA-TV to be unwarranted and deny its petition.

511. Forum Communications Company Petition. Forum Communications Company (Forum), the licensee of KMCY-TV, NTSC channel 14 in Minot, North Dakota, requests that we change the DTV channel 14 allotment provided for KXMD-TV in Williston, North Dakota. Forum submits that these two stations are only 136 km apart, which represents approximately 56% of the minimum spacing distance required for new DTV allotments. Forum sees a potential for interference between the KMCY-TV and KXMD-TV and fears that future facilities changes may be hampered. Forum submits that, in the absence of OET Bulletin No. 69, it cannot determine the best alternative channel for channel 14 at Williston. It notes, however, that the NAB's list of alternative channels shows that others may be available for DTV use in that community. Forum did not submit a supplemental filing.

512. Our calculations indicate that Forum's KMCY-TV will receive new interference to about 6.7% of its service area and to 2% of the population now served. We further note that KXMD-TV's DTV operation will provide for 99.6% service area replication. We believe that these levels of interference and service replication are fully consistent with policies used to develop the DTV allotments. To the extent that the DTV allotments provided KMCY-TV and KXMD-TV might hamper future facility changes by those stations, we find that such impact is speculative at this time. We also note that we have provided mechanisms for parties to negotiate changes to the DTV allotments. Without the agreement of KXMD-TV, we are unwilling to make a change in that station's DTV allotment solely at the request of another party. Accordingly, we are denying Forum's petition.

513. Fox Television Stations, Inc. Petition and Supplemental Filing. Fox Television Stations, Inc. (Fox) raises specific concerns with regard to several of its stations.<sup>159</sup> Fox asserts in its petition that its Los Angeles, California station KTTV-TV will have 5.9% less coverage than its NTSC service. It sees no engineering reason to prevent KTTV-TV from increasing its

---

<sup>159</sup> We address Fox's request regarding its station WTTG-TV above in Section IV B.

## Federal Communications Commission

---

power from the 659.2 kW specified in the Table to 1,000 kW.

514. As noted above, we are not granting requests to maximize facilities as a matter of reconsideration. We have adopted provisions in our rules to allow licensees to request an increase in their DTV facilities and believe that considering maximization requests at this time would unfairly disadvantage parties that have expected such maximization requests to be dealt with under the rules. We are thus denying Fox's request to increase the power of KTTV-TV.

515. Fox is next concerned that the DTV channel assigned to WTIC-TV in Hartford, Connecticut, could interfere with its WNYW-TV, channel 5 in New York City. It argues that channels 16, 28, 35, 44, 60, or 63 could be assigned to Hartford. Tribune Company (Tribune), the corporate parent of WTIC-TV, channel 61 in Hartford, Connecticut, states that it recognizes that the northeast corridor is especially congested and supports a proposed MSTV regional solution to alleviate short-spacings but opposes Fox's petition and any solution addressing only the DTV channel 5 assignment to WTIC-TV.

516. We have reviewed the alternative channels suggested by Fox for Tribune's WTIC-TV. We further note Tribune's objections to making such a change. As stated above, we are generally not changing the DTV allotment of one broadcaster at the request of another. We have provided for parties to negotiate allotment changes and will only grant requested changes where all affected parties agree. In this case, Tribune has not indicated its agreement to the change proposed for its WTIC-TV by Fox. Furthermore, our analysis indicates that the channels suggested by Fox for WTIC-TV would impact or cause additional interference to other stations. In addition, as stated previously, we find that increased use of channels 60-69 would be inconsistent with our statutory mandate under Section 337(a) of the Balanced Budget Act of 1997. Accordingly, we are denying Fox's request that the DTV allotment for WTIC-TV be changed to protect its station.

517. Fox argues that its WTXF-TV, channel 29 in Philadelphia, Pennsylvania would be impacted by the DTV allotment for WMPB-TV in Baltimore, Maryland. Fox states that another DTV channel should be selected for WMPB-TV and suggests channel 65.

518. As stated above, we are generally not changing the DTV allotment of one broadcaster at the request of another. We have provided for parties to negotiate allotment changes and typically will grant change requests only where all affected parties agree. There is no indication that the licensee of WMPB-TV has agreed to the proposed change. Again, as stated above, we find increased use of channels 60-69 to be inconsistent with our statutory mandate under Section 337(a) of the Balanced Budget Act of 1997. Accordingly, Fox's request to change the DTV allotment for WMPB-TV to protect its station is denied.

519. Fox's WJBK-TV operates on channel 2 in Detroit, Michigan. It states that proposed new DTV allotments in Cleveland, Ohio for WKYC-TV and WWMT-TV in Kalamazoo, Michigan could cause some interference to WJBK-TV, although it states that this is not as egregious as the previous cases. Fox recommends, however, that we evaluate DTV



## Federal Communications Commission

---

channels 53 or 65 for WKYC-TV and 26, 29, 30, 60, 61, 67, or 68 for WWMT-TV. Gannett opposes Fox's request that we change the DTV channel 2 allotment of Gannett's WKYC-TV in Cleveland, Ohio. Gannett argues that Fox has failed to demonstrate any compelling need for change. It also argues that use of channel 53 or 65 for WKYC-TV's DTV service, as Fox suggests, would leave its station with a less desirable channel than its present allotment. Gannett points out that neither channel is in the core spectrum, so that their use would require WKYC-TV to return to its NTSC channel 3.

520. We have reviewed the alternative channels suggested by Fox for WKYC-TV and WWMT-TV, and we have noted Gannett's objections to making such a change with regard to its WKYC-TV. As stated above, we are generally not changing the DTV allotment of one broadcaster at the request of another. We have provided for parties to negotiate allotment changes and will typically grant change requests only where all affected parties agree. Furthermore, our analysis indicates that the channels suggested by Fox would impact or cause additional interference to other stations. As stated previously, we also find that increased use of channels 60-69 would be inconsistent with our statutory mandate under Section 337(a) of the Balanced Budget Act of 1997. Accordingly, Fox's request that we alter the DTV allotments for WKYC-TV and WWMT-TV to protect its station is denied.

521. Fox indicates that WFXT-TV in Boston, Massachusetts operates on channel 25 and has been assigned channel 31 for DTV. Fox argues that DTV channel 25 has also been allocated to WNNE-TV in Hartford, Vermont and that WNNE-TV's DTV operations must use the same antenna azimuth pattern as its NTSC operations to prevent interference to WFXT-TV. Fox states that WFXT-TV has on file an application seeking relocation from its present antenna site in Needham to the Hancock Tower in downtown Boston and has also sought an increase in power. Fox states that moving its DTV operation from Needham to Boston will permit co-location with WABU-TV's channel 32 and should alleviate adjacent channel interference. Fox also asks that its increased power request be taken into account.

522. As indicated above, service replication is based on NTSC facilities existing as of April 3, 1997, and we are not changing DTV allotments to take into account pending requests to change the location or power of an existing NTSC facility. To the extent that Fox desires to make such changes in its DTV allotment or facilities, it should do so under the appropriate rule provisions. We therefore deny Fox's request with regard to WFXT-TV.

523. Gateway Communications Inc. Petition. Gateway Communications Inc. (Gateway) is the licensee of WBNG-TV in Binghamton, New York; WTAJ-TV in Altoona, Pennsylvania; WOWK-TV in Huntington, West Virginia; and WLYH-TV in Lancaster, Pennsylvania. In its petition, Gateway states that, without OET Bulletin No. 69, it cannot complete its analysis. Gateway states that WOWK-TV will receive co-channel interference from the DTV allotment for WSYX-TV in Columbus, Ohio and requests another, non-interfering allotment for WSYX-TV. Gateway also questions the allotment of DTV channel 54 to WOWK-TV and DTV channel 55 to station WCHS-TV in Charleston, West Virginia and proposes that WWOK-TV's DTV allotment be changed from channel 54 to channel 39 and that DTV channel 54 be allotted to the

unbuilt CP for station WKRP-TV in Charleston, West Virginia. In addition, Gateway suggests that side-mounted DTV antennas will not be able to achieve the pattern replication we anticipated. Gateway asks us to provide additional power and/or other means to enable stations using side-mounted antennas to replicate their service areas. Gateway did not submit a supplemental filing. In its comments, Heritage expresses concern that grant of Gateway's requests could result in changes that place Heritage-owned stations at a competitive disadvantage in their respective markets.

524. With regard to Gateway's concern that its station will receive interference to its NTSC operations, as stated above, we have attempted to the extent possible to minimize all interference to existing NTSC operations in our DTV policies and in developing the DTV Table. In many instances, however, it was not possible to provide for completely interference free operation and still provide every broadcaster with a DTV channel or meet our other allotment goals. We continue to find that the DTV allotments in the Huntington area are appropriate and find no basis for changing the allotment provided WSYX-TV in Columbus, Ohio solely at Gateway's request. We are therefore denying Gateway's request to change the DTV allotment of WSYX-TV in order to reduce interference to its station, WOWK-TV. With regard to Gateway's concern about side-mounted DTV antennas, we have provided a way for stations to request additional power, provided that they can make an engineering showing that such a change would not cause additional interference.

525. Granite Broadcasting Corporation Petition. Granite Broadcasting Corporation (Granite) submits that, while the DTV allotments of most of its stations are reasonably comparable to their competitors' allotments, two of its stations, KNTV-TV, NTSC channel 11 in San Jose, California and WWMT-TV, NTSC channel 3 in Kalamazoo, Michigan, have received allotments that put them at a competitive disadvantage compared to other commercial network affiliates in their markets. Granite did not submit an individual supplemental filing.

526. Granite states that KNTV-TV was assigned DTV channel 12 with 6 kW ERP. It states that its analysis of the station's predicted DTV coverage area is not as optimistic as the 99 percent replication predicted by our models. It is concerned that the channel 13 DTV allotment for KCBA-TV in Salinas, California, at a distance of 49.8 km, is within the minimum and maximum spacings for adjacent channels specified under Section 73.623(d)(1) of the rules. Granite submits that, due to this spacing, both stations are precluded from improving their assigned ERP and service patterns. Granite further notes that the station's replication is based on a directional antenna pattern for its DTV operations despite its present use of an omnidirectional antenna. It states that, while it is likely that an antenna manufacturer could fill the directional pattern to at least 85 percent, it is unlikely that KNTV-TV will be able to realize the full coverage needed to achieve service replication. Granite submits that the DTV channel 12 allotment provided for KNTV-TV would produce a substantial loss of service and place the station at a competitive disadvantage. Granite recognizes that alleviating problems in congested markets often will require action to be coordinated and reevaluated among several stations on a regional basis, and it requests such a reevaluation for the San Francisco-Oakland-San Jose market.

## Federal Communications Commission

---

527. AK Media, in comments to Granite's petition, supports the request that we correct the short spacing between the DTV channel 12 allotment provided for its own KCBA-TV and the DTV channel 12 allotment provided for Granite's KNTV-TV in San Jose. Like Granite, AK Media expresses concern that the distance between these adjacent DTV channels the minimum spacing requirements by 1.5 km for adjacent DTV channels.

528. As indicated above, we are taking a number of steps to address adjacent DTV-to-DTV channel concerns, such as improving our DTV emissions mask to reduce out-of band emissions and making specific DTV allotment changes. In this instance, we do not find that an allotment change is necessary or possible that would significantly improve the situation. As Granite notes, this is an extremely congested area of the country and the number of potential solutions is limited. Furthermore, with regard to this specific situation, we note that MSTV in its *ex parte* filing estimates that KNTV-TV's DTV operation would be able to replicate 99% of its current NTSC service area and would also provide improved geographic and population coverage. Given the potentially significant improvements in coverage that are possible with its DTV channel, we find that Granite's concern about the service replication and the competitive implications of its DTV allotment are unfounded. We believe that the DTV allotment for KNTV is consistent with our DTV service replication policies and goals. Accordingly, Granite's request for a change in the DTV allotment of KNTV-TV is denied.

529. Granite argues that WWMT-TV also faces service problems resulting from faulty assumptions in our models. It states that our replication protocols have assumed that DTV service on the channel 2 allotment provided for WWMT-TV would be equivalent, out to a field strength of only 28 dBu, to DTV service at higher signal levels on other channels. Granite suggests that such an assumption is not warranted, particularly for channel 2, since we have questioned the susceptibility of service on this channel to interference from both natural sources, such as atmospheric noise, and man-made noise, such as ignition noise. It expresses concerns that assignment of DTV channel 2 to WWMT-TV subjects that station to signal variations that make our service estimates to be inflated, with results unfair to WWMT-TV.

530. Fox, in comments supporting Granite, states that it is concerned about potential interference problems between the DTV channel 2 allotment for WWMT-TV and Fox's WJBK-TV in Detroit. It notes tropospheric ducting along Lake Michigan can cause interference, especially during summer months. Fox states that for these reasons it has suggested an alternative DTV channels for WWMT-TV in its petition. Gannett, on the other hand, disputes Fox's concern that tropospheric ducting on channel 2 will cause interference with WJBK-TV. Gannett states that, while certain atmospheric conditions can cause interference, ducting and Sporadic-E are occasional and intermittent phenomena and do not occur with the frequency and predictability that would warrant consideration here.

531. The values used to determine the signal strength of noise limited coverage were derived from measured field and test data by our DTV advisory committee. The fact that different field strengths apply to low VHF, high VHF, and UHF frequencies reflect the differing propagation characteristics of each of these regions of the spectrum. We note that this same

## Federal Communications Commission

---

principal has been used for analog NTSC service and our rules specify different field strengths for both Grade A and Grade B coverage depending on frequency band.<sup>160</sup> As indicated above, we further note that we have expanded the DTV core spectrum to include channels 2 to 6. While we recognize that ducting can occur on channel 2 as suggested by Fox, we note that this phenomena occurs on other frequencies as well. We note that this a congested region of the country and we continue to believe that the allotments we have developed are appropriate. In sum, we find Granite's concerns to be unfounded and we expect DTV service on channel 2 to be as successful as analog service has been on that channel. We are denying Granite's request for an alternative DTV channel for WMMT-TV.

532. Grant Broadcasting Group Petition. Grant Broadcasting Group (Grant) is concerned that the DTV channel 34 allotment provided for WNYO-TV may result in blanketing interference. It submits that the NBC affiliate, WGRZ-TV, channel 2 in Buffalo, has been allotted DTV channel 33. Grant states that this channel 33 DTV operation will have 1000 kW ERP, while WNYO-TV's channel 34 operation will have 142.6 kW DTV power. It is concerned that, with such a great disparity in power between these first-adjacent channel stations, WNYO-TV will experience severe blanketing interference from channel 33. Grant also expresses concern that if WGRZ-TV begins operation on its DTV channel 33 before WNYO-TV commences operation on DTV channel 34, that station may argue that it has no obligation to help cure WNYO-TV's blanketing interference problems. Grant urges the Commission to clarify that WNYO-TV and other similarly situated stations will be able to increase power to avoid such interference.

533. We have adopted a number of measures, including power increases, that may be used to improve non co-located adjacent channel situations, such as between WYNO-TV and WGRZ-TV. We note that our new requirements for DTV out-of-band emissions will improve this specific situation which, under the worst case assumptions, would affect less than 1% of the population served by WYNO-TV. We therefore make no changes at this time but clarify that Grant may request a power increase for WNYO-TV under our maximization rules.

534. Great Trails Broadcasting, Inc. Petition and Supplemental Filing. Great Trails Broadcasting, Inc. (Great Trails) is the licensee of WHAG-TV, channel 25, in Hagerstown, Maryland. It is concerned that WHAG-TV will be unable to serve its current viewers with its channel 55 DTV allotment. It states that it is particularly concerned with regard to the issue of interference at cable headends. Great Trails submits that because of the mountainous terrain of the Potomac, Cumberland, and Shenandoah Valleys, many viewers receive the station's service through cable. It states that a preliminary study indicates that operation of WHAG-TV's DTV service on channel 55 may pose problems for delivering signals to cable headends due to new interference. It argues that allotment of an out-of-core channel for WHAG-TV will place a heavy burden on it because it will have to build two DTV facilities while the dominant stations in the Washington, DC market will not.

---

<sup>160</sup> See, for example, Section 73.683 of the rules. 47 CFR §73.683.

## Federal Communications Commission

---

535. In its supplemental filing, Great Trails requests that we exchange the DTV allotment for WHAG-TV with the channel 44 DTV allotment currently provided for WWPB-TV, a Maryland Public Broadcasting Commission (MPT) station also in Hagerstown. It submits that these stations currently use the same transmitter site. Great Trails states that one problem with use of channel 55 by WHAG-TV is that the station would be short spaced to the NTSC service of channel 62, another MPT station in Frederick, MD. Great Trails submits that the engineering solutions necessary for DTV channel 55 and NTSC channel 62 to co-exist would be easier to achieve if both stations were owned by the same party. It submits that MPT would be in the best position to build and operate channel 55 in Hagerstown to minimize interference to channel 62 in Frederick. It argues that, in the event that operation of these stations results in unresolvable interference, there will be little or no loss of service since the programming of MPT Hagerstown and Frederick stations is virtually the same.

536. MPT seeks the denial of Great Trails' petition for reconsideration. MPT states that Great Trails proposal that the DTV allotments for WHAG-TV and WWPB-TV be switched would leave WWPB, a tax-supported public television station with a less desirable channel and the prospect for paying for two channel changes. It states that Great Trails' interference argument is not supported by its engineering statement which recognizes that any interference would be from channel 55 to channel 62 and not in the other direction. MPT also submits an engineering statement that indicates that Great Trails' DTV operations will not create interference to WFPT's channel 62 service.

537. We are denying Great Trails' request. As indicated by MPT, Great Trails' request would affect another station, and Great Trails has not received the consent of that affected station. Furthermore, with regard to Great Trails' principal concerns about interference to cable headend reception, we note that interference at a cable headend often can be overcome by the use of proper engineering techniques, including improved and more sophisticated receiving antenna in those limited situations where they may be needed. We therefore find that Great Trails' reliance on service through cable carriage would lessen any concern about its particular DTV allotment. As stated above, we have attempted to provide all stations a core channel, but this was not always possible. We continue to find that the channel provided Great Trails' station in the Sixth Report and Order is appropriate and are denying its request for a change.

538. Gulf California Broadcast Company Petition. Gulf California Broadcast Company (GCBC), the licensee of KESQ-TV, channel 42, Palm Springs, California, states that it has initiated a costly upgrade of its facilities that is not reflected in its allotment of DTV channel 52, with 64.4 kW and an antenna HAAT of 1087 m. GCBC states that, as a result, its DTV operation on channel 52 would serve less than one-third of the population that will be served by the station's NTSC operation from its new transmitter site on Pine Mountain. GCBC therefore requests that we allot it another DTV channel, preferably channel 54, at significantly higher power. It submits that DTV channel 54 could be allocated without any other change in the DTV Table and that this channel would result in improved coverage. It further states that the total interference resulting from DTV operation by KESQ-TV on channel 54 would be reduced at

## Federal Communications Commission

---

least 23% in area and 50% in population as compared to operation on channel 52. GCBC did not submit a supplemental filing.

539. We have reviewed GCBC's requested channel change. Our analysis indicates that use of channel 54 by KESQ-TV would impact and cause increased interference to other stations. We therefore are denying GCBC's requested channel allotment change for station KESQ-TV. With regard to GCB's concerns that the allotment for KESQ-TV did not take into account its recently upgraded facilities, our calculations have assumed KESQ-TV's operation at the Pine Mountain site with the parameters specified in their most recent application.

540. Jefferson-Pilot Communications Company Petition and Supplemental Filing. Jefferson-Pilot Communications Company (Jefferson-Pilot), the licensee of WWBT-TV, channel 12 in Richmond, Virginia, submitted a petition for reconsideration and supplemental filing asking that its station be allotted DTV channel 11 instead of channel 54. WAVY Television, Inc. (WAVY) opposed Jefferson-Pilot's request, stating that the allotment of channel 11 to WWBT-TV would cause unacceptable interference to its station WAVY-TV, NTSC channel 10 in Portsmouth, Virginia. On November 5, 1997, Jefferson-Pilot filed a request seeking to withdraw its petition and retain its authorization to use channel 54 during the digital transition period.

541. We find that because Jefferson-Pilot has asked to withdraw its petition, its request for a DTV channel change for WWBT-TV is now moot.

542. Journal Broadcast Group, Inc. Petition and Supplemental Filing. In its petition, Journal Broadcast Group, Inc. (Journal), the licensee of KTNV-TV, channel 13 in Las Vegas, NV, states that the allotment of UHF DTV channel 17 for KTNV-TV is unjustified because it would impose significant costs on Journal that would not exist for other Las Vegas stations and would create serious environmental issues at KTNV-TV's transmitter site. Specifically, it states that a UHF transmitter will cost considerably more than a VHF transmitter and antenna. Journal estimates that this added cost is expected to exceed \$1,000,000. It also states that operating at UHF will make RF compliance on the Black Mountain antenna site more complex and expensive. It states that these concerns could be avoided by allotting a VHF DTV channel for this station, and it asks the Commission to allot channel 9 for KTNV-TV.

543. In its supplemental petition, Journal requests that we modify the DTV Table to assign channel 12 to KTNV-TV. It states that use of channel 12 would eliminate the serious problems identified in its petition, could be accomplished consistent with the DTV allotment rules, would actually provide more interference-free coverage than the KTNV-TV's channel 17 DTV allotment, and would also resolve the concerns raised by the two parties that filed comments responding to Journal's petition. In this regard, Journal submits that use of channel 12 would address Innovative Technologies concern that Journal's operating on channel 17 would displace its LPTV station. Second, the Clark County School District, the licensee of KLVX-TV, channel 10 in Las Vegas, opposed Journal's request to use channel 9 because Journal did not expressly commit to cooperate in resolving potential interference. Journal states that it hereby

## Federal Communications Commission

---

makes that commitment to the School District, in the event that it is allotted channel 9. It observes that the School District's interference concerns would be mooted if we grant its request to allot channel 12 for KTNV-TV, rather than channel 9.

544. We have reviewed Journal's request. Our analysis indicates that use of channel 12 by KTNV-TV would impact and cause increased interference to other stations. We therefore are denying Journal's requested change for KTNV-TV.

545. Jovon Broadcasting Corp. Petition. Jovon Broadcasting Corp. (Jovon) is the licensee of WJYS-TV, channel 62 in Hammond, Indiana. Jovon claims that its channel 36 DTV allotment conflicts with the FCC's statutory obligation to minimize significant economic impact on small entities. Jovon states that its station is one of 12 commercial TV stations competing in the Chicago DMA and that, with DTV channel 36, it would be the only one unable to operate from the Sears and Hancock buildings. It states that operation on channel 36 from the Sears and Hancock buildings would result in co-channel interference to WMVT-TV, Milwaukee, Wisconsin. It further argues that its consumer base would have 1 million fewer viewers. Jovon states that it should be allotted channel 64 instead. It states that channel 64 will eliminate a competitive disadvantage and permit it to operate within the centralized antenna zone of the Chicago market. It states that allotting channel 64 to WJYS-TV would not be inconsistent with the core approach, as other channels are already allocated outside the core spectrum during the transition period. In comments, Jovon states that use of channel 36 will displace an LPTV station and notes that TBN's petition also requests that WJYS-TV be allotted channel 64. Jovon did not submit a supplemental filing.

546. We find that the DTV channel 36 allotted to Jovon's station WJYS-TV is consistent with our DTV service replication policies. Our DTV allotments are intended to provide for service replication of a station's existing facilities. Jovon's station WJYS-TV is licensed to serve the community of Hammond, Indiana and now operates from a transmitter site 24 miles from the Sears and Hancock buildings. In addition, we disagree with Jovon that providing its station WJYS-TV with a DTV allotment that replicates the service it can now provide places it at an unfair advantage or conflicts with our statutory obligation to minimize significant economic impact on small entities. Furthermore, we also find that increased use of channels 60-69 would be inconsistent with our statutory mandate under Section 337(a) of the Balanced Budget Act of 1997. We therefore are denying Jovon's request.

547. KFBB-TV Corporation, L.L.C. Petition. KFBB-TV Corporation, L.L.C. (KFBB), the licensee of KFBB-TV, channel 5 in Great Falls, Montana, requests that we reconsider the allotment of DTV channel 39 for KFBB-TV and instead allot channel 8 with a peak ERP of 180 kW or less and antenna HAAT of 180 m. KFBB submits that operation of KFBB-TV's DTV service on a UHF channel would likely cause the station to incur significant increased operating costs. It states that operating with the specified power would place a considerable economic burden on KFBB-TV because the cost of constructing and operating such a high power facility is not justified in the station's small market. It states that allowing the station to continue to operate on a VHF channel would keep it from incurring these additional costs. KFBB states that

## Federal Communications Commission

---

use of channel 8 would create only a small increase in interference and requests that we regard this interference as *de minimis*. If we determine that this interference is not *de minimis*, it submits that we permit the station avoid the interference through use of a directional antenna. KFBB states that it could limit the ERP of the proposed facility to 30.5 kW in the direction of the area where interference would otherwise occur. KFBB did not submit a supplemental filing.

548. We have reviewed KFBB's request. Our analysis indicates that its requested change would impact and cause increased interference to other stations. We therefore are denying KFBB's requested change for its station KFBB-TV.

549. KPDX License Partnership Petition. KPDX License Partnership (KPDX), the licensee of KPDX-TV, channel 49, Vancouver, Washington, requests that we reconsider the DTV channel 48 allotment provided for KPDX-TV. It states that an engineering analysis indicates that operation of KPDX-TV's DTV service on channel 48 would severely limit the station's ability to replicate its service area and to make a smooth transition to full DTV operations. It submits that because KPDX-TV's NTSC service is first-adjacent to its DTV channel, the level of intermodulation interference is likely to be considerable. KPDX further argues that the channel 48 operating parameters place KPDX-TV at a serious disadvantage with respect to other stations in the Portland, Oregon/Vancouver, Washington market. It states that KPDX-TV received that lowest power -- 103 kW, compared to other power levels of 960 kW and 750 kW. KPDX submits that such a low power level virtually ensures that KPDX-TV will have no chance of replicating even a significant portion of its NTSC coverage. Finally, KPDX is concerned that because we have not determined whether channel 48 will be in the core spectrum, KPDX-TV may have to construct two DTV facilities, one on channel 48 and a second in the core. KPDX request that it be allotted channel 44 for DTV service with an antenna HAAT of 527 m and 446 kW. It submits that this channel can be used without any spacing problems and without any increased interference to NTSC and new DTV operations. KPDX did not submit a supplemental filing.

550. We have reviewed KPDX's request. Our analysis indicates that the requested change would impact and cause increased interference to other stations. With regard to KPDX's concerns about adjacent channel DTV and NTSC operation, all available information and testing to date indicate that adjacent channel DTV and NTSC operations are possible and that intermodulation interference will not occur with co-located operations. With regard to the power assigned to its station, we estimate that KPDX-TV's DTV allotment will be able to provide DTV service to an area larger area than now served by its analog operation. To the extent that there are differences in the power assigned to other stations in the Portland/Vancouver market, this merely reflects the fact that the NTSC service coverage of those stations currently varies. We therefore deny KPDX's requested change for its station.

551. KSLS, Inc. Petition. KSLS, Inc., is the licensee of KSCI-TV, channel 18, in San Bernardino, California. It is concerned that KSCI-TV's NTSC service will receive interference from the co-channel DTV operation of KUSI-TV in San Diego, California. KSLS notes that, by the FCC calculations, KSCI-TV will suffer the greatest area interference of any station in the



## Federal Communications Commission

---

Los Angeles area, *i.e.*, 12.1% of its service area and 1.6% of its population. KSLs states that the combination of poor receive antennas and greater than calculated signals from San Diego due to ducting will produce much higher levels of interference than we have predicted. KSLs-TV submits that there appear to be many other DTV channels that would work in San Diego without causing interference to KSCI. In particular, it states that almost all the frequencies in the Bakersfield market, including channels 17, 23, 29, 31, and 45, could be reused for DTV allotments in San Diego.

552. KSLs also notes that the channel 61 DTV allotment for KSCI-TV cannot be located at Mt. Wilson. It states that, if all of the stations in the Los Angeles market were co-located there, all receive antennas in the market could be pointed in one direction. It submits that such co-location would reduce interference and could make more channels available for DTV allotments. KSLs states that it understands that other stations in the market not located on Mt. Wilson support co-location of all facilities at that site. It urges us to modify the DTV Table to facilitate co-location of all stations in the Los Angeles market to Mt. Wilson.

553. Channel 51 of San Diego, Inc. (KUSI) opposes KSLs's petition to the extent that it urges that its channel 18 DTV allotment be set aside and be changed to one of the channels 17, 23, 29, 31 or 45. KUSI states that it is also concerned about mutual interference between its DTV operations and KSLs's KSCI-TV NTSC operations and has filed its own petition for rule making noting that channel 17 would be a viable alternative. It notes, however, that channel 17 is allotted to Mexico and has urged that the Commission attempt by treaty to have that channel 17 assignment deleted. KUSI notes that the other channels suggested by KSLs are also unavailable because of conflicting Mexican assignments. It states that until channel 17 or some other equally suitable channel becomes available, it opposes any change in its current allotment. It states that at the present time, the allocation of channel 18 is the best channel for KUSI-TV.

554. We have reviewed KSLs's request, and our analysis indicates that the alternative channels suggested are not available for assignment to KUSI. We therefore are denying KSLs's request that the DTV allotment for KUSI-TV be changed to one of these channels to protect its station KSCI-TV. With regard to KSLs's request that its station be relocated to Mt. Wilson, our DTV allotments are based on service replication using existing transmitter sites. We have given broadcasters some flexibility to move their transmitter sites and have provided procedures for the modification of DTV allotments. We do not, however, believe that such a change should be made on reconsideration. We therefore are denying KSLs's requests.

555. KWTX Broadcasting Company Petition. KWTX Broadcasting Company (KWTX), licensee of KWTX-TV, channel 10 in Waco, Texas, seeks allotment of channel 30 instead of channel 53 for KWTX-TV's DTV operation. It states that operating on channel 30 would enable it to better serve the public in the Waco-Temple-Killeen market and would not conflict with any other DTV allotment. KWTX did not submit a supplemental filing.

556. We have reviewed KWTX's request. Our analysis indicates that its requested change would impact and cause increased interference to other stations and, in particular, would

## Federal Communications Commission

---

conflict with a co-channel DTV allotment at Decatur, Texas. We therefore are denying KWTX's requested change for its station KWTX-TV.

557. Lee Enterprises, Inc. and New Mexico Broadcasting, Inc. Petition. Lee Enterprises, Inc., by its subsidiary New Mexico Broadcasting, Inc. (Lee), is the licensee of KREZ-TV in Durango, Colorado. Lee indicates that the allotment of channel 17 for KREZ-TV calls for an assigned power of 50 kW, but that the extreme roughness of terrain would require a replication pattern that would reduce the power to 3.4 kW in certain directions. Since KREZ-TV is not short-spaced to any authorized or proposed station, Lee requests that it be permitted to use a 50 kW omnidirectional antenna for its DTV operation.

558. The service replication approach, as developed by the industry and adopted by the Commission, is based on a station's existing transmitting antenna pattern, taking into account terrain and changes in operating frequency. If Lee wishes to increase the power of KREZ-TV or to use a different antenna pattern, it may request such changes under the appropriate rule provisions. As stated above, we do not find that individual station changes to increase service area are appropriate matters for reconsideration. We therefore are denying Lee's request to increase the power or use a different antenna pattern for its KREZ-TV. We note, however, that the *de minimis* interference standard and other changes we are adopting will give broadcasters like Lee additional flexibility to make such changes under our rules for the modification of DTV allotments.

559. Louisiana Television Broadcasting Corporation Petition. Louisiana Television Broadcasting Corporation (LTBC), the licensee of WBRZ-TV, channel 2 in Baton Rouge, Louisiana, submits that, according to its engineering analysis, the channel 42 DTV allotment provided for WBRZ-TV may not be the best allotment. It states that better channels may be available that would not have any "ripple" effect on other allotments. It submits that channel 13 may offer better coverage of the Baton Rouge market and better protection of other stations from interference. LTBC indicates that WBRZ-TV would need to use a directional antenna to operate on channel 13. LTBC did not submit a supplemental filing.

560. We have reviewed LTBC's request. Our analysis indicates that use of channel 13 by WBRZ-TV would impact and cause interference to other broadcast stations. We therefore are denying LTBC's request to change the DTV channel 42 allotment for WBRZ-TV. We note that this allotment is estimated to provide over 93% replication of WBRZ-TV's present coverage and that our decision to expand the core spectrum will permit WBRZ-TV to return to channel 2 at the end of the transition, if coverage on channel 42 proves inadequate.

561. Maranatha Broadcasting Company, Inc. Petition and Supplemental Filing. In its petition, Maranatha Broadcasting Company (Maranatha), the licensee of WFMZ-TV, channel 69 in Allentown, Pennsylvania, requests that we eliminate short spacing between WFMZ-TV's channel 46 DTV allotment and the co-channel DTV allotment for WWAC-TV in Atlantic City, New Jersey. It states that the stations' transmitters are located 145.7 km apart, a co-channel short spacing of 50.5 km. Maranatha submits that the short spacing is egregious and discriminatory

because both stations have NTSC channels outside the core spectrum and will not be able to continue their DTV operations on these channels at the end of the transition. In its supplemental filing, Maranatha calls the WFMZ-TV/WWAC-TV channel pair the most egregious DTV-to-DTV short spacing in the northeastern United States. It argues that it is unfair to place the expensive and risky burdens of converting to DTV on independent broadcasters and simultaneously saddle them with substandard DTV allotments. It requests that we adjust the DTV Table to assure WFMZ-TV a fully spaced DTV allotment with the potential for maximization of facilities by the end of the transition period, if not earlier.

562. We have reviewed Maranatha's request. Our analysis indicates that there are no alternative DTV allotments that would improve this situation without affecting other broadcast stations. In developing the DTV allotments, we used engineering criteria rather than spacing standards, and we attempted to provide stations with allotments that would permit full service replication of their NTSC service areas. Our analysis indicates that the DTV allotment for Maranatha's WFMZ-TV meets this goal. We note that MSTV in its *ex parte* filing estimates that with this allotment WFMZ-TV will replicate 99.8% of its existing service area and will serve 2,710,000 people, as compared to the 1,897,000 people served by its existing analog operations. Accordingly, we are denying Maranatha's request regarding its station.

563. McAlister Television Enterprises, Inc. Petition and Supplemental Filing. In its petition, McAlister Television Enterprises, Inc. (McAlister), the licensee of KAMC-TV, channel 28 in Lubbock, Texas, requests reconsideration of the channel 27 DTV allotment provided for KAMC-TV. McAlister expresses concern that only 50.4 kW ERP was authorized for KAMC-TV's DTV service on channel 27. In its supplemental filing, McAlister also asserts that KAMC-TV's DTV service on channel 27 may cause harmful interference to the station's NTSC service on channel 28. It states that recent information characterizing DTV out-of-band emissions generated by a non-linear final radiofrequency amplifier places in doubt the ability to generate, maintain, and receive a lower DTV first adjacent channel operation that will not interfere with KAMC-TV's NTSC signal.<sup>161</sup> To eliminate the potential for adjacent channel DTV interference, McAlister requests that we substitute DTV channel 46 for KAMC-TV's channel 27 allotment. The attached engineering statement provided by McAlister purports to demonstrate that a DTV station can operate in Lubbock on channel 46 with 1,000 kW ERP and that channel 46 was chosen based on an analysis performed on alternate channels following the methodology of OET Bulletin No. 69. This study also indicates that 1,000 kW will more closely replicate KAMC-TV's existing service area.

564. We have reviewed McAlister's request. Our analysis indicates that use of channel 46 by KAMC-TV would impact other stations. We further find that the power assigned to KAMC-TV is consistent with our policies and will permit adequate service replication. In this regard, we note that MSTV in its *ex parte* filing estimates that this channel would provide over

---

161 This statement references: "Transmitter Considerations for ATV," Robert J. Plonka, Harris Corp., Broadcast Division, November 22, 1996.

## Federal Communications Commission

---

99% service replication.

565. Media General, Inc. Petition and Supplemental Filing.<sup>162</sup> Media General, Inc. (Media General) is concerned that the DTV Table does not allow almost half of its stations to replicate their existing NTSC service and that other stations in its markets have great power advantages. To solve these problems, Media General proposes that stations be permitted to maximize and increase their power now, even if interference is predicted, upon a showing that the interference can be avoided through certain engineering mechanisms such as employing directional antennas, moving transmitter sites, or using terrain shielding. Media General submits that four of its stations that have less than maximum DTV power allotments can increase their power without causing additional interference to other DTV allotments: WHOA-TV, WJWB-TV, WJHL-TV, and WSLS-TV.

566. As indicated above, we are not granting requests for maximization of facilities at this time. We have adopted specific rules and procedures for power increases and maximization requests. We find that such requests are more appropriately handled under these procedures rather than in the context of petitions for reconsideration. Accordingly, we are denying Media General's request that the DTV power for its stations, WHOA-TV, WJWB-TV, WJHL-TV, and WSLS-TV, be increased.

567. In its supplemental filing, Media General requests that the DTV allotments for its stations WBMG-TV in Birmingham, Alabama and WTVQ-TV in Lexington, Kentucky be changed to channels 62 or 65 so that they can increase power to 1000 kW. It acknowledges that these channels have been identified for early recovery but states that the use of these channels would alleviate the disparity in authorized power between UHF and VHF stations and would resolve interference problems. Media General asks us to refrain from reassigning its original channel allotments until it has fully tested operation on the new channels.

568. We do not find that the channel changes requested by Media General for these two stations are warranted or consistent with our DTV allotment policies. We note that the DTV allotments for both WBMG-TV and WTVQ-TV are estimated to provide over 99% service replication, along with an increase in population served over their associated NTSC operations. As stated above, we do not believe that additional use of channel 60-69 is warranted as a general matter, and in particular with regard to these stations. To the extent that Media General desires to increase the DTV power authorized for these stations, it should make such requests under the appropriate rules. Accordingly, we are denying Media General's request that the DTV allotments for WBMG-TV and WTVQ-TV be changed.

569. Mid-South Public Communications Foundation Petition. Mid-South Public Communications Foundation (Foundation), the licensee of noncommercial station WKNO-TV in

---

<sup>162</sup> We address Media General's requests regarding Fox's WTTG-TV in Washington, DC and its own WHLT-TV in Hattiesburg, Mississippi, above in section IV B.

## Federal Communications Commission

---

Memphis, Tennessee, states that it filed a construction permit application on August 11, 1996, for a new public television station on channel 14 at Memphis and that it filed an application on December 13, 1996, for a new public television station on channel 56 in that same city. These applications are pending. The Foundation states that our decision indicated that pending construction applications filed by September 20, 1997 have been protected for DTV purposes, but that we did not confirm protection with an in-core DTV allotment. The Foundation urges that we explore an in-core DTV allotment for channel 56 or provide additional time for it to find one. The Foundation did not submit a supplemental filing.

570. While the DTV Table of Allotments contained in the Sixth Report and Order did protect pending applications filed by September 20, 1997, our decision did not provide such stations with matching DTV allotments. Such parties are not eligible to receive a second DTV channel at this time. As indicated above, initial eligibility for a DTV allotment is limited to parties that, as of April 3, 1997, were licensed to operate a television broadcast station or held a permit to construct such a station.<sup>163</sup>

571. Mississippi Authority for Educational Television Petition and Supplemental Filing. Mississippi Authority for Educational Television (MAET) is the licensee of public TV station WMAB-TV in Jackson, Mississippi and seven satellite public TV stations. It states that its station WMAE-TV, Booneville, was assigned DTV channel 55 and that its engineers have tentatively found that a VHF channel could be used for DTV purposes. It asks us to confirm that its proposed stations at Clarksdale, Cleveland, Columbia, Columbus, Hattiesburg, Natchez, and Yazoo City, for which it has pending applications, will be protected.

572. In its supplemental filing, MAET asks us to replace the channel 55 DTV allotment provided for its satellite station WMAE-TV, channel 12 in Booneville, Mississippi, with DTV channel 8. It states that operation of WMAE-TV's DTV service on channel 8 would cause a minimum of additional co-channel and adjacent channel interference to four stations in areas where those stations do not provide service. With regard to its seven pending applications, MAET states that, inasmuch as the channels that they specify do not appear to have been included in the DTV Table, it seeks clarification regarding the status of these pending applications and the appropriate DTV channel maintained and protected by the Commission for these proposed applications.

573. Cosmos opposes MAET's proposal to reassign DTV channel 8 to WMAE-TV in Booneville, Mississippi and states that the proposed change would create new interference to 2.1% of the population served by Cosmos' station KAIT-TV in Jonesboro, Arkansas.

574. We have reviewed MAET's request for WMAE-TV. Our analysis indicates that use of channel 8 by WMAE-TV would impact and cause increased interference to other stations.

---

<sup>163</sup> See also Telecommunications Act of 1996, Pub. L. No. 104-1-4, Section 201, 110 Stat. 56 (1996), and 47 U.S.C. §336(a).

## Federal Communications Commission

---

We therefore are denying MAET's requested change for WMAE-TV. With regard to its seven pending applications, we note that four of its applications have been protected -- specifically, applications for noncommercial television stations on channel 43 in Columbus, channel 31 in Cleveland, channel 32 in Yazoo City, and channel 21 in Clarksdale. If granted, these stations would not be eligible to receive a second channel for DTV. MAET's remaining three applications in Hattiesburg, Columbia, and Natchez were not protected because they were in areas where the Commission indicated that it would not accept new applications.

575. Mountain Broadcasting Corp. Petition and Supplemental Filing. Mountain Broadcasting Corp. (MBC) is the licensee of WMBC-TV, Channel 63, in Newton, New Jersey. In its petition, Mountain argues that allotment of DTV channel 61 to WNET-TV in New York, New York, would harm its operations and cause interference and loss of coverage to its existing viewers. It argues that the allotment of DTV channel 8 for its station WMBC-TV in Newton, New Jersey would result in loss of 28% of the station's service area. It notes that this loss of DTV service area reflects interference from NTSC stations on channels 7, 8, and 9. It is concerned that, if these stations keep their core spectrum NTSC channels for DTV, they will permanently cause interference to WMBC-TV's DTV operations. Mountain asks us to consider the suitability of unassigned channel 34 for WMBC-TV's DTV service.

576. Mountain states that it understands that any DTV allotment plan may result in some degree of interference but argues that the allotment decision disproportionately affects it and contravenes many policies that foster service from minority-owned, independent stations, such as WMBC-TV. Mountain requests that WNET-TV be allotted a channel other than 61 and that Mountain's WMBC-TV also be allotted a different channel for its DTV operation. Mountain states that its studies indicate that channel 34 could be allocated to it without an impact on the Table. Mountain alternatively proposes that the New York DTV allotments be re-run fully using all channels between 60-69. Finally, Mountain argues that it is entitled to a hearing if we do not grant its reconsideration.

577. In its supplemental filing, Mountain submits that DTV service on channel 34 would support a level of service comparable to WMBC-TV's existing NTSC operations. It further indicates that channel 34 would be superior to channel 8 in terms of interference caused, by reducing net NTSC and DTV interference. Mountain submits that channel 34 could be assigned to WMBC-TV without disrupting the DTV Table.

578. Mr. Anthony R. Bucco, a member of the New Jersey General Assembly, supports Mountain's request that we change WMBC-TV's DTV allotment to channel 34.

579. Mountain, in its comments, submits that other New York area broadcasters have expressed concern with regard to the DTV channel 8 allotment provided for WMBC-TV and the DTV channel 61 allotment provided for WNET-TV. It argues that ample evidence now on the record demonstrates that these allotments need to be revised. Mountain notes that Pulitzer, the licensee of WGAL-TV in Lancaster, Pennsylvania, argues that we should ameliorate NTSC service area loss by adopting temporary caps on the transmission power or antenna height of

DTV stations that would cause such interference. It observes that such a cap would presumably apply to WMBC-TV. Mountain states that, while the cap would further reduce WMBC-TV's DTV service area during the transition, it might also benefit the station's existing NTSC service, if the interference from WNET-TV's DTV operation on channel 6 is similarly capped. It submits, however, that a station's DTV operations should not remain capped after the surrender of its NTSC license, even if removing the cap creates interference to the NTSC operation of another station in an adjacent, smaller market where the transition to DTV service is not yet complete.

580. Mountain further submits that we must adopt a floor on the service area and population loss that may be imposed on a particular station. It states that it understands that any DTV allotment plan may result in some interference to some stations during the transition period. However, it argues that the size of the service area and population losses imposed on WMBC-TV contravenes our underlying goals of minimizing interference to existing service and replicating that service following the transition to DTV. It states that the service area losses faced by WMBC-TV (19% of its service area population, representing a loss of more than 1.5 million people) will threaten the station's very survival.

581. Finally, Mountain argues that the DTV table imposes unjustified burdens on small businesses in the provision of telecommunications service. Mountain notes that Section 257 of the Telecommunications Act of 1996 requires the Commission to identify and eliminate market entry barriers for small businesses in the provision and ownership of telecommunications and information services.<sup>164</sup> It notes that we have given television broadcasters the flexibility to provide supplemental digital services such as data transfer, subscription video, interactive materials, and other innovations. It states that the implementation of DTV thus provides an opportunity for small businesses owning existing television stations to use their spectrum to provide new telecommunications and information services. Mountain argues that, judging by the New York area DTV allotments, the transition to DTV will greatly burden small businesses. It submits that the four stations that will experience the most interference in the New York ADI are all UHF stations, and that WMBC-TV will bear the most significant loss.

582. As Mountain recognizes, any DTV allotment plan that accommodates all existing broadcasters will result in some degree of interference to existing broadcast stations and new DTV allotments. This is especially true in the heavily congested Northeast portion of the United States and, in particular, the New York City market. In this regard, we recognize that Mountain's DTV allotment does not provide for full replication and that the existing operations of its WMBC-TV may experience more interference than certain other stations. We have carefully studied this situation, including Mountain's suggestions of channel 34 and 23. We find no solution that would improve this situation and continue to believe that our current DTV allotment plan, as amended herein, provides for the best approach for all broadcast stations. In this regard, we note that MSTV's proposed "*ex parte* filing" solution for this region, for example,

---

164 See 47 U.S.C. § 257(a).

## Federal Communications Commission

---

was also unable to address Mountain's concerns. In fact, Mountain states, in response to MSTV's *ex parte* filing, that MSTV's proposals ignore the concerns of Mountain and would reduce service of its WMBC-TV by more than twice the amount imposed by Commission's DTV allotment plan. With regard to Mountain's suggestion that all channels, including channels 60-69, be used in this area to reduce interference and improve service replication. We have already implemented that approach. The DTV Table contained in the Sixth Report and Order uses all channels, including channels 60-69, where necessary to accommodate all stations with minimal interference.<sup>165</sup>

583. Mountain Lake Public Broadcasting Petition and Supplemental Filing. Mountain Lake Public Broadcasting (MLPB), the licensee of WCFE-TV, channel 57 in Plattsburgh, New York, submits that operation of its DTV service on channel 38 as provided in the DTV Table will cause substantial and unnecessary harm to the station. It states that WCFE-TV serves a large but rather sparsely populated rural area in northeastern New York and northwestern Vermont. It submits that the financial costs of transmitting on a UHF channel are significant and burdensome for a rural public broadcaster like MLPB. For example, MLPB states that the annual operating costs of a UHF facility would be 85% more than the annual operating costs of a VHF facility. It proposes that we allot channel 13 or some other VHF channel for DTV service by WCFE-TV.

584. In its supplemental filing, MLPB submits that its studies confirm that channel 13 is available for use by WCFE-TV. It states that WCFE-TV could operate on channel 13 in Plattsburgh with 3.2 kW ERP at an antenna HAAT of 741.3 meters without causing interference to any existing NTSC station or DTV allotment. It submits that, with these facilities, WCFE-TV's DTV service would experience a very small amount of interference from two existing NTSC stations, that the areas of interference would be less than 1% of the station's coverage area, and that it would accept this interference. The coverage studies and maps used in the analysis were prepared by NTIA's Institute of Telecommunications Sciences.

585. MLPB notes that Heritage Media Corporation has filed opposition comments regarding its petition, making reference to the requested substitution of channel 13 for channel 38 at Plattsburgh and urging that we not accommodate reallocation requests that would put Heritage's station at an unfair advantage. MLPB submits that Heritage's comments do not specify what unfair advantage would be provided by its requested change. It states that this is especially unclear given WCFE-TV's status as a noncommercial educational station that does not compete in the commercial market. MLPB further notes that Trinity Christian Center of Santa Ana, Inc., in an effort to protect a translator station, urges that we substitute channel 13 as the DTV allotment for WVNY-TV, channel 22 in Burlington, Vermont. It urges that we conclude that the protection of a secondary translator service does not override the public interest concerns that form the basis of MLPB's request to use channel 13 at Plattsburgh.

---

<sup>165</sup> See, for example, Sixth Report and Order at para. 36.



## Federal Communications Commission

---

586. We have reviewed MLPB's request. Our analysis indicates that operation on channel 13 by MLPB's WCFE-TV would impact and cause interference to other stations. Our analysis further indicates that there are no other VHF channels available for its use. Accordingly, we are denying MLPB's request. However, we would note that, due to the efficiencies of the DTV system, the expense of operating MLPB's DTV operation should be lower than the expense of operating its current UHF NTSC facility.

587. Mt. Mansfield, Inc. Petition. Mt. Mansfield, Inc. (Mt. Mansfield), the licensee of WCAX-TV, channel 3 in Burlington, Vermont, expresses concern regarding the channel 53 DTV allotment provided for WCAX-TV. It notes that both its existing channel and its DTV allotment are outside of the core spectrum and argues that it cannot make critical planning and investment decisions so long as the post-transition status of channel 3 remains unsettled. It also submits that operation of WCAX-TV's DTV service on channel 53 would allow coverage of only 91.9% of its existing service area and would deprive some 28,000 residents, including underserved rural residents in areas surrounding Montpelier and Barre, Vermont, of service. It states that it is unable to propose an alternative DTV channel for WCAX-TV without OET Bulletin No. 69 and without the establishment of minimum DTV spacing requirements with regard to Canadian stations. Mt. Mansfield requests that we consider alternative allotments for WCAX-TV that will better preserve the station's existing viewers and future service and that we make clear that all channels between channels 2-51 will be equally considered for the final DTV core spectrum. Mt. Mansfield also asks us to finalize coordinated DTV Tables to govern the allotment of channels in the U.S.-Canadian border area, so that broadcasters can design and construct their DTV facilities with some certainty that coordination will not disrupt or require later changes. Mt. Mansfield submits that, if formal coordination cannot be achieved quickly, then the DTV allotments set forth in the Sixth Report and Order should be conditioned on the right of border area broadcasters to require subsequent reallocations that will be consistent with the goal of service replication. It did not submit a supplemental filing.

588. Heritage indicates that it is concerned that providing Mt. Mansfield with a new DTV allotment could result in changes which place Heritage-owned stations in a competitive disadvantage in their respective markets.

589. With regard to Mt. Mansfield's request that we consider an alternative allotment for its station, WCAX-TV, we find that Mt. Mansfield has not provided any evidence that the channel 53 DTV allotment provided for WCAX-TV is inconsistent with our DTV policies and procedures. As indicated above, we are not making allotment changes merely because a station received an out-of-core allotment. Further, while the channel 53 allotment did not provide 100% replication of WCAX-TV's service area, we already noted that, in many situations, full replication during the transition period may not be possible. We estimate that the channel 53 DTV allotment for WCAX-TV will replicate over 90% of its current NTSC channel 3 service and that no interference should be caused to its existing NTSC operations. We continue to believe that the DTV channel 53 allotment for WCAX-TV is the best choice, given our DTV policies of full accommodation, service replication, and minimizing interference among all stations. With regard to Mt. Mansfield's other requests, we have amended our core spectrum

## Federal Communications Commission

---

approach, and all channels between channels 2-51 will now be considered equally for the DTV core spectrum. In addition, we have already begun the process to coordinate and finalize the DTV allotments along the United States and Canadian border. We note that the development and testing of DTV has been a collaborative effort between our two countries. Canada participated actively in our advisory committee activities, and much of the testing of the DTV system was done in Canada. We expect that our coordination efforts will be similarly cooperative and that DTV Tables of Allotments for both our countries will be promptly finalized, as requested by the petitioner.

590. National Broadcasting Company Petition. In its petition, National Broadcasting Company (NBC) requests that the DTV assignments for its stations located in Southern California, *i.e.*, KNBC-TV, NTSC channel 4 in Los Angeles, California and KNSD-TV, NTSC channel 39 in San Diego, California, be re-examined. It is concerned that KNBC-TV's channel 36 DTV allotment is predicted to replicate only 84.3% of the station's service area and that KNSD-TV's assigned power of 89.3 kW may not be sufficient to fully replicate its service area. NBC states that, while it recognizes the difficulty in achieving complete replication of a low-VHF station by a UHF station, due to the terrain in the Los Angeles area, it believes there may be alternatives. It pledges to cooperate with the efforts of the Broadcasters' Caucus to coordinate possible allotment changes in the region.

591. We find that the allotments for NBC's KNBC-TV and KNSD-TV are appropriate and consistent with our service replication goals. We also note that the DTV channel allotments for these stations are also proposed in the Joint MSTV *ex parte* filing supported by NBC. We find that no changes in the DTV allotments for these stations are warranted.

592. NBC submits that the interference caused to certain NTSC stations could be reduced or eliminated by a change in assignment for a DTV facility and that it intends to work with the Broadcasters' Caucus to resolve these issues. In particular, it notes that its WRC-TV in Washington, DC will receive co-channel DTV interference from WHP-TV, Harrisburg, Pennsylvania to 3.3% of the population and 7% of the land area within its Grade B contour, while its WAR-TV in Providence, Rhode Island will receive co-channel DTV interference from WTNH-TV, New Haven, Connecticut to 3% of the population and 11.4% of the land area within its Grade B contour. NBC submits that allotting other DTV channels for WHP-TV and WTNH-TV would allow its stations to retain their existing audiences.

593. We find that the impact on NBC's WRC-TV and WAR-TV is consistent with our goal of minimizing interference. In developing the DTV Table, we attempted to ensure that the DTV allotments do not cause interference to other stations, or where interference does occur to minimize the interference to the extent possible. In providing for full replication of all broadcast stations, it was not always possible to eliminate all interference. This is particularly true in congested areas such as the Northeast corridor. We find, however, that the approximately 3% impact on population for NBC's stations is well within our goals for minimizing interference. We further note that these levels are lower than the interference levels for many stations contained in MSTV's *ex parte* filing, which is supported by NBC. We therefore are denying

## Federal Communications Commission

---

NBC's request that the DTV allotments of WHP-TV and WTNH-TV be changed in order to protect certain of its stations.

594. NBC further states that a new DTV channel may be necessary for its station, WTVJ-TV in Miami, Florida. It states that it intends to move the WTVJ-TV DTV transmitter closer to the center of Miami in order to serve the entire Miami-Ft. Lauderdale market. NBC indicates that WTVJ-TV operates on channel 6 at a transmitter site located south of Miami and that operation from this location is needed because of a co-channel station in Orlando. As a result, WTVJ-TV currently operates two translators, on channel 58 in Hallendale and channel 19 in Sunrise, in order to provide service to the Miami-Ft. Lauderdale metropolitan area. According to NBC, WTVJ-TV was assigned DTV channel 30 in Miami with a maximum ERP of 1000 kW, but because channel 30 is first adjacent to the NTSC channel in West Palm Beach, Florida it may not be able to be moved to a new location without causing interference. NBC states that, if such a move cannot be made, it intends to apply for allotment of a new DTV channel that will permit it to move the station's transmitter site to a location closer to Miami. NBC did not submit a separate supplemental filing.

595. We note that MSTV's *ex parte* filing, to which NBC was party, did not recommend any DTV allotment change with regard to WTVJ-TV. We have reviewed the situation, and we confirm that WTVJ-TV's DTV channel 30 allotment cannot be moved closer to the center of Miami without causing additional interference. We do note that channel 58, which is now used by NBC to provide NTSC translator service for WTVJ-TV, could be used to provide complete DTV coverage of the Miami-Ft. Lauderdale area at that location without impacting any other stations. In view of the fact that we have no specific request before us at this time, however, we are not making any changes in the channel 30 DTV allotment for WTVJ-TV.

596. Ohio State University Petition and Supplemental Filing. Ohio State University (OSU), the licensee of noncommercial educational WOSU-TV, channel 34 in Columbus, Ohio, submits that the channel 38 DTV allotment provided for WOSU-TV would result in substantial and unnecessary hardship for the station. OSU states that operation on channel 38 may require WOSU-TV and other TV stations using OSU's tower to relocate to a new tower site. It states that the problem is that OSU's tower, which now holds the antennas for WOSU-TV, noncommercial educational WTTE-TV and LPTV station WCLS-LP simply cannot hold additional television antennas. Thus, in order to permit OSU to activate its DTV station using the tower, one or more of the other facilities on the tower will have to be removed at significant expense to those licensees and at significant loss of on-going revenue to OSU. It states that it anticipates that, working with the other stations on its tower and the Commission it can find a workable DTV channel to substitute to channel 38 that can operate from the OSU tower without significant disruption to other allotments or diminution in coverage area. In its supplemental filing, OSU states that despite its efforts it has not been able to identify another channel that would permit the sharing of antennas in a manner that would accommodate DTV facilities for stations that now use the OSU tower. It therefore limits its reconsideration request to urge the FCC to consider favorably the future substitution of an alternative channel for WOSU-TV's DTV channel 38 if, as a result of further analysis and cooperation among local stations, a

## Federal Communications Commission

---

channel becomes available. It states that channels may also become available due to TV stations ceasing broadcastings on either their NTSC or DTV channels or other changes in the Table of Allotments. It states that, as a result of its reconsideration, it would expect to have priority over other parties.

597. Throughout this proceeding, we have stated that we intend to provide broadcasters with the flexibility to develop alternative allotment approaches and plans. To the extent that an alternative DTV channel becomes available for WOSU-TV, as a result of future negotiation and cooperation among local stations, we have stated that we would act positively upon such changes, provided all affected broadcasters agree and the change does not result in additional interference to other stations or allotments. We are, however, denying OSU's request that it be given a priority in future allotments that may become available as a result of parties ceasing broadcasting on their NTSC or DTV channels. We do not find the fact that a party filed a petition for reconsideration to be a sufficient reason to warrant a priority over other parties in the assignment of future DTV channel allotments that may become available.

598. Ozark Public Telecommunications, Inc. Petition. Ozark Public Telecommunications, Inc. (OPT), the licensee of noncommercial educational KOZK-TV, channel 21, Springfield, Missouri, requests that we substitute channel 42 for its channel 23 DTV allotment. OPT states that channel 42 was proposed for KOZK-TV's DTV channel in the Sixth Further Notice and that it has already undertaken significant efforts and costs to implement service on that channel. OPT states that at the time of the draft DTV Table it was faced with the necessity of replacing the station's transmitting antenna. OPT states that it chose to acquire a panel antenna that could radiate efficiently on both channel 21 and channel 42 and that the cost of this antenna, which was installed in 1993, was \$300,000. It states that KOZK-TV will suffer substantial hardship if required to activate its DTV service on channel 23. OPT states that channel 42 can be used for KOZK-TV's DTV operation without causing interference to other stations or allotments. OPT did not submit a supplemental filing.

599. We have reviewed OPT's request. Our analysis indicates that use of channel 42 by OPT's KOZK-TV would impact and cause additional interference to other stations. We are sympathetic to OPT's situation and recognize the extra costs it incurred in installing a new antenna five years ago. Nevertheless, we expressly cautioned parties that the DTV Table of Allotments contained in the Sixth Further Notice was a draft and that the DTV allotments for individual stations were subject to change. We do not find that an allotment change request based on premature plans or commitments by broadcasting parties like OPT should outweigh the costs associated with additional interference to other stations. Accordingly, we are denying OPT's request to modify its DTV allotment.

600. Paxson Communications Corporation Petition and Supplemental Filing. Paxson expresses concern that the DTV allotments for three of its stations are outside the core spectrum. Specifically, it states that WAQF-TV, channel 51 in Batavia, New York was allotted DTV channel 53; KAJW-TV, channel 51 in Tolleson, Arizona was allotted DTV channel 52; and WAKC-TV, channel 23 in Akron, Ohio, was allotted DTV channel 59. Paxson states that it

## Federal Communications Commission

---

will be forced to relocate the DTV operations of these stations at the end of the transition. In addition, it states that WAQF-TV's and KAJW-TV's NTSC operations are on channel 51 and because the core spectrum may be located between channels 2-46, these stations may face the possibility that neither their existing nor their new DTV allotments will be in the core spectrum. Paxson submits that it has been unable to identify any alternative allotments for these stations that would satisfy our criteria of no new interference.

601. As indicated above, we are generally not changing allotments merely because a station received an allotment of an out-of-core channel. While we attempted to provide all stations with an in-core channel, this was not always possible. We have reviewed Paxson's request and find that there are no alternative in-core channels that would not result in additional interference to other stations. Accordingly, we are denying Paxson's request that the allotments for WAQF-TV, KAJW-TV, and WAKC-TV be changed.

602. Paxson questions our allotment to KTFH-TV, NTSC channel 49 in Conroe, Texas, of DTV channel 5, a potentially out-of-core channel, at only 1 kW ERP. It notes that, while the 1 kW ERP authorized for this station is predicted to fully replicate KTFH-TV's service area, in practice, transmissions at such low power levels will be unable to propagate through structures of any moderate size. It asks that we allot a different DTV channel for KTFH-TV or, in the alternative, that we authorize increased ERP and antenna height for the station's DTV operation on channel 5. Paxson submits that DTV channels 16 or 25 could be allotted for KTFH-TV without causing additional interference to NTSC operations.

603. We have reviewed Paxson's request. Our analysis indicates that use of channels 25 by KTFH-TV would cause additional interference to other broadcast stations. We also note that use of channel 16 would be short spaced to existing land mobile in Houston. Neither of these channels would therefore be acceptable for use by KTFH-TV. We note, however, that under our decision to expand the core spectrum to include channels 2-6, the DTV channel 5 allotment provided for KTFH-TV will now be in the core spectrum. We also disagree with Paxson that the 1 kW ERP authorized for this station's DTV service is not adequate to replicate the station existing service. In this regard, we see no evidence that indicates that DTV signals on low-VHF channels at 1 kW will not adequately propagate through residential and other structures where viewers typically receive television service. Accordingly, we are denying Paxson's request to modify KTFH-TV's DTV allotment.

604. Pennsylvania State University Petition. Pennsylvania State University (PSU), the licensee of WPSX-TV, channel 3 in Clearfield, Pennsylvania, requests that we change its channel 15 DTV allotment to channel 7, or another suitable VHF channel. PSU submits that unique circumstances affecting WPSX-TV's service area will result in less replication than the 97.3% we have predicted. It states that, given the topography of the area, UHF-band transmissions may not reach all of its viewers. In addition, PSU anticipates that the costs of operation in the UHF band may significantly exceed the costs of operating in the VHF band. PSU did not submit a supplemental filing.

## Federal Communications Commission

---

605. We have reviewed PSU's request. Our analysis indicates that there are no available VHF channels that could be allotted to WPSX-TV without increasing interference to other stations. We also note that our analysis of service coverage takes into account terrain. We therefore believe that the 97% replication figure for WPSX-TV is a reasonably accurate prediction of the station's DTV coverage. Accordingly, we are denying PSU's request that the allotment for WPSX-TV be changed.

606. Pennsylvania Telecasters, Inc. Petition. Pennsylvania Telecasters, Inc. (PT) requests that we reconsider the DTV Table to the extent that it deleted the vacant channel 29 allotment at State College, Pennsylvania, an allotment within the area covered by the 1987 Order freezing acceptance of applications for new stations in certain large markets. PT states that, on August 14, 1996, it filed an application to operate on this allotment and requested waiver of the freeze Order. It observes that this date was within the 30-day period that we provided for submission of new NTSC applications after the Sixth Further Notice. PT submits that another application for channel 29 at State College was filed at the same time by Harry J. and Anna A. Hain (the Hains). PT argues that, while we stated that we would avoid creating DTV allotments that conflict with proposed new NTSC stations, we nonetheless allotted channel 29 for DTV service in both Johnstown and Williamsport, Pennsylvania, thus precluding use of that channel at State College. It argues that we thereby violated our own policy and nullified both its application and that of the Hains. It asks that we either reinstate the NTSC channel 29 allotment at State College or provide an equivalent replacement allotment at that community and permit the modification of the two pending applications to specify operation on the replacement channel. PT did not submit a supplemental filing.

607. As noted in the Sixth Report and Order, we stated that we would continue to process pending applications and to consider requests for waiver of our 1987 freeze Order on a case-by-case basis. We also stated that we will not maintain NTSC allotments that are not subject to a pending application or rule making proceeding. PT's application has not been accepted, and we have not acted on its waiver request. The allotment at issue was needed and was used for DTV.

608. Quincy Newspapers, Inc. Petition. Quincy Newspapers, Inc. (QNI), the licensee of WREX-TV, Rockford, Illinois; WGEM-TV, Quincy, Illinois; WSVJ-TV, Elkhart, Indiana; WVVA-TV, Bluefield, West Virginia; KTIV-TV, Sioux City, Iowa; and KTTC-TV, Rochester, Minnesota, expresses concern about the DTV allotments provided for its stations. QNI did not submit a supplemental filing. First, QNI states that WREX-TV and WGEM-TV were assigned DTV channel 54 and that WSVJ-TV received DTV channel 58. Because these channels are outside the core, QNI states that the stations will have to relocate to DTV allotments inside the core at considerable expense. It states that it has determined that certain alternative channels might be feasible: channel 25 for WSVJ-TV and channel 28 for WGEM-TV. QNI notes that WSVJ-TV's NTSC service will suffer 10% new interference from the current DTV Table and that few stations will suffer as much DTV-to-NTSC interference.

609. As indicated above, although we attempted to provide all stations with an in-core

## Federal Communications Commission

---

channel and to ensure that the DTV allotments would not cause any interference to existing NTSC service, this was not always possible. We have reviewed QNI's request with regard to these stations and our analysis indicates that the use of channels 25 and 28 by WSVJ-TV and WGEM-TV, respectively, would cause additional interference to other stations. We are therefore denying QNI's request with regard to these stations.

610. QNI also states that WVVA-TV and KTIV-TV, which currently operate on channels 6 and 4, respectively, were assigned DTV channels 46 and 41. It observes that, if we do not expand the core spectrum to include channel 2-6, these stations will not have the option of returning to their NTSC channel. QNI also states that the area in and around Bluefield is mostly mountainous, so that propagation of TV signals in the UHF band presents potential coverage problems. QNI therefore requests that we change WVVA-TV's DTV allotment to channel 23 and that we allow WVVA-TV and similarly situated stations to use on-channel boosters to eliminate any coverage shortfalls caused by DTV interference.

611. As indicated above, we have expanded the DTV core spectrum to include channels 2-51. QNI therefore would have the option to return WVVA-TV and KTIV-TV operations to their original channels. As for QNI's request that WVVA's allotment be changed to channel 23, our analysis indicates that use of this channel would cause additional interference to other stations. We therefore are denying this request. QNI may employ on-channel boosters with its DTV operations; however, as indicated above, such stations will not be protected outside the DTV service area.

612. Red River Broadcast Corp. Petition and Supplemental Filing. Red River Broadcast Corp. (Red River), the licensee of KBRR-TV, channel 10 in Thief River Falls, Minnesota, and holder of a construction permit for KDLV-TV, channel 46 in Sioux Falls, South Dakota, requests that we modify the DTV allotments provided for these stations. Red River submits that allotment of high UHF band channels 57 for KBRR-TV and 47 for KDLV-TV will impose significant costs and create potential interference problems. Red River raises land mobile concerns about DTV channel 14 provided for its KJRR-TV in Jamestown, North Dakota and suggests that any interference to and from land mobile operations on frequencies adjacent to this channel should be the responsibility of land-mobile users. In its supplemental filing, Red River requests that the channel 57 DTV allotment provided for KBRR-TV be changed to DTV channel 32, that the channel 47 DTV allotment for KDLV-TV be changed to channel 42, and that the channel 14 DTV allotment for KJRR-TV be changed to channel 30.

613. We have reviewed Red River's request. Our analysis indicates that the DTV allotment changes requested by Red River for its stations would impact and cause additional interference to other broadcast stations. We also note that the requested change for KBRR-TV poses a conflict with Canadian allotments. Accordingly, we are denying Red River's requested changes for stations KBRR-TV, KDLV-TV, and KJRR-TV. We further note that our existing policies apply with regard to interference between land mobile and television services on shared channels. That is, the new operations will be required to protect, or take any corrective actions needed to protect, any existing operation.

## Federal Communications Commission

---

614. Reece Associates Limited Petition and Supplemental Filing. In its petition, Reece Associates Limited (Reece), the holder of a construction permit for WZWY-TV, channel 27 in Orlando, Florida, expresses concern about its channel 14 DTV allotment. In its supplemental filing, Reece states that there is a likelihood that WZWY-TV would not be able to protect land mobile licensees operating in and around Orlando, Florida on frequencies immediately adjacent to channel 14. Reece states that it would prefer that WZWY-TV operate on in-core DTV channel 14 in Orlando. However, Reece states that because television licensees have to take the steps and incur the costs to remedy interference to land mobile operations, it believes a new DTV allotment is its best option. Reece states that a preliminary study of alternate DTV channels suggests that WZWY-TV can use channel 4 for digital operations at the transmitter site proposed for that station in a pending modification application, at 28° 16' 44.3" N and 81° 01' 24.8"W. If channel 4 is not suitable, Reece asks that we identify an alternative DTV channel for WZWY-TV.

615. We have reviewed Reece's request regarding WZWY-TV. Our analysis indicates that no other channels are available at its approved transmitter site that would not result in additional interference and are consistent with our DTV allotment policies. As stated above, our replication is based on approved facilities as of April 3, 1997. To the extent that Reece desires to make modifications to its NTSC or DTV allotments, it should follow the procedures set forth in the rules for such changes. With regard to its channel 14 allotment, we recognize that the successful implementation of this channel 14 for DTV use does require careful engineering and may result in some additional costs. However, we note that channel 14 is being used successfully for NTSC television service without causing interference to, or receiving interference from, adjacent land mobile operations. We therefore are denying Reece's request to change the DTV allotment for WZWY-TV.

616. Retlaw Enterprises, Inc. Petition. Retlaw Enterprises, Inc. (Retlaw) is the licensee of KJEO-TV in Fresno, California and eight other television stations. Retlaw, in its petition, submits that the DTV channel 14 allotment provided for its station KJEO-TV in Fresno, California is virtually co-located with a major provider of land mobile services now using frequencies adjacent to channel 14. It believes that KJEO-TV's DTV operation may render the adjacent land mobile frequencies unusable or severely impaired. Retlaw wishes to avoid the risks and expense of building DTV facilities on channel 14 in Fresno that might require adjustments by one or both parties. It requests that we provide explicit guidance to Retlaw and others facing similar dilemmas. At a minimum, it recommends that we provide a process to resolve real world problems on an *ad hoc* basis, free from preconceptions regarding the responsibility for resolving such problems. Retlaw did not submit a supplemental filing.

617. As noted above, our existing policies apply with regard to interference between land mobile and television services on shared channels. That is, any new operations will be required to protect, or take any corrective actions needed to protect, existing operations. We do not believe that any other general provisions or *ad hoc* measures are needed at this time to ensure successful sharing between land mobile and DTV services. We recognize that the



## Federal Communications Commission

---

successful implementation of KJEO-TV's channel 14 DTV allotment may require careful engineering and may result in some additional costs. We note, however, that channel 14 is being used successfully for NTSC television service under similar circumstances without causing interference to, or receiving interference from, adjacent land mobile operations. Accordingly, we are denying Retlaw's request.

618. Roberts Broadcasting of Cookeville, L.L.C. Petition. In its petition, Roberts Broadcasting of Cookeville, L.L.C. (Roberts), the licensee of WKZX-TV, NTSC channel 28 in Cookeville, Tennessee, is concerned that the assignment of DTV channel 27 to WKRN-TV, Nashville, Tennessee, which has transmission facilities located well within the edge of WKZX-TV's channel 28 Grade B contour, could result in substantial interference to WKZX-TV's NTSC service. Roberts is concerned that WKRN-TV could operate on channel 27 permanently, as its NTSC signal is on channel 2, which appears to be out of the core spectrum and therefore not available for use at the end of the transition. It requests that we reassign WKRN-TV's paired DTV channel 27.

619. We find Roberts' concerns about interference to its NTSC service to be without merit. We estimate that the DTV operations of WKRN-TV would impact only 2.8% of the population now served by Roberts' WKZX-TV. We believe that such an impact is consistent with our goal of minimizing interference. We further observe that we have now included channels 2-51 in the core spectrum, so that WKRN's channel 2 would be available for its use at the end of the transition. Nonetheless, if Roberts perceives WKRN-TV's DTV operations on channel 27 to be problematic, and WKRN-TV desires to continue its DTV operations on this channel rather than return to channel 2, Roberts can continue to operate its DTV operations on channel 28. We note that this allotment would provide 100% replication of Roberts' existing service area and an estimated increase in the population served from 192,000 to 200,000. Accordingly, Roberts' petition for reconsideration is denied.

620. Sierra Broadcasting Company Petition and Supplemental Filing. Sierra Broadcasting Company (Sierra), the licensee of KRNV-TV, channel 4 in Reno, Nevada, expresses concern about the loss of service that would result from KRNV-TV's operation on its channel 33 DTV allotment. It notes that this allotment would allow KRNV-TV to cover only 59.4% of the station's existing service area and only 71% of the station's existing population, the lowest service replication in the country. In its supplemental filing, Sierra submits that channel 9 could be substituted for channel 33 at Reno with a minimum of complication. It requests that we allow KRNV-TV to use this channel at a new site at Slide Mountain, at 39° 18' 45" N and 119° 53' 00" W. Sierra states that this would eliminate any spacing problems with the channel 8 NTSC operation of KOLO-TV in Reno. In addition, Sierra states that there would be a 22 km short spacing to KFSN-TV, channel 9 in Fresno, California. However, it states that its attached engineering statement demonstrates that terrain shielding between these two stations should negate any potential for interference.

621. Sierra requests a change in both its DTV channel allotment and transmitter site. As indicated above, we find that requests to change transmitter sites should be dealt with through

## Federal Communications Commission

---

the DTV allotment modification procedures provided for in the rules rather than as a matter for reconsideration. We recognize that, in this case, Sierra's requested channel change is premised on a concomitant change in its transmitter site. Nonetheless, consistent with our service replication approach, we also believe that requests for transmitter site and channel changes such as Sierra's should be handled under the DTV allotment modification procedures provided for in the rules. We therefore decline to make Sierra's requested changes.

622. Smoky Hills Public Television Corporation Petition. Smoky Hills Public Television Corporation (Smoky Hills), the licensee of noncommercial educational KSWK-TV, channel 3 in Lakin, Kansas submits that requiring KSWK-TV to use channel 23 for DTV service will cause substantial, unnecessary hardship. KSWK-TV is a satellite repeater station that rebroadcasts the signal of Smokey Hills' co-owned KOOD-TV in Hays, Kansas. Smokey Hills submits that, if KSWK-TV were to operate on channel 23 with power levels of 1,000 kW as authorized, the station's annual electric power costs would increase from approximately \$4,500 to over \$176,000. It states that it has tentatively identified channel 8 as a substitute for channel 23. It submits that the only significant increase in interference caused by the use of channel 8 would be to existing co-channel station KSNK-TV in McCook, Nebraska. Smoky Hills states that it would be willing to operate at a lower ERP during the DTV transition, while KSNK-TV uses channel 8, and to increase power on DTV channel 8 only after KSNK-TV completes its transition to its new DTV channel 12. It states that it is negotiating with the commercial broadcasters in the area and believes it can achieve a mutually acceptable arrangement with KSNK-TV for operations during the transition. Smoky Hills did not submit a supplemental filing.

623. We have reviewed Smoky Hill's request. Our analysis indicates that there are no available VHF channels that would not impact other broadcasters. Therefore, we are denying Smoky Hill's petition at this time. As indicated above, however, we will consider alternative allotment/assignment plans that are the result of negotiations and coordination among broadcasters and other parties within their communities. Smoky Hill indicates that it is engaged in ongoing dialogue with commercial broadcasters in its area. If and when Smoky Hill completes its negotiations and coordination, it may resubmit its request.

624. South Central Communications Corp. Petition. South Central Communications Corp. (SCCC) is the licensee of 11 LPTV stations and an applicant for two full service TV stations.<sup>166</sup> SCCC requests that the DTV allotment for WKGB-TV, Bowling Green, Kentucky be changed from channel 48 to 3 and the DTV allotment for WATE-TV, Knoxville, Tennessee be changed from channel 26 to 5 in order to protect its applications for construction permits for channel 48 in Owensboro, Kentucky and channel 26 in Knoxville, Tennessee. In the event that these changes are made, and SCCC's two applications are granted, SCCC commits to commence DTV operations within 18 months of such grants.

---

<sup>166</sup> SCCC's requests that the DTV Table be modified to avoid impact on several of its LPTV stations are addressed in the low power section of this order.

## Federal Communications Commission

---

625. Young Broadcasting Inc. (YBI) opposes SCCC's petition seeking DTV allotment changes for 6 full service television stations, including YBI's Knoxville station, WATE-TV, in order to preserve its existing LPTV operations and protect its application for an NTSC station in Knoxville on channel 26.<sup>167</sup> YBI states that SCCC has made no showing to support the technical adequacy of its proposal to replace WATE's DTV channel assignment of channel 26 with channel 5. YBI also states that use of DTV channel 5 would place WATE at a distinct competitive disadvantage since it would be the only Knoxville station with both its NTSC and DTV channels potentially outside the core area. It describes SCCC as nothing more than an applicant for a proposed new NTSC station on channel 26 for which it may never receive an authorization and, even if authorized, may never be able to construct.

626. As noted in the Sixth Report and Order, we stated that we would continue to process pending applications and to consider requests for waiver of our 1987 freeze Order on a case-by-case basis. We also stated that we will not maintain NTSC allotments that are not subject to a pending application or rule making proceeding. SCCC's applications have not been accepted and we have not acted on its waiver request. In the absence of a pending application, the allotments at issue were needed and used for DTV.

627. Tri-State Public Teleplex, Inc. Petition and Supplemental Filing. Tri-State Public Teleplex, Inc. (Tri-State) is the licensee of noncommercial educational TV station WNIN-TV, channel 9 in Evansville, Indiana. Tri-State requests reconsideration of the allotment of DTV channel 54 and suggests that channel 12 may be an appropriate substitute. It states that use of channel 54 would increase electrical power costs to between \$200,000 to \$250,000 per year and would require a second channel change after the transition period. In its supplement, Tri-State submits that channel 12 is available for use by WNIN-TV, that DTV operation on channel 12 would be possible at its current antenna height of 177 m. HAAT and with power limited to approximately 15 kW in the direction of co-channel station KFVS-TV in Cape Girardeau, Montana, and that such operation would not cause interference to any other station. Tri-State asks that we amend the DTV Table to specify channel 12 as the paired DTV channel for WNIN-TV, with an appropriate power reduction towards KFVS-TV.

628. We have reviewed Tri-State's request. Our analysis indicates that substituting channel 12 for channel 54 as WNIN-TV's DTV allotment would impact and cause interference to other stations. Accordingly, we are denying Tri-State's petition. To the extent that Tri-State suggests specific engineering solutions, we find that such modifications are better addressed as part of a specific application rather than as a matter for reconsideration.

629. Univision Communications Inc. Petition. Univision Communications Inc. (Univision), owns and operates the Univision Network along with both full service and low

---

<sup>167</sup> Young Broadcasting Inc submitted a consolidated opposition to petitions for reconsideration filed by Rapid Broadcasting Company, South Central Communications Corporation, Trinity Christian Center of Santa Ana, Inc. d/b/a Trinity Broadcasting Network, and Landmark Arts, Inc. See Opposition of Young Broadcasting Inc. to Four Separate Petitions for Reconsideration filed July 18, 1997.

## Federal Communications Commission

---

power television stations.<sup>168</sup> It submits that the rules and procedures adopted in the Sixth Report and Order will severely impact Spanish-language broadcasters. It requests DTV channel changes for three of its full service stations.

630. Univision is the licensee of KUVN-TV, channel 23, in Garland, Texas, which was allotted DTV channel 24. Univision states that nearly every television station in this market operates from the Cedar Hill antenna farm, located between Dallas and Fort Worth. It states that KUVN-TV, constrained by mileage separation requirements, must transmit from a tower 43.5 km northeast of Cedar Hill, and that, as a result, KUVN-TV covers much less of the Dallas-Fort Worth market than the stations operating from Cedar Hill. It submits that, had KUVN-TV been allotted a non-adjacent DTV channel that could operate from the Cedar Hill site, KUVN-TV's DTV programming would reach most of the Hispanic households in the Dallas-Fort Worth market. Univision states that this situation is made worse by our allotment of the channel it currently uses for its low power operation in Fort Worth to a full service station in the Dallas area. Univision requests a non-adjacent DTV channel that will allow it to locate KUVN-TV's DTV transmitter at the Cedar-Hill antenna farm. Univision also asks that we preserve the channel of its low power operation or provide it an alternate channel.

631. We note that the DTV allotment process is based on service replication. Under this approach, stations are allotted DTV channels that, to the extent feasible, replicate their existing NTSC service area, using the existing geographic coordinates and antenna heights of their presently authorized transmitting facilities. We note that Univision requests that the DTV allotment for its station KUVN-TV in Garland, Texas be changed to a non-adjacent channel so that it may operate from the Cedar Hill antenna farm. To the extent that Univision wishes to modify the location of KUVN-TV beyond the 5 km distance already provided in the rules, we find that such a request is beyond the scope of this proceeding and should be pursued under the procedures already in place for such requests.

632. With regard to its New York station, WXTV-TV, channel 41 in Patterson, New Jersey, which broadcasts from the Empire State Building, Univision states that assignment of adjacent DTV channel 40 to WXTV-TV will make it difficult for the station to begin DTV service because it is not clear that space will be available atop the Empire State Building for an additional UHF transmitter or antenna. It submits that the only real alternative, the World Trade Center, is 4.7 km from the Empire State Building, and it is concerned that operation there would lead to destructive interference. Univision states that, given the unique importance of the New York market and the current lack of any engineering data on potential interference between full power adjacent channel broadcast operations from sites nearly 5 km apart, we should eliminate this as likely source of interference by providing WXTV-TV with a non-adjacent DTV channel. While Univision will still face the difficulty of locating space to construct DTV transmitter facilities, it believes that this is preferable to risking investments and viewer loyalty

---

<sup>168</sup> Univision's requests for allotment changes to protect its low power operations, its supplemental filing addressing one of those operations, and the Telemundo pleading addressing these Univision requests are addressed in the low power section above.

## Federal Communications Commission

---

on the unproven hope that interference will not occur between adjacent channel and NTSC facilities located 5 km apart.

633. With regard to Univision's request for a non-adjacent channel for its WXTV-TV in Patterson, New Jersey, we again note that we have permitted stations to locate their DTV facilities anywhere within 5 km of their existing NTSC transmitter. While some additional interference may occur in situations when exact co-location is not possible, we have found that this increased interference is generally *de minimis* and is outweighed by the flexibility needed by broadcasters to find appropriate sites to begin DTV operations. We understand that in the case of stations located in New York City this may be particularly difficult. However, we could not eliminate all adjacent DTV-to-NTSC channels while still achieving our other goals, such as full accommodation. We note that Univision is not the only broadcaster in New York City that was allotted an adjacent channel. Accordingly, we are denying Univision's request with regard to WXTV-TV.

634. Univision is concerned that the DTV channel 53 allotment for its WGBO-TV, channel 66 in Joliet, Illinois, is outside of the core spectrum. It states that, with both channels outside the core, the station will not only have to build DTV facilities twice but will also have to move to some presently unknown channel elsewhere in the band. It argues that this economically undesirable result will confuse the station's viewers, particularly if WGBO-TV's DTV operations are moved to a channel previously occupied by another station. Univision asks us to exchange the channel 19 DTV allotment provided for WGN-TV with the channel 53 DTV allotment provided for WGBO-TV. Univision notes that WGN-TV shares WGBO-TV's transmitter site. It submits that because WGN-TV's NTSC channel 9 is already within the core spectrum, swapping the DTV channels of WGN-TV and WGBO-TV will ensure that both stations have an in-core channel for their DTV operations once NTSC service ceases.

635. With regard to Univision's request for its WGBO-TV, as indicated above, we are generally not granting requests by broadcasters to change their DTV allotments based solely on the fact that the broadcaster received a DTV allotment out of the core spectrum. In developing the DTV Table of Allotments, we attempted to provide all eligible broadcasters with an initial DTV allotment within channels 2 to 51. However, this was not always possible because of the limited availability of spectrum and the need to accommodate and replicate all existing facilities with minimal interference. We also stated that the interests of maintaining adequate service replication and minimizing interference generally supersede other station characteristics, such as a station's particular programming.

636. Venture Technologies Group Petition and Supplemental Filing. VenTech is concerned about the channel 30 DTV allotment for its full service station WTWB-TV in Johnstown, Pennsylvania. It observes that the DTV Table provides DTV channel 28 at Clarksburg, West Virginia; and DTV channels 29 and 30 at Johnstown, Pennsylvania. It further states that on July 14, 1997, we issued a Report and Order in MM Docket No. 97-96, RM-8756, DA 97-1503 (released July 18, 1997), modifying the city of license of WTWB-TV to Johnstown from Jeannette, Pennsylvania, and also changing the station's television market from

## Federal Communications Commission

---

Johnstown-Altoona to Pittsburgh. VenTech argues that DTV channel 28 is not suitable for pairing with NTSC channel 46 at Clarksburg, because it is near the NTSC channel 29 station at Charleston, West Virginia. VenTech states that several other channels, including 10, 17, 31, 41 and 45, could be used for DTV service at Clarksburg that would not be so close to an adjacent channel. It believes that channel 45 would be the best choice because this channel could likely be used with the Clarksburg channel 46 station's existing antenna with minimal adjustments. VenTech submits that channel 29 is not a well-suited DTV allotment to be paired with NTSC channel 8 at Johnstown. It states that the Johnstown market is wide, and the terrain rough, so that it is impossible to serve the whole market from a single transmitter site. It states that in the last Nielsen ratings book a full third of the ratings books came from Centre County, where State College, Pennsylvania is located. VenTech notes that there is an NTSC channel 29 allotment in State College that conflicts with the channel 29 DTV allotment in Johnstown. It recommends that we substitute DTV channel 30 for channel 29 at Johnstown. To allow for this change, VenTech states that we should substitute channel 28 for the channel 30 allotment now paired with WTWB-TV's NTSC channel 19 at Jeannette.

637. VenTech states that, by providing a two-channel separation in the DTV allotments associated with WTWB-TV and channel 8 at Johnstown, we would give greater future siting flexibility. It states that NTSC channel 8 at Johnstown and WTWB-TV have transmitter sites that are approximately one mile apart. It submits that, if we do not change the current DTV pairings in this region, adjacent DTV channels 29 and 30 will be required to remain co-sited, even though they are now serving different cities and markets.

638. We have reviewed the DTV allotment changes suggested by VenTech. Our analysis indicates that making these changes would impact and cause additional interference to other stations. Accordingly, we are denying VenTech request that we modify DTV allotments in the Johnstown, Pennsylvania and Clarksburg, West Virginia area.

639. VictoriaVision, Inc. Petition. VictoriaVision, Inc. (VictoriaVision), the licensee of station KVCT-TV, channel 19 in Victoria, Texas, requests that we allot channel 11 instead of channel 34 for KVCT-TV's DTV operations. VictoriaVision states that the MSTV's alternative channel list indicates that channel 11 is available for assignment at Victoria, Texas. It submits that allotment of channel 11 at Victoria would be beneficial to KVCT-TV's efforts to provide quality television programming to viewers in that market. VictoriaVision did not submit a supplemental filing.

640. We have reviewed VictoriaVision's request. We note that its existing DTV allotment is estimated to provide to provide for full replication. Further, our analysis indicates that its requested channel change would impact other broadcasters. We therefore are denying VictoriaVision's request that KVCT's DTV allotment be changed to channel 11.

641. Virgin Islands Public Television System Petition. Virgin Islands Public Television System (VIPTS) is the licensee of noncommercial educational television station WTJX-TV, channel 12, in Charlotte Amalie, St. Thomas, USVI. VIPTS asks that it be assigned DTV

## Federal Communications Commission

---

channel 10 rather than channel 44. It states that its engineering study indicates that VHF channels 3, 10 or 11 could be used by WTJX-TV. It states that it understands that the license of WBNB-TV, channel 10 in Charlotte Amalie has been canceled by the Commission and that the inclusion of this station with a paired DTV channel was an error made by the Commission. It states that channel 10 could be paired with WTJX-TV and that this would avoid the unnecessary expense of UHF operation for its noncommercial operation.

642. We have reviewed the request made by VIPTS. The Commission's engineering data base indicates that channel 10 in Charlotte Amalie is still an active license. Accordingly, use of this channel by VIPTS for its DTV operation is not possible. We therefore are denying VIPTS's request.

643. Wabash Valley Broadcasting Corp. and IMS Broadcasting, LLC. Petition. Wabash Valley Broadcasting Corp. and IMS Broadcasting, LLC. (Wabash) are commonly owned licensees of several TV stations. Wabash believes that rapid implementation of DTV will require shared antenna and tower arrangements and that the Commission should encourage such proposals. Wabash seeks authority to use an existing antenna farm for its WNDY-TV, DTV channel 32, Marion, Indiana at 39° 53' 45" N and 86° 12' 30" W, rather than its existing antenna site. Wabash did not file a supplemental filing.

644. Tribune opposes Wabash's request. It states that Wabash proposes to use the coordinates of the towers licensed to serve Indianapolis and that this change in WNDY's tower coordinates would impede WNDY's ability to serve its city of license, Marion, Indiana. Tribune states that, since Wabash did not request a change in its assigned DTV power, antenna height, and antenna pattern, its proposed noise limited contour would no longer encompass its principal community, in contravention of the FCC's rules.

645. As indicated above, we find that requests to change transmitter sites should be dealt with under the DTV allotment modification procedures provided for in the rules and not as a matter for reconsideration. Accordingly, we are denying Wabash's petition in this regard.

646. Warwick Communications, Inc. Petition. Warwick Communications, Inc. (WCI) is the licensee of KFXK-TV, channel 51 in Longview, Texas. In one of two petitions,<sup>169</sup> WCI asks that the DTV allotment for its KFXK-TV be changed from channel 52 to channel 26. It states that it is concerned about the use of adjacent channels and the fact that channel 52 is out of the core spectrum. WCI states that channel 26 will meet all technical requirements. Fox opposes WCI's request, noting that, while the change seems to meet spacing requirements with regard to Fox's co-channel station, KRIV-TV in Houston, its preliminary analysis raises interference concerns, in light of the relatively flat terrain in southeastern Texas.

---

<sup>169</sup> WCI's separate petition regarding its low power station K22EH, channel 22 in Longview, Texas, is addressed in the low-power section above.

## Federal Communications Commission

---

647. As indicated above, we are not making changes merely because a broadcaster received an out-of-core channel. We have attempted to provide all broadcasters with a channel in the core spectrum 2-51. This was not always possible, however, given the need to accommodate and replicate all existing facilities with minimal interference. With regard to WCI's adjacent channel concern, our new out-of-band emissions mask will help to further ensure that adjacent DTV and NTSC channel operate without interference problems. We therefore are denying WCI's request that the DTV allotment for KFXK-TV be changed.

648. WCPX License Partnership Petition and Supplemental Filing. In its petition, WCPX License Partnership (WCPX), the licensee of WCPX-TV, channel 6 in Orlando, Florida, requests that we make a firm commitment to allow WCPX-TV to return to channel 6 for DTV operation at the end of the transition. WCPX argues that our concerns about using the low-VHF channels for DTV service are unfounded. It argues that the significant propagation benefits provided by these channels outweigh any slight disadvantages that might result from higher noise levels. In addition, it states that the risk of interference to noncommercial FM stations from allowing WCPX-TV to continue to use channel 6 for DTV service after the transition is highlighted by the station's successful operation on channel 6 for more than 40 years. Alternatively, WCPX requests that its DTV channel allotment should be changed from channel 58 to an in-core channel, such as channels 14 or 46. It argues that it is unfair to allot an out-of-core channel for WCPX-TV, a large market network affiliate subject to the November 1, 1999 DTV build-out requirement, while providing in-core channels for two unbuilt television stations in the central Florida area. It notes that unbuilt WZWT-TV in Orlando and WLCB-TV in Leesburg, Florida were assigned DTV channels 14 and 46, respectively. It submits that providing WCPX-TV with a DTV channel within the core spectrum will allow the station to prudently plan for DTV and not face two separate channel changes. It states that because WCPX-TV shares a tower with two other VHF stations and three FM stations, the uncertainty associated with an out-of-core channel will affect the other stations as well. WCPX indicates that there are no channels besides the channel 14 and 46 DTV allotments provided for WZWT-TV and WLCB-TV that will work at the WCPX-TV antenna site. WCPX argues that the permits for both stations were issued years ago and that both repeatedly have obtained extensions of construction deadlines. It argues that neither station has WCPX-TV's rapid build-out requirement, and that if we do not resolve that channel 6 will be available for its DTV use, we should assign it either channel 46 or 14 and substitute channel 58 as appropriate.

649. Reece Associates Limited (Reece) holds a permit to construct and operate a station in Orlando, Florida on NTSC channel 27. Reece opposes WCPX's request to assign Reece its DTV channel 58 and assign Reece's DTV channel 14 to WCPX-TV. Reece states that WCPX has failed to justify its request for DTV channel 14 and argues that as a permittee, Reece is no less entitled to a core DTV channel than WCPX.

650. In its supplemental filing, WCPX submits that upon further analysis, using the guidance provided in OET Bulletin No. 69, it could not operate on either DTV channel 14 or 46 and therefore withdraws these proposals. It submits, however, that the construction permit for NTSC channel 45 at Leesburg expired January 25, 1997 and that we should consider that



## Federal Communications Commission

---

channel vacant. WCPX requests that we replace this vacant NTSC noncommercial reserved channel 45 allotment with a DTV channel 45 noncommercial reserved allotment and move the reference coordinates approximately 12 km northwest of Leesburg. It states that this would permit WCPX-TV to use channel 46 for DTV service at Orlando in lieu of channel 58. It further offers that we could alternatively substitute DTV channel 58 at Leesburg if we assigned DTV channel 46 to WCPX-TV.

651. We have reviewed WCPX's request. While WCPX is correct that the construction permit for NTSC channel 45 at Leesburg expired in January, 1997, the CP has been reinstated and is currently valid. Therefore, channel 46 is not available for use by WCPX-TV. Further, our analysis indicates that there are no in-core channels available for WCPX-TV. As indicated above, however, we have amended our DTV core spectrum approach to include channels 2-6 and WCPX would therefore be permitted to return to its channel 6 at the end of the transition. Accordingly, we are denying WCPX's request that it be allotted DTV channel 46 or another in-core DTV channel.

652. WCTE-TV Petition. WCTE-TV, the licensee of noncommercial station WCTV-TV, channel 22 in Cookeville, Tennessee, submitted a letter on August 21, 1997, the date for filing supplemental filings. In its submission, WCTE-TV asks that its channel 52 DTV allotment be reconsidered. WCTE-TV is concerned that use of out-of-core channel 52 will require it to pay for two DTV conversions and will cause the station's monthly electric bill to nearly triple, from \$6,350 per month to approximately \$18,000 per month. It states that the station could not operate if its annual transmitting costs went from \$76,200 to \$216,000. WCTE-TV asks that it be permitted to transition from NTSC to full DTV operation on its station's existing channel 22. It states that it believes that channel 22 could be used for DTV service, with channel 52 as an alternate, until tests can be made on the station's antenna and feeding system. WCTE-TV proposes to implement a plan to test whether its existing tower and antenna will support DTV operation. It also would begin DTV operation on a limited basis, from 12:00 midnight until 6:00 a.m., with a gradual transition to full operation.

653. As stated above, we are not granting requests by broadcasters to change their DTV allotments based solely on the fact that the broadcaster received a DTV allotment out of the core spectrum. In developing the DTV Table of Allotments, we attempted to provide all eligible broadcasters with an initial DTV allotment within channels 2 to 51. However, this was not always possible because of the limited availability of spectrum and the need to accommodate and replicate all existing facilities with minimal interference. Although we recognize that the implementation of DTV will present a number of unique challenges for noncommercial educational broadcasters, we have stated that, in considering changes in the DTV allotments, including changes to eliminate out-of-core channels, the interests of service replication and minimizing interference generally supersede other station characteristics, such as whether the station is a noncommercial operation. Further, we do not find that WCTE-TV's suggestion that it convert to DTV operations on its existing channel would be in the public interest. Our decision to provide all eligible broadcasters with a second channel for DTV and require simulcasting is to ensure that service to the public is preserved during the transition period from

## Federal Communications Commission

---

analog to digital television operations. This would not be the case if we permitted existing stations to transition to digital on their existing analog channels. Accordingly, we are denying WCTE-TV's request.

654. WENH, Inc. Petition WENH, Inc. (WENH) is the licensee of WENH-TV, channel 36, in Elmira, New York. In its petition, WENH seeks reconsideration of the FCC's decision to assign it DTV channel 55. WENH states that, using MSTV's list of alternative DTV channels assignments, it has found that channel 6 is available for assignment to WENH-TV in Elmira. It states that replacing channel 55 with channel 6 for DTV will resolve certain fairness issues. Specifically, it states that VHF channel 2 was assigned to WENH-TV's competitor and that the allocation of channel 6 would "de-intermix" the Elmira market.

655. We have reviewed WENH's request. Our analysis indicates that use of channel 6 by WENH-TV would cause additional interference to other stations and also conflict with Canadian allotments. Accordingly, we are denying WENH's request that the DTV allotment for its station be changed.

656. Wichita License Subsidiary Corp. Petition and Supplemental Filing. Wichita License Subsidiary Corp. (WLS) is the applicant for a new commercial NTSC station in Salina, Kansas. In September 1996, WLS filed its application seeking authority on channel 34. The application was returned for failure to comply with the 1987 freeze, and WLS has submitted a petition for reconsideration of that action. WLS states that the DTV Table allots channel 34 to two communities approximately 85 miles from Salina: Wichita, Kansas and Superior, Nebraska. WLS reports that its studies indicate that we could allot DTV channel 31 to Wichita and channel 41 to Superior. It states that these changes would preserve channel 34 in Salina and, since channel 36 is also available, would allow the channels to be paired for DTV when WLS's reconsideration petition and channel 34 application are granted.

657. As indicated in the Sixth Report and Order, we stated that we would continue to process pending applications and consider requests for waiver of our 1987 freeze Order on a case-by-case basis. We further indicated that we are not maintaining NTSC allotments that are not subject to a pending application or rule making proceeding. WLS's application was considered and denied. Therefore, there was no pending application for the channel 34 allotment in Salina and that allotment has been used for DTV service. Further, we note that only parties licensed to operate a television station or holding a construction permit as of April 3, 1997 are eligible for an initial DTV channel. If WLS were to obtain a license, it would not be eligible to receive a matching DTV allotment. Accordingly, we are denying its request to change certain DTV allotments.

658. Withers Broadcasting Companies Petition and Supplemental Filing. Withers Broadcasting Companies (Withers) is the licensee of KREG-TV, channel 3 in Glenwood Springs, Colorado; KAVU-TV, channel 25 in Victoria, Texas; and WDTV-TV, channel 5 in Weston, West Virginia. In its petition, Withers seeks reconsideration of the DTV assignments

## Federal Communications Commission

---

provided for its stations.<sup>170</sup> Relying on MSTV's list of alternative DTV channels, Withers states that channel 9 is available in Glenwood Springs and Victoria and channel 10 is available in Weston. Withers states that substituting these channels for the DTV channels previously provided its stations would help them serve their communities.

659. The University of Houston is the licensee of noncommercial station KUHT, channel 8, Houston, Texas. It states that Withers' proposed change to the DTV Table with respect to its station KAVU-TV, Victoria, Texas would conflict with KUHT's own proposal for DTV operations on channel 9. The University states that there are several reasons why the Commission should prefer its request for DTV channel 9. It states that its station serves a much larger area and population, while Withers' original allotment of channel 15 is far superior to its own channel 53 allotment. It further states that as a public television licensee it is less able to activate an effective DTV station on channel 53 than Withers, a commercial licensee, would be able to do on its allotted channel 15. The University also states that Withers' use of channel 9 would be short-spaced to existing public station KLRN-TV on channel 9 in San Antonio, Texas. It states that Withers has neither approached KLRN or obtained its consent. The University states that, unlike its proposal, which was accompanied by an engineering analysis and has the written consent of KTRE-TV, Withers has not recognized an interference problem and is opposed by co-channel station KLRN-TV. It concludes that Withers' proposal to use channel 9 would not be in the public interest.

660. We have reviewed Withers' requests. Our analysis indicates that the requested changes would impact and cause increased interference to other stations. We therefore are denying Withers' requested changes for its stations KREG-TV, KAVU-TV, and WDTV-TV.

661. WLNY-TV, Inc. Petition and Supplemental Filing. WLNY-TV, Inc. (WLNY) is the licensee of WLNY-TV, channel 55, in Riverhead, New York and three low power stations: W38BC, Stamford, Connecticut; W44AW Morristown, New Jersey; and W57BC, Mineola, New York. WLNY requests that we modify the channel 57 DTV allotment of WLNY-TV to reduce substantial interference to WLNY-TV's NTSC signal and relocate the station's DTV service to an in-core channel. WLNY argues that, given the unique technical operational and marketing burdens facing WLNY-TV, it should have first priority with respect to any core allotments identified by the station or the FCC. If no alternative channels exist, WLNY seeks first priority with respect to any NTSC channels recovered during the transition to DTV. It states that, when recovered NTSC channels become available for DTV use, we should issue a public notice establishing an exclusive window for out-of-core stations. It argues that no recovered spectrum should be made available to stations already in the core or to LPTV or translator stations unless each out-of-core full service station has a core channel that duplicates its existing DTV signal coverage. WLNY advocates an exception to our LPTV displacement rules that would allow WLNY-TV and other stations like it to recover their displaced LPTV channels once their full-

---

<sup>170</sup> Withers' stations were allotted the following DTV channels: DTV channel 23 to KREG-TV, DTV channel 15 to KAVU-TV, and DTV channel 58 to WDTV-TV.

## Federal Communications Commission

---

service facilities are reassigned to core channels.

662. We have reviewed WLNY-TV's request. Our analysis indicates that there is no available in-core channel that could be allotted to WLNY-TV without causing additional interference to other stations. Further, we have already indicated that we would attempt to minimize the number of out-of-core operations, such as WLNY's, to the extent that other in-core channels may become available during the transition. In addition, we have stated that all out-of-core DTV stations will be given an in-core channel on which to operate after the transition. As discussed above, we are treating all displaced low power stations in a fair and equitable manner without regard to ownership or affiliation. We find no reason to amend that policy and treat low power stations operated by WLNY differently than other parties. Accordingly, the petition for reconsideration filed by WLNY is denied.

663. WTKR, Inc. Petition and Supplemental Filing. WTKR, Inc. (WTKR) is the licensee of WTKR-TV, channel 3 in Norfolk, Virginia. WTKR expresses concern that both its NTSC channel and its DTV channel 58 allotment may fall outside the core spectrum and requests that WTKR-TV be assigned DTV channel 46 instead. It states that this channel was retained as a noncommercial DTV "stand-alone" reserved allotment at West Point. WTKR argues that, since West Point is a community of fewer than 3,000 people served by two Richmond noncommercial stations, and since the allotment for West Point has remained unused for 32 years, there is little likelihood that a station would be constructed on channel 46 before the end of the DTV transition period. WTKR argues that channel 46 could be moved to Norfolk and used by WTKR-TV for its DTV service while causing only *de minimis* interference to other stations. It also notes that both of Richmond's operating noncommercial stations are carried on the West Point cable system. WTKR submits that assignment of channel 46 would allow it to avoid the very substantial expense of a double channel shift.

664. We find that WTKR's request conflicts with a request by WJCB, which is being granted and is discussed above, to eliminate land mobile interference. On balance, we find that eliminating potential interference with adjacent channel land mobile operations outweighs out-of-core concerns such as those expressed by WTKR. We are therefore denying WTKR's request. We note that because the core spectrum now includes channel 3, WTKR may have the option of returning to that channel at the end of the transition, if it desires to do so.

665. WXXI Public Broadcasting Council Petition and Supplemental Filing. WXXI Public Broadcasting Council (WXXI) is the licensee of noncommercial station WXXI-TV, channel 21 in Rochester, New York. In its supplemental filing, WXXI states that it has a pending application to increase the power of its station to 5,000 kW. It states that its 50 kW channel 16 DTV operation will have to compete with other DTV stations in the Rochester market that can operate at 1,000 kW. It states that its engineering studies indicate that WXXI-TV would not be able to increase power and that the directional antenna assumed for its station would severely affect its operation. It also indicates that its existing NTSC service would receive substantial interference from the channel 21 DTV service of WWTI-TV at Watertown, New York. It argues that its ability to identify an alternative DTV channel has been thwarted by

## Federal Communications Commission

---

the Commission's failure to provide guidelines on required protection of Canadian facilities and by the fact that Canada has not adopted a DTV Table. WXXI urges that: 1) WXXI-TV's allotment be amended to permit omnidirectional operation with a power of at least 50 kW; 2) an agreement with Canada be finalized, before closing the door on the ability of border stations such as WXXI-TV to propose an alternative channel allotment not subject to the rule making process; 3) the DTV allotment on channel 21 at Watertown, New York be changed to eliminate interference to WXXI-TV; and 4) protection of WXXI's application on reserved channel 61 with an in-band DTV allotment be confirmed.

666. Service replication is based on particular antenna patterns derived from replicating existing station coverage. To the extent that WXXI wishes to deviate from its specified antenna pattern, it may do so by reducing power or submitting a request to increase or maximize the coverage of its station under the applicable rules. With regard to WXXI's second request, we are working with Canada to ensure that DTV is implemented in a manner that best meets the needs and schedules of both countries. We see no merit, however, in providing additional time for border stations to propose alternative channels for their stations without rule making. Such an approach would delay the implementation of DTV and would not be in the public interest. As stated above, we are not changing the DTV allotment of one broadcaster at the request of another, unless all affected parties agree. We therefore deny WXXI's request that we change the channel 21 DTV allotment for Watertown. Finally, we confirm that the reserved NTSC channel 61 allotment at Rochester has been protected. We note, however, that there is no associated DTV channel pair for that NTSC channel and that any application granted for the channel would not be eligible for a second DTV channel.

667. WWAC, Inc. Petition and Supplemental Filing. In its petition, WWAC, Inc. (WWAC), the licensee of WWAC-TV, channel 53 in Atlantic City, New Jersey, submits that WWAC-TV's Grade B coverage is currently limited to a very small area. It states that on May 8, 1996, it filed an application to modify WWAC-TV's facilities by boosting its power to 5 MW and moving its transmitter site to a location that would allow it to reach a greater audience. WWAC states that this application is still pending but is not taken into account in the DTV Table. It notes that we assigned channel 53 to two other stations for DTV service, channel 68 in Newark, New Jersey and channel 47 in Salisbury, Maryland, and that it would be impossible to grant its modification application with those two stations in operation.

668. WWAC further submits that, while detrimentally affecting the ability of WWAC-TV to expand its service area, the DTV Table protects a permittee that has never built its station, is admittedly unable to build at its authorized site, and will cause interference to existing stations if allowed to go on the air under the current terms of its construction permit. WWAC states that WACI-TV, Atlantic City did not build its facilities during its construction period and had filed two applications for extensions. It states that WACI-TV was unable to operate at its approved transmitter site, due to environmental concerns, and that its application to operate at a different site has been opposed by other parties. WWAC requests that we deny the modification application of WACI-TV, revoke that station's construction permit, and exchange WWAC-TV's and WACI-TV's DTV allotments so that WWAC-TV may increase its coverage. In a further

## Federal Communications Commission

---

petition filed on September 15, 1997, WWAC submits that WWAC-TV's allotment problems could be solved either by revoking the current NTSC and DTV allotments of unbuilt-WACI-TV and reassigning them to WWAC-TV or, alternatively, by granting WWAC a channel in the channel 60-69 band and permitting it to subsequently migrate to the DTV core spectrum after unused spectrum is turned in.

669. Garden State Communications, L.P. (Garden State), the permittee of WACI-TV in Atlantic City, New Jersey, opposes the WWAC's request. Garden State submits that WWAC-TV has operated at minimal power for nine years. It argues that the solution crafted by WWAC to address its own self-created dilemma amounts to filing a petition to steal WACI-TV's permit without due process, that WWAC provides no support for this unprecedented action, and that the filing of a petition for reconsideration does not give rise to this type of draconian relief. It submits that the petition for reconsideration process should not give parties an opportunity to seek the unrelated dismissal of pending applications or revocation of valid construction permits. It states that WWAC had the opportunity, in the proper forum, to timely raise any objections it may have had regarding WACI-TV's construction permit or application for modification. It states that only after release of the DTV Table did WWAC recognize that it had harmed itself by not operating at a higher permissible power. Garden State submits that it has invested considerable time, money, and effort in pursuing the WACI-TV license. It states that accepting the arguments advanced by WWAC would establish a chilling precedent for all permittees, who would be at the whim of any licensee who wished to condemn their permit in order to serve its own self interest.

670. As indicated above, service replication of DTV allotments is based on facilities licensed as of April 3, 1997, the date of adoption of the Sixth Report and Order. Requests for modification of NTSC facilities that were pending on that date are not taken into account in the DTV allotment process for the purposes of service replication. We find that the DTV allotment provided for WWAC-TV is consistent with our service replication policies. In fact, we note that WWAC-TV was assigned a maximum power of 50 kW, which is the minimum power assigned to all UHF stations and not the power required for replication of WWAC-TV's existing NTSC service area. We estimate that this power level will permit WWAC-TV to more than double its existing population coverage and to increase by more than six times its existing geographic coverage. While we recognize that further increases by WWAC-TV during the transition may be difficult, we find no merit to WWAC's arguments that it should receive the allotment of another eligible party or be assigned a channel from channels 60-69. As stated above, WWAC-TV's allotment fully comports with our DTV allotment goals. We do not find that additional use of channels 60-69, merely to enhance WWAC-TV's maximization flexibility, can be justified, nor do we find that favoring WWAC-TV over another eligible party is warranted. We therefore deny WWAC's requests.

## VI. PROCEDURAL MATTERS

671. Paperwork Reduction Act of 1995 Analysis. This Memorandum Opinion and

## Federal Communications Commission

---

Order contains either a new or modified information collection. As part of its continuing effort to reduce paperwork burdens, we invite the general public and the Office of Management and Budget (OMB) to take this opportunity to comment on the information collections contained in this order, as required by the Paperwork Reduction Act of 1995, Pub. L. No. 104-13. Public and agency comments are due 60 days from date of publication of this Order in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. Written comments must be submitted on the proposed and/or modified information collections on or before 60 days after date of publication in the Federal Register. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Judy Boley, Federal Communications Commission, Room 234, 1919 M Street, N.W., Washington, DC 20554, or via the Internet to [jboley@fcc.gov](mailto:jboley@fcc.gov). For additional information regarding information collections contained in the Memorandum Opinion and Order, contact Judy Boley at 202-418-0214.

672. Supplemental Final Regulatory Flexibility Analysis. With respect to this Memorandum Opinion and Order, the Commission has prepared a Supplemental Final Regulatory Flexibility Analysis, under the Regulatory Flexibility Act, of the possible significant economic impact on small entities of the rules in this document. The SFRFA is set forth as Appendix D.

673. Ordering Clauses. In accordance with the actions described herein, IT IS ORDERED THAT Part 73 of the Commission's rules IS AMENDED as set forth in Appendix E. In addition, IT IS ORDERED THAT low power TV and TV translator stations eligible for displacement relief under the additional procedures adopted herein may apply for such relief at any time on or after the effective date of this Memorandum Opinion and Order. IT IS ORDERED that the rule amendments set forth in Appendix B SHALL BE EFFECTIVE 30 days after publication in the Federal Register. IT IS FURTHER ORDERED that the new or modified paperwork requirements contained in this Memorandum Opinion and Order (which are subject to approval by the Office of Management and Budget) will become effective 60 days after publication of this decision in the Federal Register, following OMB approval, unless a notice is published in the Federal Register stating otherwise. This action is taken pursuant to authority contained in Sections 4(i), 7, 301, 302, 303, 307 and 336 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 157, 301, 302, 303, 307 and 336.

674. IT IS FURTHER ORDERED that the Commission's Office of Public Affairs, Reference Operations Division, SHALL SEND a copy of this Memorandum Opinion and Order, including the Supplemental Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

**Federal Communications Commission**

---



## **Federal Communications Commission**

---

675. For additional information concerning this matter, contact Bruce Franca, Office of Engineering and Technology, (202) 418-2470, Alan Stillwell, Office of Engineering and Technology, (202) 418-2470, or Robert Eckert, Office of Engineering and Technology, Technical Research Branch, (202) 418-2433.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas  
Secretary

February 18, 1998

**Separate Statement  
of  
Commissioner Susan Ness**

*Re: Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*

Today we complete the final adjustments to our plan governing digital and high definition broadcasting. Through multiple rounds of public comment and consideration we have adopted the DTV transmission standard, service and application rules, technical requirements for station operations, and channel allotments and assignments for existing broadcasters.

Our rules have been carefully crafted to provide the strongest possible base for the transition from analog to digital television. My concern remains focused on ensuring that consumers reap the benefits of a markedly improved broadcast television service.

The stakeholders -- broadcasters, programmers, advertisers, equipment manufacturers, computer hardware and software providers, cable television and broadcast satellite operators -- now will determine what products and services are delivered to the American public.

Our decisions today strengthen the ability of broadcasters to build their stations and initiate service promptly. We have reconfigured the allotment table and have allowed UHF broadcasters to increase their power and use tilt beam antennas to reduce the disparity in power levels between UHF and VHF stations. These measures will ensure that UHF broadcast licensees can provide good coverage throughout their service areas, including reception inside buildings.

We have streamlined procedures so that broadcasters easily can move their transmitters within specified areas and upgrade where interference is *de minimus*. And we have preserved low power and translator stations where feasible. We also have addressed an engineering obstacle that surfaced after issuance of our original Table of Allotments last April -- the problem of adjacent channel interference. To reduce the likelihood of interference, we expanded the definition of "core spectrum" (or final spectrum for digital broadcasting) to include channels 2-51.

*Expanding the Core*

Having previously cited the benefits to the American public of repacking the digital channels, and reauctioning as much spectrum as possible after completion of the digital transition, I write separately to highlight my reasons for approving expansion of the "core" spectrum. By including an additional five channels within the "core," we provide greater flexibility,

particularly in the populated areas of the country. This permits us to minimize the problem of adjacent channel interference so that the consumer receives the clearest signal possible.

The consumer reaps other benefits from expanding the core. By adding 30 megahertz to the core spectrum, we permit about 500 existing low power and translator stations to continue their operations. These stations otherwise might have been displaced during the transition. We also eliminate the need for about 120 stations to make a costly second move of their digital channel at the end of the transition period. And rural consumers will continue to receive service from the translators that otherwise were in jeopardy of being shuttered, as well as from stations operating in the lower VHF channels 2-6 which, for scientific propagation reasons, better serve rural and hilly regions. An additional benefit of expanding the core is adding channels throughout the country, including in major markets, which could increase the diversity of broadcast ownership.

Finally, concerns were raised that by expanding the core we would lessen the revenue to the government from later auctions. This is not the case. Our decision today will result in approximately 175 additional digital channels within the expanded core, including some in major markets that will be extremely valuable. When we made our decisions last April we did not have authority to auction these channels. In July Congress authorized us to assign broadcast channels by auction, and we intend to do so. These auctions should generate significant proceeds, and as a result I believe that expanding the core will not result in any discernible diminution to the expected revenue when the spectrum is recovered at the end of the transition from analog to digital broadcasting.

### *Conclusion*

The cumulative impact of our DTV decisions will be to provide the maximum opportunity for a robust and successful transition to digital service; to preserve significant numbers of low power and translator stations that otherwise would have had to go dark at some point during the transition; to create additional channels for new entrants into digital broadcasting or other digital data services; and to ensure adequate reception of UHF digital signals. For these reasons, I support the changes and decisions made in these two reconsideration orders.

February 18, 1998

SEPARATE STATEMENT OF COMMISSIONER HAROLD W. FURCHTGOTT-ROTH  
DISSENTING IN PART

*Re: Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service -- Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order*

With one exception, I support all aspects of today's decision on digital television. At long last, we are providing television broadcasters the information they need to convert to the new DTV technology.

I dissent, however, from the Commission's decision to reduce by 30 MHz the amount of clear spectrum that can be reallocated from broadcasting to other communications services. As described below, I am concerned not only with the specifics of this decision and its clear implications for our spectrum management policy and the federal budget, but also a disturbing trend that is emerging in our decision making.

During the transition period -- when analog NTSC and DTV stations will be operating simultaneously -- DTV allotments and assignments will be scattered among all the spectrum channels currently allocated to television broadcasting. These channels are numbered 2-69. At the end of the transition, when NTSC stations are turned off, far fewer spectrum channels are needed to accommodate only the DTV stations. As the Commission decided last year, the excess spectrum can be reallocated to other radio services, such as personal communications services (PCS), and would be licensed by auction. The remaining DTV spectrum is known as the "core," and was proposed last year to span channels 7-51.

Subsequent to our decision last year to designate channels 7-51 as the DTV core, the Congressional Budget Office (CBO) estimated the revenues that will be generated by auction of spectrum outside of the core. This estimate then was included in federal budget planning.

Also after our decision, several parties suggested that VHF spectrum covered by channels 2-6 would be necessary for DTV signals to replicate the service areas of the analog NTSC stations currently assigned channels 2-6. The key reason cited was the propagation characteristics of VHF signals; they tend to "hug" the ground and, thus, they easily can reach some viewers (located in valleys, for example) that UHF signals -- *e.g.*, in channels 47-51 -- cannot. Further, this VHF spectrum is less valuable for new mobile services than would be the same amount of UHF spectrum. Thus, it made perfect sense to "slide" the core down by five channels so that it would cover channels 2-46, and reallocate the spectrum in channels 47-51 to mobile or other radio services. I supported this approach.

Unfortunately, we are taking another approach. We are designating channels 2-51 as the DTV core spectrum. Thus, we are adding an additional five channels, 6 MHz each, to the band allocated for television broadcasting. This decision reduces by 30 MHz the amount of clear

spectrum that can be reallocated for other radio services and auctioned to new licensees.

The reasons we give for justifying this spectrum grab can be boiled down to a spectrum management aphorism: "more is better." Yes, it is true that sharing among DTV stations after the transition will be eased by having 30 MHz more for broadcasting. And, yes, it is true that it will be easier to accommodate new LPTV stations after the transition. What our order does not say, however, is that the pressing need for television broadcasting spectrum -- for both DTV and for LPTV -- arises *during* the transition, not after. Thus, our decision to expand the post-transition core will do little to ease the technical burdens of the transition on full power broadcasters and will do nothing to save existing LPTV stations that are displaced during the transition. (One should ask how much comfort the LPTV stations pushed off the air during the transition will take from the fact that they might be able to begin broadcasting again several years later, after the transition is over.)

Even if the very limited benefits of expanding the post-transition core somehow justified reduction in the amount of spectrum available for auction to other services, the FCC has made no attempt to quantify how much additional DTV spectrum is necessary. Do we need to add one more channel? Two? Three? Indeed, it is no mere coincidence that we have determined today that the post-transition core must be exactly 30 MHz wider than we proposed last year. Having made the reasonable decision to include the VHF channels 2-6 in the DTV core, the Commission simply refused to make the hard choice of keeping the core at the same size and added five channels totalling 30 MHz. More is better.

Or is it?

Looking at the benefits side of the ledger, I would agree there are some benefits (if overstated) to simply adding 30 MHz to the permanent TV broadcasting allocation. What we yet again have failed to do, however, is to consider the costs side of the ledger.

From a spectrum management perspective, we have decided -- again with little consideration -- to maintain additional spectrum for a radio service that serves fixed receivers at the expense of other services, particularly mobile radio services that by definition cannot employ wireline delivery media. The costs of this decision could be enormous in terms of the new services that consumers never see, or savings on existing services they never realize.

From the perspective of fiscal responsibility, it is distressing that we -- on our own motion -- have removed a full 30 MHz of clear spectrum from the amount scored into the federal budget by the CBO. It is no answer to say that our recently-granted authority to auction broadcasting licenses, including the post-transition interstitial licenses in the DTV core (whether 2-46 or 2-51) will allow us to raise more money than auctioning channels 47-51 after they are cleared. The point here is that sum of the auction revenues from clear channels 47-51 and the interstitial post-transition DTV licenses in channels 2-46 surely will exceed the revenues from auctioning the interstitial post-transition DTV licenses in channels 2-51.

How ironic that the Commission currently is engulfed in deliberations considering the final disposition of licenses for the C-Block PCS spectrum. It strains credulity for us to fight for auction payments to the Treasury for one 30 MHz block of UHF spectrum, but cavalierly give away another 30 MHz block of UHF spectrum.

Finally, as noted above, I am very concerned at the emerging pattern here. We seem to say that as long as there are benefits to a decision, the costs do not matter, and that such decisions are particularly easy if consumers never know what services they are missing or how the federal budget is affected. This unwillingness to conduct straightforward cost-benefit analyses and provide consumers all the information they deserve is becoming a shameful hallmark of this agency.

\* \* \* \* \*

**APPENDIX A**  
**PETITIONING AND OPPOSING/COMMENTING PARTIES**

Parties Filing Petitions for Reconsideration

1. Abacus Television, Jose Luis Rodriguez, and the Video house, Inc. (Urban LPTV Parties)
2. ABC, Inc.
3. Acme Television Licenses of Oregon, L.L.C.
4. Ad Hoc Group of 25 Low-VHF Stations
5. A.H. Belo Corporation (KING-TV, Seattle, WA and others)
6. AK Media Group, Inc.
7. Alaska Broadcast Television, Inc.
8. Allbritton Communications Company
9. The Executive Committee of the Board of Trustees of American University (radio station WAMU-FM, Washington, D.C.)
10. John C. Anderson
11. Association for Maximum Service Television, Inc., the Broadcasters' Caucus and other Broadcasters
12. The Association of America's Public Television Stations and Public Broadcasting Service
13. Association of Local Television Stations, Inc.
14. Association of Public-Safety Communications Officials-International, Inc.
15. Benedek License Corporation (WHSV-TV, Harrisonburg, VA)
16. Blade Communications, Inc.
17. Bowling Green State University
18. Brazos Broadcasting Company (KBTX-TV, Bryan, TX)
19. The Brechner Family (WMDT-TV, Salisbury, MD and KTKA-TV, Topeka, KS)
20. Buck Owens Production Company, Inc.
21. California Oregon Broadcasting, Inc.
22. Cannell Cleveland, L.P. (WUAB-TV, Lorain, OH)
23. Capitol Broadcasting Company, Inc.
24. Capital Television Corporation
25. CBS, Inc.
26. Central Michigan University
27. Century Development Corporation (KGNS-TV)
28. Channel 49 Acquisition Corporation (WJCB-TV)
29. Channel 51 of San Diego, Inc.
30. Chronicle Publishing Company (KRON-TV, San Francisco, CA)
31. Citadel Communications Co., Ltd. (WHBF-TV, Rock Island, IL, WOI-TV, Ames, IA, and others)
32. Clear Channel Television Licensees, Inc. (I) (KSAS-TV, Wichita, KS)
33. Clear Channel Television Licensees, Inc. (II) (WAWS-TV, Jacksonville, FL)
34. Clear Channel Television Licensees, Inc. (III) (WXXA-TV, Albany, NY)

35. Coast TV
36. Community Broadcasters Association
37. Community Television of Southern California (KCET)
38. Cordillera Communications Inc.
39. Cornell University
40. Cornerstone Television, Inc. (WPCB-TV, Greensburg, PA, and WQED-TV, Pittsburgh (WQEX-TV, Pittsburgh, PA)
41. Cosmos Broadcasting Corporation
42. Costa de Oro Television, Inc.
43. Davis Television Topeka, LLC, et. al.
44. Delta Broadcasting, Inc.
45. Department of California Highway Patrol
46. Department of Special Districts, San Bernardino County, CA
47. DeSoto Broadcasting, Inc. (WBSV-TV, Venice, FL)
48. Dispatch Broadcast Group (WBNS-TV, Columbus, OH and WTHR-TV, Indianapolis, IN)
49. Duhamel Broadcasting Enterprises (KOTA-TV, Rapid City, SD and others)
50. Eagle III Broadcasting, L.L.C. (KKCO-TV, Grand Junction, CO)
51. Eastern Washington and Northern Idaho DTV Channel Allocation Caucus
52. Educational Broadcasting Corporation (WNET-TV, Newark, NJ)
53. Educational Television Association of Metropolitan Cleveland (WVIZ-TV, Cleveland, OH)
54. Entravision Holdings, LLC
55. Family Stations, Inc. (KFTL-TV, Stockton, CA)
56. Family Stations of New Jersey, Inc. (WFME-TV, West Milford, NJ)
57. Fayetteville-Cumberland Telecasters, Inc. (WFAY-TV, Fayetteville, NC)
58. Fireweed Communications Corporation (KYES-TV, Anchorage, AK)
59. First Baptist Church, Paris, TX
60. First Cullman Broadcasting, Inc.
61. Flinn Broadcasting Corporation (WFBI-TV, Memphis, TN)
62. Florida West Coast Public Broadcasting, Inc. (WEDU-TV, Tampa, FL)
63. Fort Wayne Public Television, Inc. (WFWA-TV, Ft. Wayne, IN)
64. Forum Communications Company (KMCY-TV, Minot, ND)
65. Fouce Amusement Enterprises (KRCA-TV, Los Angeles, CA)
66. Fox Television Stations Inc.
67. Gannett Co., Inc.
68. Gateway Communications Inc.
69. Gilmore Broadcasting Corporation (WEHT-TV, Evansville, IL)
70. GOCOM Licensee, L.L.C.
71. Golden Empire Television Corporation (KHSL-TV, Chico, CA)
72. Golden Link TV, Inc. (KPST-TV, Vallejo, CA)
73. Granite Broadcasting Corporation (KNTV-TV, San Jose, CA and others)
74. Grant Broadcasting Group (WNYO-TV, Buffalo, NY and others)
75. Great Trails Broadcasting, Inc. (WHAG-TV, Hagerstown, MD and WFFT-TV, Fort



- Wayne, IN)
76. Gulf California Broadcast Company (KESQ-TV, Palm Springs, CA)
  77. Guy Gannett Communications
  78. Hammett and Edison, Inc.
  79. Hardy & Carey, LLP (Hardy & Carey Clients)
  80. Harte-Hanks Television, Inc.
  81. Hearst Corporation
  82. Holston Valley Broadcasting Corporation (WKPT-TV, Kingsport, TN)
  83. HSN, Inc.
  84. Hubbard Broadcasting, Inc.
  85. Iberia Communications, L.L.C.
  86. Innovative Technologies, Inc.
  87. Island Broadcasting Co.
  88. Island Broadcasting, Inc. (KTGM-TV, Tamuning, Guam)
  89. Island Broadcasting Ltd.
  90. Jacksonville Educators Broadcasting, Inc. (WTCE-TV, Fort Pierce, FL)
  91. JDG Television, Inc.
  92. Jefferson-Pilot Communications Company
  93. Jet Broadcasting Co.
  94. Joint Petition of Licensees (Entravision Communications Company, L.L.C., Paxson Communications Corporation, Univision Communications, Inc., Grant Broadcasting Group, Max Media Properties, L.L.C., Pappas Telecasting Companies, Kadn Broadcasting, Inc., Warwick Communications, Inc., Delta Media Corporation, Sullivan Broadcasting Company, Glencairn, Ltd., Bay Television, Inc., Channel 63, Inc., Harish Puri, Telemundo Group, Inc.
  95. Journal Broadcast Group, Inc.
  96. Jovon Broadcasting Corp.
  97. KASA-TV, Inc. (KASA-TV, Santa Fe, NM)
  98. KCWB-TV, Inc. (KCWB-TV)
  99. Kentuckiana Broadcasting, Inc. (WFTE-TV, Salem, IN)
  100. KFBB-TV Corporation, L.L.C. (KFBB-TV, Great Falls, MT)
  101. KM Broadcasting, Inc.
  102. KM Communications, Inc.
  103. KMSB-TV, Inc. (KMSB-TV, Tucson, AZ)
  104. KMVT Television Inc. (KMVT-TV)
  105. KPDX License Partnership (KPDX-TV, Vancouver, WA)
  106. KSLs, Inc. (KSCI-TV, San Bernardino, CA)
  107. KVIE, Inc. (KVIE-TV, Sacramento, CA)
  108. KVOA Communications, Inc. (KVOA-TV)
  109. KWTX Broadcasting Company (KWTX-TV, Waco, TX)
  110. KXII-TV Broadcasters, Inc. (KXII-TV, Sherman, TX)
  111. La Dov Educational Outreach, Inc.
  112. Landmark Arts, Inc.
  113. Landmark Television of Tennessee, Inc. (WTVF-TV, Nashville, TN)

114. Land Mobile Communications Council
115. Lee Enterprises, Inc. and New Mexico Broadcasting, Inc.
116. Lehigh Valley Public Television
117. Lewis Broadcasting Corporation
118. Liberty Christian Center
119. Lincoln Broadcasting Company
120. Lindsay Television, Inc.
121. Longmont Channel 25, Inc. (KDEN-TV, Longmont, TX)
122. The County of Los Angeles, California (L.A. County)
123. Los Cerezos Television Company
124. Louisiana Television Broadcasting Corporation (WBRZ-TV, Baton Rouge, LA)
125. Malrite Communications Group, Inc.
126. Maranatha Broadcasting Company, Inc. (WFMZ-TV, Allentown, PA)
127. McAlister Television Enterprises, Inc. (KAMC-TV, Lubbock, TX)
128. McPike Communications Inc.130.
129. Media General, Inc. (WTVR-TV, Richmond, VA and others)
130. Mid-South Public Communications Foundation
131. Midwest Television, Inc. (KFMB-TV, San Diego, CA and WCIA-TV, Champaign, IL)
132. Minnesota Broadcasting Association
133. Mission Broadcasting I, Inc., and Mission Broadcasting II, Inc. (WUXP-TV, Nashville, TN and WUPN-TV, Greensboro, NC)
134. Mississippi Authority for Educational Television
135. Montgomery Communications, Inc.
136. Mountain Broadcasting Corp. (WMBC-TV, Newton, NJ)
137. Mountain Lake Public Broadcasting (WCFE-TV, Plattsburgh, NY)
138. Mt. Mansfield, Inc. (WCAX-TV, Burlington, VT)
139. National Broadcasting Company
140. National Public Radio
141. National Radio Astronomy Observatory, Socorro, NM
142. National Translator Association
143. Nexstar Broadcasting Group, L.P.
144. Estate of Hector Nicolau (WTIN-TV, Ponce, PR)
145. North Carolina Broadcasting Partners
146. Ohio State University (WOSU-TV, Columbus, OH)
147. Oklahoma Educational Television Authority
148. Ozark Public Telecommunications, Inc. (KOZK-TV, Springfield, MO)
149. Pappas Stations Partnership I (KPTM-TV, Omaha, NE)
150. Pappas Stations Partnership II (LPTV station K40DQ, Tulare, CA) and Valley Public Television, Inc. (KVPT-TV, Fresno, CA)
151. Paxson Communications Corporation
152. Paxson Communications LPTV, Inc.
153. Pegasus Communication Corporation (WWLF-TV, Hazelton, PA and WLIF-TV, Williamsport, PA)
154. Pensacola Junior College (WSRE-TV, Pensacola, FL)

155. Pennsylvania State University (WPSX-TV, Clearfield, PA)
156. Pennsylvania Telecasters, Inc.
157. Prairie Public Broadcasting, Inc. (KFME-TV, Fargo, ND and others)
158. Puerto Rico Public Broadcasting Corporation (WIPR-TV, San Juan, PR)
159. Pulitzer Broadcasting Company (WDSU-TV, New Orleans, LA and others)
160. Quincy Newspapers, Inc. (WREX-TV, Rockford, IL and others)
161. Qwest Broadcasting, L.L.C.
162. Rainbow Broadcasting Ltd.
163. Ramar Communications, Inc. (KJTV-TV, Lubbock, TX and KASY-TV, Albuquerque, NM)
164. Rapid Broadcasting Company
165. Red River Broadcast Corp. (KBRR-TV, Thief River Falls, MN and KDLV-TV, Sioux Falls, SD)
166. Reece Associates Limited (WZWY-TV, Orlando, FL)
167. Retlaw Enterprises, Inc. (KJEO-TV, Fresno, CA and others)
168. RGV Educational Broadcasting, Inc. (KMBH-TV, Harlingen, TX)
169. Roberts Broadcasting of Cookeville, L.L.C. (WKZX-TV, Cookeville, TN)
170. Ruarch Associates, L.P. (I)
171. Ruarch Associates, L.P. (II)
172. Rural California Broadcasting Corporation (KRCB-TV, Cotati, CA)
173. Sainte Partners II, L.P.
174. Sangre De Cristo Communications, Inc. (KOAA-TV, Pueblo, CO)
175. Sarkes Tarzian, Inc.
176. Scanlan Television, Inc.
177. Scripps Howard Broadcasting Company (KNXV-TV, Phoenix, AZ)
178. Shenandoah Valley Educational Television Corporation
179. Sierra Broadcasting Company (KRNV-TV, Reno, NV)
180. Siete Grande Television, Inc. (WSTE-TV, Ponce, PR)
181. Mike Simons
182. Sinclair Broadcasting Group, Inc.
183. Skinner Broadcasting, Inc.
184. Smith Broadcasting of Santa Barbara Limited Partnership (KEYT-TV, Santa Barbara, CA)
185. Smoky Hills Public Television Corporation (KSWK-TV, Lakin, KS)
186. Sonshine Family TV Corp. (WBPH-TV, Bethlehem, PA)
187. South Central Communications Corp.
188. Speer Communications Holdings I Limited Partnership (WNAB-TV, Nashville, TN)
189. Sunbelt Television, Inc.
190. Sunnycrest Media, Inc.
191. Syracuse Minority Television, Inc.
192. Telemundo Group, Inc. (KSTS-TV, San Jose, CA and others)
193. Television Wisconsin, Inc. (WISC-TV, Madison, WI)
194. Max A. Trevino
195. Tribune Broadcasting Company

196. Trinity Christian Center of Santa Ana, Inc./Trinity Broadcasting Network
197. Tri-State Public Teleplex, Inc. (WINN-TV, Evansville, IN)
198. T.V. 17 Unlimited, Inc. (WXMI-TV, Grand Rapids, MI)
199. The University of Houston System (KUHT-TV, Houston, TX)
200. University of New Hampshire d/b/a New Hampshire Public Television
201. University of North Carolina Center for Public Television (WUNC-TV, Chapel Hill, NC and WUNE-TV, Linville, NC)
202. Univision Communications Inc.
203. US Broadcast Group Licensees, L.P.
204. Venture Technologies Group (WTWB-TV, Johnstown, PA)
205. Viacom Inc. (WPSG-TV, Philadelphia, PA and others)
206. VictoriaVision, Inc. (KVCT-TV, Victoria, TX)
207. Virgin Islands Public Television System
208. W36BM TV-36
209. Wabash Valley Broadcasting Corp. and IMS Broadcasting, LLC.
210. Warwick Communications, Inc. (WCI I)
211. Warwick Communications, Inc. (WCI II)
212. WCPX License Partnership (WCPX-TV, Orlando, FL)
213. Weigel Broadcasting Co.
214. WENY, Inc. (WENY-TV)
215. Western New York Public Broadcasting Association
216. West Tennessee Public Television Council, Inc.
217. Westwind Communications, L.L.C.
218. WGBH Educational Foundation (WGBH-TV, Boston, MA)
219. WHNS License Partnership (WHNS-TV, Asheville, NC)
220. Wichita Communications (KWCV-TV, Wichita, KS)
221. Wichita License Subsidiary Corp.
222. Withers Broadcasting Companies (KREG-TV, Glenwood Springs, CO and others)
223. WLNY-TV, Inc. (WLNY-TV)
224. WMTW Holdings Inc. (WMTW-TV)
225. WNAC Argyle Television, Inc. (WNAC-TV)
226. WRNN-TV Associates L.P. (WRNN-TV, Kingston, NY)
227. WTKR, Inc. (WTKR-TV)
228. WTNH Broadcsating, Inc. (WTNH-TV, New Haven, CT), K-W TV, Inc. (WBNE-TV, New Haven, CT), Post-Newsweek Stations, Connecticut, Inc. (WFSB-TV, Hartford, CT), and Tribune Broadcasting Company (WPIX-TV, New York, NY)
229. WXXI Public Broadcasting Council
230. WWAC, Inc. (WWAC-TV, Atlantic City, NJ)
231. Young Broadcasting of Sioux Falls, Inc. (KELO-TV, Sioux Falls, SD)

Parties Filing Oppositions/Comments

1. Advanced Television Systems Committee
2. Advanced Television Technology Center
3. AK Media Group, Inc. (Petition I)
4. AK Media Group, Inc. (Petition II)
5. Alamo Public Telecommunications Council
6. Allbritton Communications Company
7. Apple Valley Broadcasting, Inc., KHQ, Incorporated, and Spokane Television
8. Association of Federal Communications Consulting Engineers
9. Association of Local Television Stations, Inc. (II)
10. The Association for Maximum Service Television, Inc. and the Broadcasters' Caucus
11. Association of Public-Safety Communications Officials-International, Inc.
12. Benedek License Corporation
13. Blackstar Communications, Inc. (I)
14. Blackstar Communications, Inc. (II)
15. Board of Regents of the University of Wisconsin System (UWS), Maine Public Broadcasting Corporation (MPBC), Northeastern Educational Television of Ohio, Inc. (NETO), Ohio University (OU), and South Carolina Educational Television Commission (SCETV)
16. Anthony R. Bucco, New Jersey Assemblyman
17. Cannell Cleveland, L.P. (I)
18. Cannell Cleveland, L.P. (II)
19. Cannell Cleveland, L.P. (III)
20. Cannell Cleveland, L.P. (IV)
21. Cedar Rapids Television Company
22. Central Virginia Educational Telecommunications Corporation
23. Channel 3 of Corpus Christi, Inc. (CONDITIONAL SUPPORT)
24. Channel 51 of San Diego, Inc. (KUSI) (I)
25. Channel 51 of San Diego, Inc. (KUSI) (II)
26. Citadel Communications Co., Ltd.
27. Clark County School District
28. Clear Channel Television Licenses, Inc.
29. Cosmos Broadcasting Corporation (I)
30. Cosmos Broadcasting Corporation (II)
31. Dispatch Broadcast Group
32. Diversified Communications
33. Duhamel Broadcasting Enterprises (DBE)
34. du Treil, Lundin and Rackley, Inc.
35. The Electronic Industries Association and the EIA Advanced Television Committee
36. Fisher Broadcasting Inc.
37. Fouce Amusement Enterprises
38. Fox Television Stations Inc.
39. Gannett Co., Inc. (I)

40. Gannett Co., Inc. (II)
41. Garden State Communications, L.P.
42. GOCOM-Ouachita License, L.L.C.
43. Guy Gannett Communications
44. HDTV Grand Alliance
45. The Hearst Corporation
46. Heritage Media Corporation
47. HSN, Inc.
48. Hubbard Broadcasting, Inc.
49. Huntsville Television Acquisition Corp.
50. Independence Television Company
51. Jefferson-Pilot Communications Company
52. Journal Broadcast Group, Inc.
53. Jovan Broadcasting Corporation (COMMENTS)
54. KHQ, Incorporated
55. KLAS, Inc. (KLAS-TV, Las Vegas, NV)
56. Lewis Broadcasting Corporation
57. County of Los Angeles
58. John A. Lundin
59. Maryland Public Broadcasting Commission (I)
60. Maryland Public Broadcasting Commission (II)
61. Max Television of Tyler L.P. (KETK-TV, Jacksonville, TX)
62. Media Access Project, the Center for Media Education, Consumer Federation of America, Minority Media and Telecommunications Council, and the National Federation of Community Broadcasters
63. Mid-South Public Communications Foundation (WKNO-TV, Memphis, TN)
64. Motorola
65. Mountain Broadcasting Corporation
66. National Cable Television Association
67. National Public Radio (two separate filings)
68. Nebraska Educational Telecommunications Commission
69. Oregon Public Broadcasting
70. Paxson Media Group, Inc.
71. Pulitzer Broadcasting Company (WDSU-TV, New Orleans, LA and other stations)
72. Reece Associates Limited
73. Rhode Island Public Telecommunications Authority
74. Sangre de Cristo Communications, Inc.
75. Sinclair Broadcast Group
76. Southern Broadcast Corporation of Sarasota (WSB-TV, Sarasota, FL)
77. South Florida Public Telecommunications, Inc.
78. Speer Communications Holdings I Limited Partnership
79. St. Lawrence Valley Educational Television Council, Inc.
80. Telemundo Group, Inc.
81. Third Avenue Television, Inc.

82. Thomson Consumer Electronics, Inc.
83. Tribune Broadcasting Company (I)
84. Tribune Broadcasting Company (II)
85. Tribune Company (III)
86. University of Houston System
87. University of North Carolina Center for Public Television
88. Viacom Inc.
89. Virginia Broadcasting Corp.
90. Washburn University of Topeka
91. WAVY Television, Inc.
92. WCPX License Partnership
93. WSOC Television, Inc.
94. Young Broadcasting Inc.

Parties Filing Replies to Oppositions/Comments

1. Ad Hoc Group of 25 Low-VHF Stations
2. Association for Maximum Service Television, Inc. and the National Association of Broadcasters
3. Association of America's Public Television Stations and the Public Broadcasting Service
4. Association of Local Television Stations, Inc.
5. Birmingham Broadcasting (WVTM TV), Inc.
6. Community Broadcasters Association
7. Cosmos Broadcasting Corporation (I)
8. Cosmos Broadcasting Corporation (II)
9. Cosmos Broadcasting Corporation (III)
10. Duhamel Broadcasting Enterprises
11. Innovative Technologies, Inc.
12. Jefferson-Pilot Communications Company
13. KM Communications, Inc.
14. Maranatha Broadcasting Company, Inc.
15. Media Access Project, the Center for Media Education, Consumer Federation of America, Minority Media and Telecommunications Council, and the National Federation of Community Broadcasters
16. Midwest Television, Inc.
17. National Public Radio, Inc.
18. Pulitzer Broadcasting Company
19. Rapid Broadcasting Company
20. Ruarch Associates Limited Partnership
21. Sangre de Cristo Communications, Inc.
22. Shenandoah Valley Educational Television Corporation
23. Sinclair Broadcast Group, Inc.
24. Skinner Broadcasting, Inc. (I)

25. Skinner Broadcasting, Inc. (II)
26. Warwick Communications, Inc.
27. WCPX License Partnership

Parties Filing Supplemental Petitions

1. AK Media Group, Inc. (KFTY-TV, Detroit, MI and KVOS-TV, Bellingham, WA)
2. Allbritton Communications Company (KTUL-TV, Tulsa, OK, and others)
3. Blade Communications, Inc. (KTRV-TV, Nampa, ID)
4. Bowling Green State University (WBGU-TV, Bowling Green, OH)
5. Brechner Family (WMDT-TV, Salisbury, MD and KTKA-TV, Topeka, KS)
6. California Oregon Broadcasting, Inc. (KOTI-TV, Klamath Falls, OR and others)
7. Cannell Cleveland, L.P. (WUAB-TV, Lorain, OH)
8. CBS, Inc. (WWJ-TV, Detroit, MI)
9. Central Michigan University (WCMU-TV, Mt. Pleasant, MI, WCML-TV, Alpena, MI, and WCMV-TV, Cadillac, MI)
10. Central Virginia Educational Telecommunications Corp. (WNVC-TV, Fairfax, VA)
11. The Christian Network, Inc. (filed jointly with Paxson, et. al.)
12. Community Broadcasters Association
13. Cosmos Broadcasting Corp. (WTOL-TV, Toledo, OH and other stations)
14. Community Television of Southern California (KECT-TV, Los Angeles)
15. The Dispatch Broadcast Group (WBNS-TV, Columbus, OH)
16. Eastern Washington and Northern Idaho DTV Channel Allocation Caucus
17. Educational Television Association of Metropolitan Cleveland (WVIZ-TV, Cleveland, OH)
18. Florida West Coast Public Broadcasting, Inc. (WEDU-TV, Tampa, FL)
19. Fox Television Stations, Inc.
20. Great Trails Broadcasting, Inc. (WHAG-TV, Hagerstown, MD)
21. Guy Gannett Communications (WTWC-TV, Tallahassee, FL)
22. HMI Broadcasting Corp. (WPTZ-TV, North Pole, NY, WCHS-TV, Charleston, WV, and others)
23. JDG Television, Inc. (KPOM-TV, Ft. Smith, AR and KFAA-TV, Rogers, AR)
24. Jefferson-Pilot Communications Company (WWBT-TV, Richmond, VA)
25. Jet Broadcasting Co., Inc. (WJET-TV, Erie, PA)
26. Journal Broadcast Group, Inc. (KTNV-TV, Las Vegas, NV)
27. Kentuckiana Broadcasting, Inc. (WFTE-TV, Salem, IN)
28. KM Communications, Inc. and Sierra Television L.L.C.
29. KMSB-TV, Inc. (KMSB-TV, Tucson, AZ)
30. KVIE, Inc. (KVIE-TV, Sacramento, CA)
31. Landmark Television of Tennessee, Inc. (WTVF-TV, Nashville, TN)
32. Maranatha Broadcasting Company (WFMZ-TV, Allentown, PA)
33. McAlister Television Enterprises, Inc. (KAMC-TV, Lubbock, TX)
34. Media General, Inc. (WHLT-TV, Hattiesburg, MS and others)



35. Meredith Corporation (WOFL-TV, Orlando, FL)
36. Mississippi Authority for Educational Television WMPN-TV, channel XX in Jackson, MS and seven satellite stations)
37. Mountain Broadcasting Corporation. (WMBC-TV, Newton, NJ)
38. Mountain Lake Public Broadcasting, Inc. (WCFE-TV, Plattsburgh, NY)
39. The Estate of Hector Nicolau (WTIN-TV, Ponce, PR)
40. Ohio State University (WOSU-TV, Columbus, OH)
41. Pacific FM, Inc.
42. Paxson Communications Corporation (WAQF-TV, Batavia, NY and other stations)
43. Pegasus Communication Corporation (WWLF-TV, Hazelton, PA and WLIF-TV, Williamsport, PA)
44. Pensacola Junior College (WSRE-TV, Pensacola, FL)
45. Prairie Public Broadcasting, Inc. (KFME-TV, Fargo, ND and others)
46. Harish Puri (WJNW-TV, Janesville, WI)
47. Red River Broadcast Corp. (KBRR-TV, Thief River Falls, MN, KJRR-TV, Jamestown, ND, and KDLV-TV, Sioux Falls, SD)
48. Reece Associates Limited (WZWY-TV, Orlando, FL)
49. Sangre de Cristo Communications, Inc. and Cordillera Communications, Inc. (KOAA-TV, Pueblo, CO)
50. Shenandoah Valley Educational Television Corporation (WWPT-TV, Staunton, VA)
51. Sierra Broadcasting Company (KRNVT-TV, Reno, NV)
52. Skinner Broadcasting, Inc.
53. Speer Communications Holdings I Limited Partnership (WNAB-TV, Nashville TN)
54. Sullivan Broadcasting Company (WTAT-TV, Charleston, SC and others)
55. Tribune Broadcasting Company
56. Tri-State Public Teleplex, Inc. (WNIN-TV, Evansville, IN)
57. The University of Houston System (KUHT-TV, Houston, TX)
58. University of New Hampshire d/b/a New Hampshire Public Television
59. Univision Communications Inc.
60. Venture Technologies Group (WTWB-TV, Johnstown, PA)
61. WCPX License Partnership ( WCPX-TV, Orlando, FL)
62. WCTE-TV (WCTV-TV, Cookeville, TN)
63. Western New York Public Broadcasting Association (WNED-TV, and WNEQ-TV, Buffalo, NY)
64. WMTW Holdings (WMTW-TV, Poland Spring, ME)
65. WXXI Public Broadcasting Council (WXXI-TV, Rochester, NY)

Parties Filing Oppositions/Comments Regarding Supplements

1. AK Media Group, Inc.
2. The Association of America's Public Television Stations and the Public Broadcasting Service
3. Barry Telecommunications, Inc.
4. Channel 51 of San Diego, Inc.
5. Cosmos Broadcasting Corporation (I)
6. Cosmos Broadcasting Corporation (II)
7. Davis Television
8. Detroit Educational Television Foundation
9. Diversified Communications
10. Gannet Co., Inc., California Oregon Broadcasting, Inc., and Lee Enterprises Incorporated
11. Golden Orange Broadcasting, Co., Inc.
12. Granite Broadcasting Corporation
13. Independence Television Company
14. Jefferson-Pilot Communications Company
15. Lincoln Broadcasting Company
16. Los Angeles Unified School District
17. Mid-South Public Communications Foundation
18. Pacific and Southern Company
19. Paxson Communications Corporation (I)
20. Paxson Communications Corporation (II)
21. Pulitzer Broadcasting Company
22. Sherjan Broadcasting, Inc.
23. Stephens Group, Inc. (KOLO-TV, Reno, NV)
24. WAVY Television, Inc.
25. Western New York Public Broadcasting Association
26. WRDW License Corp. and Raycom-U.S., Inc.

Parties Filing Replies to Oppositions/Comments Regarding Supplements

1. AK Media
2. Association for Maximum Service Television Service, Inc.
3. Shenandoah Valley Educational Television Corporation
4. Univision Communications, Inc.

Parties Submitting Responses to the December 2, 1997 Public Notice

1. ABC, Inc.
2. ABC, Inc., CBS Broadcasting, Inc., and National Broadcasting Corporation
3. Advanced Television Technology Center, Inc.
4. American Christian Television Services, Inc.
5. Association of America's Public Television Stations/Public Broadcasting Service
6. Association of Federal Communications Consulting Engineers
7. Association for Maximum Service Television, Inc.
8. Association of Local Television Stations, Inc. (ALTV)
9. Association of Public-Safety Communications Officials-International, Inc. (APCO)
10. Astroline Communications Company
11. Bangor Communications, Inc.
12. Brunson Communications, Inc
13. Bell Broadcasting, L.L.C.
14. California Broadcasting Association
15. Cannell Cleveland, L.P.
16. Carolina Christian Broadcasting, Inc.
17. Central Michigan University
18. Central Virginia Educational Television Corp.
19. Channel 19 TV Corp.
20. Chris-Craft/United Group
21. Clear Channel Television Licensees, Inc.
22. Coast TV
23. Communications Corporation of America
24. Community Broadcasters Association
25. Community Teleplay, Inc.
26. Community Television, Inc.
27. Community Television of Southern California
28. Cordillera Communications, Inc.
29. Cosmos Broadcasting Corporation
30. Costa de Oro Television, Inc.
31. Cox Broadcasting
32. Dispatch Broadcast Group
33. duTreil, Lnudin and Rackley
34. Eastern Washington and Northern Idaho DTV Channel Allocation Caucus
35. Educational Broadcasting Foundation, Inc.
36. Empire Broadcasting, L.L.C.
37. FBC Television Affiliates Association
38. Entravision Holdings, LLC
39. Fox Television Stations, Inc.
40. Fouce Amusement Enterprises
41. Freedom Communications, Inc.
42. Gateway Communications, Inc.

43. Georgia Public Telecommunications Commission
44. Granite Broadcasting Corporation
45. Golden Orange Broadcasting Co., Inc.
46. Gulf-California Broadcast Company
47. Illinois Broadcasters Association
48. Jasas Corporation
49. Joint Response of UHF Broadcasters (Clear Channel Television Licensees, Communications, Corporation of America, DP Media, Inc., Glencairn Ltd., Grant Broadcasting Group, Jasas Corporation, Max Media Properties, L.L.C., Pappas Telecasting Companies, Paxson Communications Corporation, Pegasus Communications Corporation, Sinclair Broadcast, Group, Straightline Communications, Sullivan Broadcasting Group, Telemundo Group, Inc., Univision Communications, Inc., and Viacom)
50. International Broadcasting Network
51. JDG Television, Inc.
52. Johnson Broadcasting, Inc.
53. Jovan Broadcasting Corp.
54. Jules Cohen, P.E.
55. Kentuckiana Broadcasting, Inc.
56. KFBB Corporation, L.L.C.
57. KM Broadcasting, Inc.
58. KSLS, Inc.
59. Laredo Communications College
60. Lee Enterprises, Inc.
61. Lincoln Broadcasting Company
62. LIN Television Corp.
63. County of Los Angeles
64. Los Angeles Unified School District
65. Malrite Communications Group, Inc.
66. Maranatha Broadcasting Company, Inc.
67. Meyer Broadcasting Company
68. Midwest Television, Inc.
69. Milwaukee Area Technical College District Board
70. Motorola
71. Mountain Broadcasting Corporation
72. Mt. Mansfield, Inc.
73. National Public Radio
74. City of New York Board of Education
75. National Public Safety Telecommunications Council
76. New York Metropolitan Advisory Committee (Public Safety Agencies)
77. Nexstar Broadcasting Group, L.P.
78. Northeastern Educational Television of Ohio
79. P&LFT, LLC
80. Paging Systems, Inc.

81. Pappas Telecasting Companies
82. Paxson Communications Corporation, The Christian Network, Inc., Roberts Broadcasting Company, Cocola Broadcasting Companies, DP Media, Inc.
83. Pennsylvania State University
84. Pike's Peak Broadcasting Company
85. Polar Broadcasting, Inc.
86. Prairie Public Broadcasting, Inc.
87. Pulitzer Broadcasting Company
88. Rancho Palos Verdes Broadcasters, Inc.
89. Rhode Island Public Telecommunications Authority
90. School Board of Dade County, Florida
91. Scripps Howard Broadcasting Company
92. Sinclair Broadcast Group, Inc.
93. South Florida Public Television
94. St. Lawrence Valley Educational Television Council
95. Sullivan Broadcasting Company
96. Telemundo Group, Inc.
97. Television Wisconsin
98. Thunder Bay Broadcasting Corporation
99. Tribune Broadcasting Company
100. Trinity Christian Center of Santa Ana, Inc./Trinity Broadcasting Network
101. TV 55, L.L.C.
102. University of Houston
103. Univision Communications Inc.
104. United Communications Corporation
105. UPN Affiliates Association
106. U.S. Broadcast Group Licensees, L.P.
107. Wabash Valley Broadcasting Corp.
108. Warwick Communications, Inc.
109. WB Television Network
110. West Central Illinois Educational Telecommunications Corp.
111. WISH-TV
112. WITF, Inc.
113. WLNY-TV, Inc.
114. WMTV Holdings, Inc.
115. WRGB Broadcasting, Inc.
116. WRNN-TV Associates, Limited Partnership
117. WWAC, Inc.

**APPENDIX B**  
**DTV TABLE OF ALLOTMENTS**

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
AK ANCHORAGE	2	18	1000.0	219.0	23462	265	28907	265	0.0	0.0	81.2
AK ANCHORAGE	4	20	234.4	55.0	10968	256	10912	256	0.0	0.0	100.0
AK ANCHORAGE	5	22	1000.0	250.0	25716	265	30730	266	0.0	0.0	83.7
AK ANCHORAGE	7	24	1000.0	240.0	24954	265	26028	265	0.0	0.0	95.9
AK ANCHORAGE	9	26	1000.0	212.0	23059	267	24726	268	0.0	0.0	93.3
AK ANCHORAGE	11	28	50.0	91.0	10708	251	10259	250	0.0	0.0	100.0
AK ANCHORAGE	13	30	1000.0	238.0	24829	265	25978	265	0.0	0.0	95.6
AK ANCHORAGE	33	32	50.0	33.0	6438	233	1175	212	18.7	5.3	100.0
AK BETHEL	4	3	1.0	61.0	9999	8	5629	7	0.0	0.0	100.0
AK DILLINGHAM	2	9	39.8	305.0	33890	4	33677	4	0.0	0.0	100.0
AK FAIRBANKS	2	18	60.3	33.0	6744	77	6670	77	0.0	0.0	100.0
AK FAIRBANKS	7	22	50.0	33.0	6523	77	2167	70	0.0	0.0	100.0
AK FAIRBANKS	9	24	79.4	152.0	13637	78	13637	78	0.0	0.0	100.0
AK FAIRBANKS	11	26	50.0	33.0	6524	77	4966	76	0.0	0.0	100.0
AK FAIRBANKS	13	28	50.0	33.0	6524	77	4966	76	0.0	0.0	100.0
AK JUNEAU	3	6	1.0	33.0	6622	27	2155	27	0.0	0.0	100.0
AK JUNEAU	8	11	3.2	33.0	6793	27	771	25	0.0	0.0	100.0
AK KETCHIKAN	4	13	3.2	174.0	18251	17	6873	15	0.0	0.0	100.0
AK KETCHIKAN	9	8	3.3	305.0	22274	17	22184	17	0.0	0.0	100.0
AK NORTH POLE	4	20	213.8	485.0	30801	79	30801	79	0.0	0.0	100.0
AK SITKA	13	2	1.0	33.0	6622	9	1132	8	0.0	0.0	100.0
AL ANNISTON	40	58	264.5	350.0	20802	1137	17127	616	0.2	0.0	98.0
AL BESSEMER	17	18	186.0	675.0	32102	1304	28690	1131	2.5	0.5	99.7
AL BIRMINGHAM	6	50	1000.0	420.0	35806	1598	34251	1547	0.0	0.0	96.5
AL BIRMINGHAM	10	53	1000.0	404.0	31917	1522	28399	1428	2.0	2.2	99.5
AL BIRMINGHAM	13	52	1000.0	408.0	32879	1564	29111	1465	0.0	0.0	99.5
AL BIRMINGHAM	42	30	166.3	421.0	26176	1333	23781	1253	0.4	0.4	100.0
AL BIRMINGHAM	68	36	50.0	314.0	14489	1012	13255	977	0.0	0.0	100.0
AL DEMOPOLIS	41	19	50.0	333.0	15093	121	15040	121	1.6	1.6	99.9
AL DOTHAN	4	36	1000.0	573.0	48846	788	44475	765	0.0	0.0	99.8
AL DOTHAN	18	21	50.0	223.0	13968	291	13879	291	2.2	0.8	100.0
AL DOZIER	2	59	1000.0	210.0	25630	463	21786	298	0.0	0.0	98.2
AL FLORENCE	15	14	50.0	223.0	12681	283	12862	285	2.5	5.0	98.5
AL FLORENCE	26	20	50.0	230.0	12018	258	10994	240	1.8	1.1	100.0
AL FLORENCE	36	22	50.0	221.0	12324	261	12098	259	8.8	3.9	100.0
AL GADSDEN	44	45	50.0	303.0	12167	595	11830	523	1.8	1.4	99.2
AL GADSDEN	60	26	86.9	352.0	14274	1147	13949	1129	2.9	6.4	99.4
AL HOMEWOOD	21	28	280.4	409.0	27594	1394	26602	1316	0.7	0.8	98.8
AL HUNTSVILLE	19	59	89.0	533.0	24418	879	23489	857	0.7	0.6	99.6
AL HUNTSVILLE	25	24	50.0	352.0	18210	723	17357	706	0.3	0.1	100.0
AL HUNTSVILLE	31	32	50.0	546.0	22888	845	21705	810	1.8	1.6	100.0
AL HUNTSVILLE	48	49	50.0	579.0	22033	816	21115	792	0.6	0.3	99.4

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
AL HUNTSVILLE	54	41	53.4	515.0	18686	714	18097	704	0.9	0.5	100.0
AL LOUISVILLE	43	44	168.8	275.0	14457	267	14481	267	1.0	0.8	99.8
AL MOBILE	5	27	1000.0	581.0	49332	1311	49268	1310	0.0	0.0	99.6
AL MOBILE	10	9	16.5	381.0	31418	1008	30422	998	0.0	0.0	99.9
AL MOBILE	15	47	494.6	521.0	25702	1024	25722	1039	1.7	1.0	99.6
AL MOBILE	21	20	198.9	436.0	21838	950	21326	882	0.3	0.1	100.0
AL MOBILE	42	41	50.0	183.0	11664	544	11453	533	1.3	0.5	100.0
AL MONTGOMERY	12	57	1000.0	610.0	43525	908	41216	868	0.0	0.0	99.9
AL MONTGOMERY	20	16	50.0	226.0	12730	369	12234	365	0.5	0.2	100.0
AL MONTGOMERY	26	14	50.0	183.0	12881	376	12595	372	4.0	2.9	100.0
AL MONTGOMERY	32	51	284.8	545.0	28418	538	28011	535	3.2	2.1	99.8
AL MONTGOMERY	45	46	50.0	308.0	11831	366	11666	365	1.9	1.1	100.0
AL MOUNT CHEAHA	7	56	1000.0	610.0	41663	2006	38089	1739	0.3	0.1	99.6
AL OPELIKA	66	31	50.0	207.0	10492	469	9990	460	0.0	0.0	100.0
AL OZARK	34	33	50.0	142.0	8785	229	8749	228	0.7	0.1	100.0
AL SELMA	8	55	1000.0	515.0	38823	665	34978	632	0.0	0.0	100.0
AL TROY	67	48	50.0	592.0	17954	430	17658	427	0.2	0.0	99.4
AL TUSCALOOSA	33	34	198.4	662.0	34878	1329	33354	1300	0.7	0.9	96.4
AL TUSKEGEE	22	24	104.6	325.0	17791	473	17643	464	3.6	1.5	99.4
AR ARKADELPHIA	9	46	937.1	326.0	26260	329	24331	322	0.1	0.5	93.2
AR EL DORADO	10	27	733.8	605.0	43667	630	31478	508	0.0	0.0	98.3
AR FAYETTEVILLE	13	45	1000.0	506.0	35965	706	31152	624	0.0	0.0	99.6
AR FAYETTEVILLE	29	15	50.0	270.0	14581	299	13571	286	0.6	0.3	99.7
AR FORT SMITH	5	18	1000.0	384.0	32049	616	28831	536	0.0	0.0	98.2
AR FORT SMITH	24	27	96.5	317.0	14461	398	14779	410	0.7	0.3	96.3
AR FORT SMITH	40	21	77.8	610.0	21389	310	19262	290	1.0	1.4	100.0
AR HOT SPRINGS	26	14	50.0	258.0	13296	205	12577	180	1.0	0.3	100.0
AR JONESBORO	8	9	3.2	533.0	35028	507	36662	630	0.0	0.0	92.9
AR JONESBORO	19	20	50.0	311.0	17554	246	17453	245	0.1	0.0	100.0
AR JONESBORO	48	49	57.2	305.0	17180	256	17128	255	0.0	0.0	100.0
AR LITTLE ROCK	2	47	1000.0	543.0	42551	971	39045	963	0.0	0.0	92.4
AR LITTLE ROCK	4	32	1000.0	503.0	43063	1003	40761	981	0.0	0.0	99.1
AR LITTLE ROCK	7	22	649.7	591.0	42855	976	39421	949	0.0	0.0	100.0
AR LITTLE ROCK	11	12	21.5	521.0	37672	950	34630	919	0.0	0.0	100.0
AR LITTLE ROCK	16	30	346.5	539.0	28913	892	28841	887	0.8	0.3	98.8
AR LITTLE ROCK	42	43	139.7	156.0	14218	604	14165	604	0.0	0.0	99.8
AR MOUNTAIN VIEW	6	35	1000.0	424.0	37995	518	31053	357	0.0	0.0	99.3
AR NEWARK	17	27	50.0	162.0	4239	57	4049	55	1.0	0.9	100.0
AR PINE BLUFF	25	24	131.3	182.0	11636	584	11390	582	2.4	1.0	99.9
AR PINE BLUFF	38	39	206.5	593.0	25660	804	24909	792	0.8	0.5	100.0
AR ROGERS	51	50	50.0	143.0	6500	228	6004	221	0.0	0.0	100.0
AR SPRINGDALE	57	39	50.0	117.0	5681	223	5089	216	0.5	0.1	100.0



STATE AND CITY	DIGITAL TELEVISION SERVICE						EXISTING NTSC				DTV/ NTSC AREA MATCH (%)
	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
AZ FLAGSTAFF	2	22	1000.0	488.0	37453	172	40817	196	1.7	0.1	91.5
AZ FLAGSTAFF	4	18	726.0	487.0	33861	166	30625	158	0.0	0.0	97.9
AZ FLAGSTAFF	9	32	50.0	594.0	9414	63	8146	63	0.0	0.0	100.0
AZ FLAGSTAFF	13	27	655.0	474.0	30058	150	27363	133	0.0	0.0	100.0
AZ GREEN VALLEY	46	47	72.0	1095.0	25960	632	23982	614	0.0	0.0	100.0
AZ KINGMAN	6	19	1000.0	585.0	32207	118	37735	114	0.0	0.0	81.7
AZ LAKE HAVASU CIT	34	32	50.0	817.0	13724	81	12442	74	0.0	0.0	100.0
AZ MESA	12	36	843.9	543.0	32650	2225	30934	2221	0.0	0.0	99.4
AZ PHOENIX	3	24	1000.0	542.0	36902	2232	39938	2234	0.0	0.0	91.0
AZ PHOENIX	5	17	1000.0	539.0	37709	2230	39498	2234	0.0	0.0	93.5
AZ PHOENIX	8	29	729.8	536.0	32860	2225	31649	2223	0.0	0.0	99.4
AZ PHOENIX	10	31	778.6	558.0	33054	2225	31705	2216	0.0	0.0	98.6
AZ PHOENIX	15	56	75.2	521.0	19790	2207	19733	2207	0.0	0.0	99.8
AZ PHOENIX	21	20	50.0	489.0	20113	2209	18889	2200	0.0	0.0	100.0
AZ PHOENIX	33	34	80.3	521.0	18050	2198	17534	2195	1.0	0.9	99.4
AZ PHOENIX	45	26	64.0	545.0	23121	2219	20831	2202	0.0	0.0	100.0
AZ PHOENIX	61	49	61.4	541.0	18332	2205	17585	2192	0.0	0.0	100.0
AZ PRESCOTT	7	25	50.0	856.0	18566	165	16868	137	0.2	0.0	100.0
AZ SIERRA VISTA	58	44	148.2	331.0	13360	683	12715	678	0.0	0.0	100.0
AZ TOLLESON	51	52	203.8	533.0	24651	2219	23153	2208	0.0	0.0	100.0
AZ TUCSON	4	23	405.3	1100.0	40396	723	45568	806	0.0	0.0	84.5
AZ TUCSON	6	30	486.1	1106.0	39397	710	39559	741	0.0	0.0	89.7
AZ TUCSON	9	35	233.2	1134.0	33741	686	33524	702	0.0	0.0	97.0
AZ TUCSON	11	25	666.3	507.0	25573	686	23904	685	0.0	0.0	99.5
AZ TUCSON	13	32	783.4	622.0	31165	749	26425	729	0.0	0.0	100.0
AZ TUCSON	18	19	103.2	600.0	19942	704	17894	699	1.6	0.1	100.0
AZ TUCSON	27	28	50.0	175.0	3633	629	3028	618	0.4	0.1	100.0
AZ TUCSON	40	42	50.0	619.0	15188	673	13979	672	0.2	0.0	100.0
AZ YUMA	11	41	962.3	493.0	34473	233	33353	232	0.0	0.0	99.9
AZ YUMA	13	16	509.7	475.0	28059	231	26438	229	0.0	0.0	100.0
CA ANAHEIM	56	32	75.1	728.0	19805	11348	19520	11398	0.8	0.4	97.5
CA ARCATA	23	22	50.0	510.0	12225	112	11147	99	0.1	0.0	100.0
CA BAKERSFIELD	17	25	285.1	427.0	17512	545	17028	507	0.0	0.0	100.0
CA BAKERSFIELD	23	10	4.6	1128.0	22757	671	20817	611	1.0	0.0	99.9
CA BAKERSFIELD	29	33	70.1	1137.0	15846	538	15051	472	0.0	0.0	100.0
CA BAKERSFIELD	45	55	245.8	404.0	16271	562	15924	517	0.0	0.5	100.0
CA BARSTOW	64	44	70.2	518.0	14984	626	14214	623	0.0	0.0	99.5
CA CALIPATRIA	54	50	185.2	507.0	21324	226	20704	226	0.0	0.0	100.0
CA CERES	23	15	50.0	47.0	1623	359	1623	359	3.2	2.3	100.0
CA CHICO	12	43	1000.0	396.0	28773	570	28649	562	0.5	0.6	99.1
CA CHICO	24	36	306.0	564.0	21868	357	21703	355	1.0	5.3	99.8

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
CA CLOVIS	43	44	201.0	671.0	24994	1163	24310	1150	6.5	1.3	99.9
CA CONCORD	42	63	61.0	856.0	26590	6581	25956	6208	1.1	3.0	99.5
CA CORONA	52	39	63.5	896.0	16781	12071	17469	12070	8.1	9.1	94.9
CA COTATI	22	23	50.0	620.0	10421	1149	8985	1054	0.7	0.2	99.5
CA EL CENTRO	7	22	611.2	389.0	22604	181	21793	181	0.2	0.0	99.8
CA EL CENTRO	9	48	997.9	488.0	26945	229	26621	229	0.0	0.0	99.5
CA EUREKA	3	16	1000.0	503.0	31134	134	35054	139	0.0	0.0	88.8
CA EUREKA	6	17	1000.0	530.0	38962	139	41892	143	0.0	0.0	92.8
CA EUREKA	13	11	14.2	515.0	30342	121	28654	120	0.0	0.0	100.0
CA EUREKA	29	28	50.0	334.0	6416	92	5885	88	0.1	0.0	100.0
CA FORT BRAGG	8	15	371.2	746.0	27303	114	26639	96	0.0	0.0	99.6
CA FRESNO	18	40	87.0	677.0	22864	1125	22598	1117	1.3	0.7	99.6
CA FRESNO	24	16	50.6	716.0	23275	1126	22381	1109	0.4	0.0	100.0
CA FRESNO	30	9	8.7	622.0	20834	1140	19684	1130	2.3	0.6	99.7
CA FRESNO	47	14	50.2	597.0	19355	1089	17869	1057	0.4	0.0	99.9
CA FRESNO	53	7	3.2	581.0	17074	1090	16227	1075	1.3	0.2	99.9
CA HANFORD	21	20	279.0	605.0	25523	1225	24849	1208	2.7	0.3	99.8
CA HUNTINGTON BEAC	50	48	174.7	330.0	9907	9025	9534	8947	0.3	0.0	98.5
CA LOS ANGELES	2	60	865.9	1107.0	39414	13330	48050	14289	0.4	0.0	80.0
CA LOS ANGELES	4	36	711.4	984.0	41111	13829	46739	14262	0.0	0.0	84.4
CA LOS ANGELES	5	31	661.0	976.0	40390	13494	47300	14401	0.0	0.0	85.4
CA LOS ANGELES	7	53	455.6	978.0	31810	13156	34407	13555	0.1	0.0	92.1
CA LOS ANGELES	9	43	357.5	970.0	23370	12755	24577	12876	0.1	0.0	93.7
CA LOS ANGELES	11	65	688.7	896.0	32730	13229	34448	13536	0.0	0.0	93.4
CA LOS ANGELES	13	66	679.7	899.0	31938	12964	33784	13490	0.0	0.0	94.1
CA LOS ANGELES	22	42	172.8	889.0	16223	11481	17628	12151	0.4	0.7	91.0
CA LOS ANGELES	28	59	190.3	927.0	25044	12593	24863	12621	1.0	0.8	98.2
CA LOS ANGELES	34	35	73.5	896.0	21708	12379	21279	12427	0.6	1.0	98.3
CA LOS ANGELES	58	41	58.2	875.0	21457	12504	20290	12096	0.2	0.5	99.6
CA MERCED	51	38	135.2	680.0	21599	1284	20953	1275	0.1	0.0	99.8
CA MODESTO	19	18	248.8	573.0	26528	2689	26692	2748	4.1	1.4	98.1
CA MONTEREY	46	32	50.0	771.0	15633	692	15629	705	0.3	0.2	97.7
CA MONTEREY	67	31	50.0	701.0	13402	790	12867	716	0.0	0.0	99.0
CA NOVATO	68	47	129.7	431.0	20011	4106	18713	3674	0.1	0.0	98.3
CA OAKLAND	2	56	1000.0	479.0	33796	5784	36057	5970	0.0	0.0	92.2
CA ONTARIO	46	47	73.0	927.0	17967	12177	17391	11983	0.2	0.4	100.0
CA OXNARD	63	24	50.0	549.0	11667	1513	10943	1280	0.2	0.6	99.6
CA PALM SPRINGS	36	46	50.0	207.0	5970	255	5890	259	1.1	1.4	99.3
CA PALM SPRINGS	42	52	67.3	1087.0	14000	823	14077	927	4.5	8.3	96.9
CA PARADISE	30	20	71.4	440.0	17593	370	17246	364	0.9	1.2	99.7
CA PORTERVILLE	61	48	77.8	811.0	21854	1330	21494	1278	0.1	0.0	100.0
CA RANCHO PALOS VE	44	51	235.0	451.0	13238	7851	16382	7109	0.0	0.0	79.0

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
CA REDDING	7	14	166.2	1103.0	35522	327	35198	321	0.0	0.0	99.3
CA REDDING	9	18	183.8	1097.0	35070	322	34666	319	0.0	0.0	99.0
CA RIVERSIDE	62	68	180.1	723.0	17271	11672	16882	11441	0.5	1.8	100.0
CA SACRAMENTO	3	35	1000.0	591.0	40861	4499	41289	4261	0.0	0.0	94.6
CA SACRAMENTO	6	53	1000.0	567.0	37635	4317	37776	4081	0.0	0.0	94.0
CA SACRAMENTO	10	61	1000.0	595.0	35465	4022	35298	4047	0.5	0.2	97.7
CA SACRAMENTO	29	48	270.4	321.0	12538	1562	13056	1575	12.6	4.5	96.0
CA SACRAMENTO	31	21	181.2	558.0	25170	3537	25170	3554	0.6	0.1	95.5
CA SACRAMENTO	40	55	275.9	597.0	24683	3582	24651	3387	1.5	0.9	98.5
CA SALINAS	8	43	448.5	896.0	28177	4679	26635	2944	0.0	0.0	91.8
CA SALINAS	35	13	3.2	735.0	17120	765	16367	760	0.6	0.0	99.5
CA SAN BERNARDINO	18	61	413.6	725.0	23074	11391	23623	11875	11.9	1.6	96.9
CA SAN BERNARDINO	24	26	50.0	509.0	14332	8702	12957	5696	2.6	9.9	99.9
CA SAN BERNARDINO	30	38	210.0	715.0	16989	11222	16905	11248	8.2	3.7	98.4
CA SAN DIEGO	8	55	1000.0	226.0	24010	2704	23545	2660	0.0	0.0	98.9
CA SAN DIEGO	10	25	809.1	229.0	20867	2694	20089	2655	0.0	0.0	100.0
CA SAN DIEGO	15	30	191.7	613.0	22924	2527	23823	2548	0.0	0.0	95.5
CA SAN DIEGO	39	40	93.3	577.0	19553	2458	20018	2314	9.2	0.0	95.5
CA SAN DIEGO	51	18	52.1	579.0	17316	2422	19500	2403	9.5	7.3	86.0
CA SAN DIEGO	69	19	62.9	594.0	20726	2504	19310	2405	0.0	0.0	99.9
CA SAN FRANCISCO	4	57	1000.0	512.0	36097	5941	36969	5930	0.0	0.0	93.1
CA SAN FRANCISCO	5	29	1000.0	506.0	34977	5800	37021	5968	0.0	0.0	94.2
CA SAN FRANCISCO	7	24	621.2	509.0	30529	5503	31509	5866	1.4	1.5	93.7
CA SAN FRANCISCO	9	30	708.6	509.0	32429	5827	29666	5424	0.1	0.0	99.8
CA SAN FRANCISCO	14	51	476.3	701.0	16358	5310	17169	5313	2.0	1.2	94.5
CA SAN FRANCISCO	20	19	147.7	472.0	18054	5343	17673	5268	1.1	1.0	97.6
CA SAN FRANCISCO	26	27	95.2	421.0	15665	5173	14492	4950	0.7	1.0	100.0
CA SAN FRANCISCO	32	33	50.0	491.0	15589	5288	13582	4849	8.4	1.5	100.0
CA SAN FRANCISCO	38	39	216.8	440.0	16904	5207	14924	4781	0.7	0.1	100.0
CA SAN FRANCISCO	44	45	206.3	491.0	16415	5223	15218	4859	0.7	0.6	100.0
CA SAN JOSE	11	12	6.2	844.0	31737	5170	29472	4933	0.0	0.0	99.6
CA SAN JOSE	36	52	251.3	686.0	15638	5256	14441	5063	2.0	1.2	95.6
CA SAN JOSE	48	49	194.6	631.0	14403	4923	12982	4803	3.7	3.2	99.8
CA SAN JOSE	54	50	50.0	585.0	7749	4309	7636	4349	7.5	6.3	95.8
CA SAN JOSE	65	41	79.2	812.0	16801	4486	15633	4358	0.0	0.0	100.0
CA SAN LUIS OBISPO	6	15	1000.0	543.0	40194	398	41708	414	0.0	0.0	95.4
CA SAN LUIS OBISPO	33	34	50.0	440.0	6564	272	5665	245	0.0	0.0	100.0
CA SAN MATEO	60	59	107.3	362.0	11787	4746	11176	4612	0.4	0.8	100.0
CA SANGER	59	36	50.0	591.0	14995	761	14043	745	0.0	0.0	100.0
CA SANTA ANA	40	23	50.0	881.0	19085	12468	17952	12273	6.5	1.1	99.7
CA SANTA BARBARA	3	27	698.8	917.0	42096	1166	45650	1276	0.0	0.0	90.2
CA SANTA BARBARA	38	21	67.8	887.0	24246	837	22947	768	4.1	0.6	99.7

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
CA SANTA MARIA	12	19	188.3	591.0	26039	378	24810	368	0.5	0.1	100.0
CA SANTA ROSA	50	54	50.0	939.0	11196	413	10137	393	2.5	3.7	98.2
CA STOCKTON	13	25	691.8	594.0	36232	4245	35709	4593	2.2	0.7	96.2
CA STOCKTON	58	46	156.4	559.0	21148	3361	21483	3377	2.1	2.6	97.7
CA STOCKTON	64	62	63.5	874.0	26826	6635	25391	5855	0.3	0.0	99.2
CA TWENTYNINE PALM	31	23	50.0	90.0	2529	52	2341	50	0.0	0.0	100.0
CA VALLEJO	66	34	63.9	466.0	13195	5161	11634	3741	0.0	0.0	98.2
CA VENTURA	57	49	169.7	530.0	15057	3256	13570	1584	0.0	0.0	100.0
CA VISALIA	26	28	174.4	792.0	27346	1137	26475	1132	0.2	0.0	100.0
CA VISALIA	49	50	82.3	835.0	20266	1291	19894	1225	0.0	0.0	100.0
CA WATSONVILLE	25	58	50.0	675.0	11608	783	11399	737	0.9	0.1	99.7
CO BOULDER	14	15	99.6	351.0	17345	2086	17309	2095	3.5	0.1	97.9
CO BROOMFIELD	12	38	1000.0	738.0	31261	2162	30560	2153	0.0	0.0	97.8
CO CASTLE ROCK	53	46	128.8	193.0	10925	1687	10375	1663	0.0	0.0	100.0
CO COLORADO SPRING	11	10	20.1	725.0	29934	1040	26513	618	1.0	0.0	99.8
CO COLORADO SPRING	13	24	459.0	652.0	29384	1273	24843	643	0.0	0.0	99.9
CO COLORADO SPRING	21	22	75.1	656.0	18914	559	18277	549	1.2	0.1	99.1
CO DENVER	2	34	1000.0	319.0	28224	2255	31110	2312	0.0	0.0	89.3
CO DENVER	4	35	1000.0	451.0	32693	2295	32149	2340	0.0	0.0	91.2
CO DENVER	6	18	1000.0	292.0	28048	2224	27181	2145	0.0	0.0	95.7
CO DENVER	7	17	1000.0	310.0	25665	2247	24881	2210	0.0	0.0	99.1
CO DENVER	9	16	1000.0	280.0	25576	2250	23510	2210	0.0	0.0	99.4
CO DENVER	20	19	247.9	383.0	19667	2097	18609	2041	2.8	0.5	98.8
CO DENVER	31	32	233.2	317.0	17119	2051	16663	2047	0.5	0.1	100.0
CO DENVER	41	40	74.8	344.0	12086	1889	11934	1873	0.6	0.1	100.0
CO DENVER	50	51	81.7	233.0	12111	1876	11694	1870	0.0	0.0	100.0
CO DENVER	59	43	144.8	356.0	17315	2049	16527	2045	0.0	0.0	99.8
CO DURANGO	6	15	50.0	110.0	8515	63	9280	62	0.0	0.0	91.0
CO FORT COLLINS	22	21	50.0	256.0	13966	426	13878	431	0.4	0.0	99.5
CO GLENWOOD SPRING	3	23	879.2	771.0	26314	77	31163	85	0.1	0.5	82.1
CO GRAND JUNCTION	4	15	71.5	422.0	12688	103	13808	106	0.0	0.0	88.5
CO GRAND JUNCTION	5	2	1.0	33.0	7035	92	6692	92	0.0	0.0	100.0
CO GRAND JUNCTION	8	7	9.7	829.0	31861	143	26289	113	0.4	0.0	100.0
CO GRAND JUNCTION	11	12	10.8	429.0	21026	111	19309	103	0.0	0.0	100.0
CO GRAND JUNCTION	18	17	50.0	883.0	13770	96	12748	95	0.0	0.0	100.0
CO LONGMONT	25	29	234.1	325.0	17790	2148	17770	2144	0.2	0.1	99.4
CO MONTROSE	10	13	3.2	33.0	4659	33	4430	33	0.0	0.0	100.0
CO PUEBLO	5	42	1000.0	396.0	30740	588	31495	580	0.4	0.0	92.6
CO PUEBLO	8	26	364.3	727.0	29914	851	26336	621	0.0	0.0	99.6
CO STEAMBOAT SPRIN	24	10	3.2	157.0	1891	12	1499	11	0.0	0.0	100.0
CO STERLING	3	23	1000.0	232.0	25691	70	22797	62	0.0	0.0	99.9

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
CT BRIDGEPORT	43	42	50.0	156.0	9545	2622	9689	2664	2.1	2.8	97.3
CT BRIDGEPORT	49	52	50.0	222.0	10021	3223	9688	3156	6.3	10.2	98.8
CT HARTFORD	3	33	1000.0	276.0	21991	3476	24532	3877	0.0	0.0	85.9
CT HARTFORD	18	46	219.5	299.0	17043	3203	17368	3157	6.3	6.3	90.1
CT HARTFORD	24	32	50.0	262.0	13076	2852	11674	2651	11.3	11.0	98.6
CT HARTFORD	61	5	1.0	515.0	22582	3667	23105	3792	7.9	10.7	86.5
CT NEW BRITAIN	30	35	134.0	451.0	22623	3872	22140	3765	17.5	13.2	96.1
CT NEW HAVEN	8	10	8.6	363.0	22646	5353	23122	4690	3.7	2.4	90.0
CT NEW HAVEN	59	6	1.0	314.0	16594	4189	18681	4424	2.3	0.9	85.9
CT NEW HAVEN	65	39	50.0	82.0	1425	546	1369	530	0.0	0.0	100.0
CT NEW LONDON	26	34	116.7	381.0	16634	2417	15227	1723	0.6	1.6	99.4
CT NORWICH	53	45	50.0	207.0	9654	839	9558	838	2.8	4.5	97.5
CT WATERBURY	20	12	3.2	366.0	18905	4400	18645	4039	8.1	4.6	92.9
DC WASHINGTON	4	48	1000.0	237.0	26989	6541	24745	6454	6.6	3.0	98.9
DC WASHINGTON	5	36	1000.0	235.0	26351	6530	26711	6533	0.0	0.0	95.9
DC WASHINGTON	7	39	1000.0	235.0	23331	6004	23215	6365	0.0	0.0	95.4
DC WASHINGTON	9	34	1000.0	235.0	24624	6440	22883	6299	0.0	0.0	100.0
DC WASHINGTON	20	35	231.6	235.0	17347	6010	17179	5746	0.1	0.0	96.0
DC WASHINGTON	26	27	67.2	233.0	15070	5823	15606	5637	13.3	4.1	94.9
DC WASHINGTON	32	33	194.3	213.0	13878	5588	14310	5777	10.0	2.3	93.5
DC WASHINGTON	50	51	65.0	247.0	14147	5160	14207	5376	0.1	0.0	97.7
DE SEAFORD	64	44	50.0	195.0	4202	154	4202	154	3.2	2.9	100.0
DE WILMINGTON	12	55	1000.0	294.0	23176	7443	20136	6742	0.0	0.0	99.8
DE WILMINGTON	61	31	50.0	292.0	16054	5337	15401	5324	5.3	6.5	97.1
FL BOCA RATON	63	44	61.7	310.0	13892	3705	13892	3705	0.0	0.0	100.0
FL BRADENTON	66	42	50.0	465.0	18294	2380	18282	2379	0.0	0.0	100.0
FL CAPE CORAL	36	35	216.1	450.0	24093	879	23907	870	0.0	0.0	100.0
FL CLEARWATER	22	21	232.4	433.0	21082	2536	21082	2536	9.1	5.2	100.0
FL CLERMONT	18	17	240.6	458.0	28579	2143	28566	2101	0.0	0.0	99.4
FL COCOA	52	51	154.7	285.0	14214	1507	14142	1510	0.0	0.0	99.7
FL COCOA	68	30	50.0	287.0	13459	1043	13446	1039	0.0	0.0	100.0
FL DAYTONA BEACH	2	11	47.2	503.0	44133	2602	41617	2380	0.0	0.0	99.7
FL DAYTONA BEACH	26	49	145.7	304.0	16535	1271	13794	830	0.0	0.0	100.0
FL FORT LAUDERDALE	51	52	151.7	262.0	13422	3627	13422	3627	0.0	0.0	100.0
FL FORT MYERS	11	53	1000.0	451.0	36265	1082	34767	1033	7.0	5.4	99.6
FL FORT MYERS	20	15	215.4	451.0	24348	847	24348	847	0.1	0.0	100.0
FL FORT MYERS	30	31	50.0	293.0	16321	651	16188	651	6.5	4.2	100.0
FL FORT PIERCE	21	38	117.7	147.0	11558	446	11088	436	0.0	0.0	100.0
FL FORT PIERCE	34	50	301.7	454.0	24332	1376	23318	1068	0.0	0.0	100.0
FL FORT WALTON BEA	35	25	50.0	60.0	4682	155	4678	155	2.1	0.6	100.0
FL FORT WALTON BEA	53	40	56.2	219.0	12566	488	12574	488	0.0	0.0	99.9
FL FORT WALTON BEA	58	49	50.0	59.0	1170	106	1170	106	0.0	0.0	100.0

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
FL GAINESVILLE	5	36	1000.0	262.0	31845	1206	31333	1154	0.0	0.0	100.0
FL GAINESVILLE	20	16	91.0	287.0	16217	546	16225	547	0.5	0.1	100.0
FL HIGH SPRINGS	53	28	103.9	278.0	13464	443	13293	416	0.0	0.0	99.9
FL HOLLYWOOD	69	47	97.4	264.0	13806	3583	13806	3583	0.0	0.0	100.0
FL JACKSONVILLE	4	42	1000.0	293.0	33336	1218	31927	1179	0.0	0.0	100.0
FL JACKSONVILLE	7	38	1000.0	277.0	27783	1087	26495	1082	3.7	1.8	100.0
FL JACKSONVILLE	12	13	14.6	296.0	27737	1084	27930	1091	3.9	2.2	98.4
FL JACKSONVILLE	17	34	300.6	304.0	21158	1047	20982	1045	6.3	1.9	100.0
FL JACKSONVILLE	30	32	96.5	302.0	16097	1004	16097	1004	0.0	0.0	100.0
FL JACKSONVILLE	47	19	102.8	299.0	18851	1019	18851	1019	0.0	0.1	100.0
FL JACKSONVILLE	59	44	64.2	289.0	14310	967	14310	967	0.0	0.0	100.0
FL KEY WEST	8	12	3.2	33.0	1460	34	1460	34	0.0	0.0	100.0
FL KEY WEST	22	3	1.0	62.0	1741	33	1741	33	0.0	0.0	100.0
FL LAKE WORTH	67	36	50.0	60.0	3822	717	3822	717	0.0	0.0	100.0
FL LAKELAND	32	19	145.7	331.0	17465	2429	17465	2429	0.0	0.0	100.0
FL LEESBURG	45	46	133.0	138.0	11551	1425	10900	1419	0.0	0.0	100.0
FL LEESBURG	55	40	149.1	515.0	22927	1953	22638	1965	0.1	0.0	98.7
FL LIVE OAK	57	48	50.0	137.0	8563	161	8563	161	0.0	0.0	100.0
FL MELBOURNE	43	20	90.3	299.0	14936	1541	14876	1539	0.0	0.0	100.0
FL MELBOURNE	56	48	170.8	472.0	27441	2120	24824	1902	0.9	1.7	99.1
FL MIAMI	2	18	1000.0	283.0	32748	3999	31340	3901	0.0	0.0	100.0
FL MIAMI	4	22	1000.0	304.0	33960	4013	33960	4013	0.0	0.0	100.0
FL MIAMI	6	30	1000.0	549.0	47149	3619	43965	2793	0.0	0.0	98.9
FL MIAMI	7	8	14.3	293.0	28109	3947	28109	3947	0.1	0.0	100.0
FL MIAMI	10	9	14.8	305.0	28742	3954	28730	3954	0.0	0.0	100.0
FL MIAMI	17	20	113.3	309.0	16727	3755	16727	3755	0.0	0.0	100.0
FL MIAMI	23	24	192.6	297.0	15913	3794	15913	3794	0.0	0.0	100.0
FL MIAMI	33	32	201.3	280.0	17636	3748	17259	3598	0.0	0.0	100.0
FL MIAMI	35	26	66.2	102.0	8033	2890	7442	2300	0.0	0.0	99.6
FL MIAMI	39	19	123.1	276.0	14200	3712	14982	3725	0.0	0.0	94.8
FL MIAMI	45	46	73.1	308.0	12757	3710	12757	3710	0.0	0.0	100.0
FL NAPLES	26	41	283.7	368.0	19538	625	19530	625	0.0	0.0	100.0
FL NAPLES	46	45	94.3	309.0	14551	548	14551	548	0.0	0.0	100.0
FL NEW SMYRNA BEAC	15	33	50.0	176.0	10158	659	10158	659	0.8	5.2	100.0
FL Ocala	51	31	50.0	280.0	14383	592	14383	592	0.6	0.4	100.0
FL ORANGE PARK	25	10	3.2	151.0	9390	960	8960	953	0.0	0.0	100.0
FL ORLANDO	6	58	1000.0	445.0	40976	2471	36463	2429	0.0	0.0	98.3
FL ORLANDO	9	39	839.9	479.0	38033	2482	35179	2183	0.1	0.0	98.3
FL ORLANDO	24	23	50.0	381.0	20679	1954	20591	1953	8.8	5.1	100.0
FL ORLANDO	27	14	171.3	550.0	35564	3673	29084	3043	0.0	0.0	100.0
FL ORLANDO	35	22	67.5	451.0	20573	1953	20939	1971	0.0	0.0	98.0
FL ORLANDO	65	41	123.1	465.0	21706	2059	21799	2061	0.0	0.0	99.5

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
FL PALM BEACH	61	49	101.0	125.0	12399	1406	12750	1445	0.0	0.0	97.2
FL PANAMA CITY	7	42	1000.0	265.0	27025	394	26252	371	0.0	0.0	100.0
FL PANAMA CITY	13	19	537.6	437.0	35665	571	33760	511	0.0	0.0	100.0
FL PANAMA CITY	28	29	50.0	228.0	12704	211	12644	210	0.1	0.0	100.0
FL PANAMA CITY	56	38	50.0	155.0	10333	201	10321	198	0.0	0.0	100.0
FL PANAMA CITY BEA	46	47	50.0	59.0	1418	86	1418	86	0.3	0.0	100.0
FL PENSACOLA	3	17	1000.0	372.0	36542	1108	31164	943	0.0	0.0	100.0
FL PENSACOLA	23	31	91.9	149.0	11627	471	11282	465	0.7	3.6	100.0
FL PENSACOLA	33	34	132.8	415.0	18793	868	18561	866	0.0	0.0	100.0
FL PENSACOLA	44	45	122.3	454.0	19008	896	18984	896	0.3	0.0	100.0
FL SARASOTA	40	52	88.9	235.0	13344	1974	12951	1857	0.2	0.2	99.4
FL ST. PETERSBURG	10	24	607.5	458.0	31241	2783	30743	2795	0.0	0.0	99.0
FL ST. PETERSBURG	38	57	52.6	438.0	20978	2908	21394	2918	2.6	0.7	98.0
FL ST. PETERSBURG	44	59	272.7	454.0	27852	3105	26940	3082	0.0	0.0	100.0
FL TALLAHASSEE	11	32	1000.0	232.0	25777	430	23062	384	0.0	0.0	100.0
FL TALLAHASSEE	27	22	91.4	518.0	29111	609	28079	595	0.4	0.1	100.0
FL TALLAHASSEE	40	2	1.0	268.0	13664	361	13704	362	0.0	0.0	99.6
FL TAMPA	3	54	1000.0	473.0	41755	3671	39567	3244	0.0	0.0	96.1
FL TAMPA	8	7	19.0	471.0	37631	3452	35000	3222	1.4	0.2	99.8
FL TAMPA	13	12	17.8	433.0	34655	3345	35523	3387	6.9	2.0	97.6
FL TAMPA	16	34	73.3	308.0	16910	2770	16934	2772	1.3	0.4	99.9
FL TAMPA	28	29	101.0	471.0	27073	3079	22441	2914	0.0	0.0	100.0
FL TAMPA	50	47	149.3	445.0	25345	3034	23509	2957	1.0	0.3	99.9
FL TEQUESTA	25	16	191.2	453.0	22790	1447	22565	1268	0.0	0.0	100.0
FL TICE	49	33	133.6	312.0	15015	716	14724	714	0.0	0.0	100.0
FL VENICE	62	25	55.5	167.0	10475	664	10354	662	0.0	0.0	99.6
FL WEST PALM BEACH	5	55	1000.0	302.0	33787	4048	30886	2486	0.0	0.0	100.0
FL WEST PALM BEACH	12	13	14.7	299.0	28672	3707	27252	3701	1.0	0.5	100.0
FL WEST PALM BEACH	29	28	225.7	457.0	24721	3869	24681	3850	0.2	1.7	100.0
FL WEST PALM BEACH	42	27	50.0	439.0	19161	2452	19157	2452	0.0	0.0	100.0
GA ALBANY	10	17	611.1	293.0	27571	589	25456	542	1.2	0.4	97.6
GA ALBANY	31	30	50.0	302.0	17242	406	17234	406	0.5	0.5	100.0
GA ATHENS	8	22	600.2	326.0	28979	3373	25822	3264	0.0	0.0	99.9
GA ATHENS	34	48	277.5	440.0	22260	3052	21347	2821	1.2	0.3	99.9
GA ATLANTA	2	39	1000.0	316.0	31734	3513	28857	3391	0.0	0.0	99.0
GA ATLANTA	5	27	1000.0	326.0	32598	3523	31015	3442	0.0	0.0	99.4
GA ATLANTA	11	10	15.7	320.0	26462	3322	25851	3314	0.0	0.0	98.4
GA ATLANTA	17	20	82.5	332.0	20181	3107	18911	3044	2.9	0.4	97.6
GA ATLANTA	30	21	50.0	334.0	15764	2905	16865	2956	2.0	1.0	92.2
GA ATLANTA	36	25	67.1	332.0	19555	3104	18956	3076	5.0	0.7	99.4
GA ATLANTA	46	19	50.0	332.0	18719	3090	18442	3077	0.9	0.1	99.5

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
GA ATLANTA	57	41	50.0	319.0	9926	2613	9890	2606	3.8	1.0	99.6
GA ATLANTA	69	43	50.0	299.0	15421	2953	15790	2961	0.0	0.0	95.9
GA AUGUSTA	6	42	1000.0	418.0	37310	939	33843	885	0.0	0.0	99.1
GA AUGUSTA	12	31	716.9	485.0	37268	998	32219	921	0.0	0.0	99.7
GA AUGUSTA	26	30	60.4	485.0	24272	667	23574	625	0.0	0.0	98.3
GA AUGUSTA	54	51	65.1	385.0	16955	537	16931	537	0.3	0.1	99.9
GA BAINBRIDGE	49	50	192.8	410.0	22695	493	22683	493	0.1	0.0	100.0
GA BAXLEY	34	35	50.0	147.0	6497	93	6465	93	0.0	0.0	100.0
GA BRUNSWICK	21	24	262.3	600.0	31785	996	31608	951	0.1	0.3	100.0
GA CHATSWORTH	18	33	331.5	564.0	19455	1485	17109	1056	1.2	2.0	99.3
GA COCHRAN	29	7	4.8	350.0	20633	537	19851	520	0.0	0.0	98.7
GA COLUMBUS	3	15	1000.0	543.0	45960	1149	35466	889	0.0	0.0	99.8
GA COLUMBUS	9	47	985.2	503.0	38776	980	31136	724	0.5	0.1	99.9
GA COLUMBUS	28	23	192.0	461.0	22702	843	22061	833	4.4	4.6	99.6
GA COLUMBUS	38	35	50.0	399.0	20127	589	19841	586	0.2	0.1	100.0
GA COLUMBUS	54	49	50.0	345.0	15376	492	14812	486	0.0	0.0	100.0
GA CORDELE	55	51	50.0	125.0	5069	62	5065	62	0.0	0.0	100.0
GA DALTON	23	16	50.0	447.0	12110	704	10601	655	1.9	1.5	100.0
GA DAWSON	25	26	50.0	329.0	14774	306	14699	304	0.9	2.1	99.9
GA MACON	13	45	1000.0	238.0	25508	671	20877	590	0.0	0.0	100.0
GA MACON	24	16	50.0	244.0	14633	474	14304	467	0.5	1.0	99.9
GA MACON	41	40	50.0	237.0	12902	429	12850	429	1.6	0.5	100.0
GA MACON	64	50	50.0	185.0	2523	254	2466	253	0.0	0.0	100.0
GA MONROE	63	44	119.9	363.0	17274	2962	17752	3051	0.0	0.0	96.3
GA PELHAM	14	20	273.3	378.0	22980	645	22614	638	0.0	0.0	99.9
GA PERRY	58	32	50.0	247.0	13047	432	12959	431	0.0	0.0	100.0
GA ROME	14	51	408.4	616.0	28081	3421	26996	3239	1.0	1.0	100.0
GA SAVANNAH	3	39	1000.0	451.0	41918	738	34691	654	0.0	0.0	100.0
GA SAVANNAH	9	46	958.3	320.0	29284	641	25467	597	0.0	0.0	100.0
GA SAVANNAH	11	15	487.6	445.0	36273	697	34178	673	0.7	0.8	99.8
GA SAVANNAH	22	23	170.3	436.0	25152	549	24027	539	0.2	0.1	100.0
GA THOMASVILLE	6	52	1000.0	619.0	51636	878	45896	839	0.0	0.0	99.8
GA TOCCOA	32	24	50.0	253.0	12060	460	11262	432	0.8	0.8	100.0
GA VALDOSTA	44	43	50.0	277.0	11316	233	11324	233	0.6	0.4	99.9
GA WAYCROSS	8	18	531.9	314.0	28738	370	25186	342	0.0	0.0	98.8
GA WRENS	20	36	325.9	452.0	24569	613	24593	614	4.8	3.3	97.9
HI HILO	2	22	50.0	33.0	6524	67	2155	58	0.0	0.0	100.0
HI HILO	4	19	1000.0	366.0	29712	119	30256	110	0.0	0.0	90.6
HI HILO	9	8	3.2	33.0	6793	69	2391	58	0.0	0.0	100.0
HI HILO	11	21	50.0	33.0	6524	67	4051	65	0.0	0.0	100.0
HI HILO	13	18	50.0	33.0	6523	67	4051	65	0.0	0.0	100.0
HI HILO	14	23	50.0	33.0	6524	67	751	46	0.0	0.0	100.0



STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
HI HILO	32	31	50.0	366.0	20338	83	17557	80	0.6	0.0	100.0
HI HILO	38	39	50.0	366.0	20338	83	17557	80	0.0	0.0	100.0
HI HONOLULU	2	22	1000.0	33.0	9594	797	11517	836	0.0	0.0	83.3
HI HONOLULU	4	40	1000.0	33.0	10686	835	11185	836	0.0	0.0	93.8
HI HONOLULU	5	23	1000.0	629.0	47397	842	52476	842	0.0	0.0	90.3
HI HONOLULU	9	8	7.2	33.0	8305	836	8484	836	0.0	0.0	97.9
HI HONOLULU	11	18	120.2	33.0	7255	799	7519	836	0.0	0.0	95.4
HI HONOLULU	13	35	549.5	33.0	9761	836	9683	836	0.0	0.0	100.0
HI HONOLULU	14	31	50.0	33.0	6289	802	1898	721	0.0	0.0	100.0
HI HONOLULU	20	19	50.0	622.0	28646	836	20876	836	2.0	6.2	100.0
HI HONOLULU	26	27	50.0	580.0	21625	836	17512	836	0.4	5.1	96.9
HI HONOLULU	32	33	50.0	33.0	5603	826	2501	754	2.6	1.0	100.0
HI HONOLULU	38	39	50.0	580.0	27550	832	17796	836	0.4	6.7	100.0
HI HONOLULU	44	43	50.0	580.0	27550	836	18040	836	0.0	1.3	100.0
HI KAILUA KONA	6	25	812.8	887.0	53971	133	54363	145	0.0	0.0	98.9
HI KANEHOHE	66	41	50.0	632.0	28895	842	14374	837	0.0	0.0	100.0
HI LIHUE	8	12	3.3	305.0	22274	51	22184	51	4.9	0.0	100.0
HI LIHUE	21	7	3.2	305.0	24677	51	17541	51	0.0	0.0	100.0
HI LIHUE	27	28	50.0	366.0	20338	51	17557	51	27.3	0.0	100.0
HI LIHUE	67	45	50.0	366.0	20338	51	17557	51	0.0	0.0	100.0
HI WAILUKU	3	24	72.4	1814.0	53585	120	52313	138	0.0	0.0	97.8
HI WAILUKU	7	36	50.0	1811.0	51943	139	40173	121	0.0	0.0	100.0
HI WAILUKU	10	30	50.0	1811.0	51943	139	40768	121	0.0	0.0	100.0
HI WAILUKU	12	29	50.0	1664.0	51106	138	45250	128	0.0	0.0	100.0
HI WAILUKU	15	16	50.0	1723.0	50272	138	42954	123	0.0	0.0	100.0
HI WAILUKU	21	20	50.0	33.0	6373	90	2364	85	6.3	6.0	100.0
HI WAILUKU	27	28	50.0	366.0	20337	100	17557	100	17.2	5.2	100.0
HI WAILUKU	33	34	50.0	366.0	20338	100	17557	100	6.4	1.2	100.0
IA AMES	5	59	1000.0	564.0	48378	984	40402	884	0.0	0.0	100.0
IA BURLINGTON	26	41	50.0	96.0	3829	91	3821	91	1.1	0.2	100.0
IA CEDAR RAPIDS	2	51	1000.0	442.0	37088	809	34974	779	0.0	0.0	92.9
IA CEDAR RAPIDS	9	52	1000.0	607.0	44258	948	34935	764	0.0	0.0	100.0
IA CEDAR RAPIDS	28	27	226.0	452.0	24320	649	24312	641	0.1	0.0	99.6
IA CEDAR RAPIDS	48	47	83.3	323.0	15823	490	15815	490	0.8	3.4	100.0
IA COUNCIL BLUFFS	32	33	50.0	98.0	6340	642	5791	631	4.2	0.8	100.0
IA DAVENPORT	6	56	1000.0	408.0	36341	1070	32108	941	0.0	0.0	98.3
IA DAVENPORT	18	49	209.7	302.0	17562	629	17166	627	0.1	0.0	100.0
IA DAVENPORT	36	34	50.0	65.0	734	259	734	259	0.5	0.0	100.0
IA DES MOINES	8	31	796.2	591.0	44002	915	34792	837	0.0	0.0	100.0
IA DES MOINES	11	50	1000.0	600.0	43262	904	38472	872	0.0	0.0	98.0
IA DES MOINES	13	19	611.9	600.0	44568	917	37303	855	0.0	0.0	100.0
IA DES MOINES	17	16	126.7	463.0	23435	720	23117	717	0.2	0.0	100.0

STATE AND CITY	DIGITAL TELEVISION SERVICE						EXISTING NTSC				DTV/ NTSC AREA MATCH (%)
	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
IA DES MOINES	63	26	58.1	550.0	20137	674	20089	673	0.0	0.0	100.0
IA DUBUQUE	40	43	50.0	256.0	12330	221	12033	218	2.1	1.0	100.0
IA FORT DODGE	21	25	50.5	355.0	20624	211	20632	211	0.1	0.1	99.9
IA IOWA CITY	12	45	922.3	439.0	35414	1080	31000	929	0.0	0.0	100.0
IA IOWA CITY	20	25	50.0	123.0	11519	390	11169	371	1.4	0.7	100.0
IA MASON CITY	3	42	1000.0	472.0	42310	734	32426	513	0.0	0.0	99.8
IA MASON CITY	24	18	50.0	436.0	19783	275	19674	275	0.5	0.1	100.0
IA OTTUMWA	15	14	69.1	363.0	19978	338	19746	333	1.3	0.5	100.0
IA RED OAK	36	35	63.1	475.0	20212	748	19928	745	1.9	2.7	100.0
IA SIOUX CITY	4	41	1000.0	585.0	49038	632	38681	499	0.0	0.0	99.8
IA SIOUX CITY	9	30	766.6	616.0	44129	531	38211	463	0.0	0.0	99.4
IA SIOUX CITY	14	39	50.0	351.0	19053	257	19017	256	2.5	1.3	99.9
IA SIOUX CITY	27	28	161.7	326.0	18801	255	19331	262	1.1	1.1	96.1
IA SIOUX CITY	44	49	226.4	610.0	29824	360	29043	352	0.0	0.0	100.0
IA WATERLOO	7	55	1000.0	604.0	42494	922	35926	780	0.0	0.0	99.8
IA WATERLOO	32	35	237.6	579.0	28849	734	28450	698	2.1	2.3	99.5
ID BOISE	2	28	978.1	777.0	45244	393	50231	396	0.0	0.0	90.0
ID BOISE	4	21	724.1	754.0	44481	394	48296	395	0.0	0.0	92.0
ID BOISE	7	26	407.8	808.0	38677	391	38283	390	0.0	0.0	99.4
ID CALDWELL	9	10	14.0	805.0	26995	386	25535	385	0.2	0.0	100.0
ID COEUR D'ALENE	26	45	50.0	465.0	5958	315	4501	184	0.0	0.0	100.0
ID FILER	19	18	50.0	161.0	6675	83	6659	83	0.0	0.0	100.0
ID IDAHO FALLS	3	36	1000.0	488.0	37465	234	40914	237	0.0	0.0	91.3
ID IDAHO FALLS	8	9	21.8	463.0	35031	232	33586	231	0.0	0.0	100.0
ID LEWISTON	3	32	1000.0	384.0	25292	137	28029	141	0.0	0.0	84.3
ID MOSCOW	12	35	804.7	346.0	26273	140	25834	151	1.0	3.2	98.6
ID NAMPA	6	24	822.6	811.0	44997	394	47567	393	0.0	0.0	93.1
ID NAMPA	12	44	525.4	829.0	37704	391	37104	390	0.0	0.0	99.1
ID POCATELLO	6	23	1000.0	466.0	33212	267	34995	265	0.0	0.0	90.4
ID POCATELLO	10	17	189.6	465.0	29785	229	28233	228	0.0	0.0	100.0
ID TWIN FALLS	11	16	578.8	323.0	27977	131	26495	129	0.0	0.0	100.0
ID TWIN FALLS	13	22	50.0	161.0	11305	101	11221	101	0.0	0.0	100.0
ID TWIN FALLS	35	34	50.0	164.0	3197	69	3181	69	0.0	0.0	100.0
IL AURORA	60	59	187.8	494.0	24765	8255	24885	8277	0.1	0.0	99.2
IL BLOOMINGTON	43	28	50.0	293.0	14988	595	14689	563	0.9	0.3	100.0
IL CARBONDALE	8	40	1000.0	268.0	26138	695	21296	537	0.0	0.0	100.0
IL CHAMPAIGN	3	48	1000.0	287.0	32382	894	22935	724	6.8	2.4	99.9
IL CHAMPAIGN	15	41	50.0	396.0	18190	457	17815	451	0.1	0.0	100.0
IL CHARLESTON	51	50	50.0	70.0	2801	71	2801	71	0.0	0.0	100.0
IL CHICAGO	2	3	2.6	418.0	26774	8356	22397	8193	9.5	0.9	96.1
IL CHICAGO	5	29	200.1	494.0	30933	8519	27979	8322	6.2	0.7	98.2

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
IL CHICAGO	7	52	153.6	515.0	29047	8459	27413	8361	4.8	0.4	100.0
IL CHICAGO	9	19	163.8	415.0	27649	8411	26313	8333	4.5	0.6	99.9
IL CHICAGO	11	47	157.0	497.0	28320	8427	25860	8218	6.3	0.4	99.9
IL CHICAGO	20	21	81.7	378.0	19467	8030	16941	7946	1.8	0.4	99.1
IL CHICAGO	26	27	70.5	472.0	22593	8200	22488	8183	2.0	0.4	99.2
IL CHICAGO	32	31	218.0	430.0	24077	8332	23929	8322	3.4	0.6	99.6
IL CHICAGO	38	43	215.3	381.0	21549	8076	21794	8099	3.9	0.7	98.4
IL CHICAGO	44	45	167.9	433.0	22393	8196	22361	8189	3.1	0.6	99.8
IL DECATUR	17	18	241.7	393.0	23354	845	21829	813	1.3	0.7	99.5
IL DECATUR	23	22	58.1	314.0	14066	648	13731	640	0.0	0.0	100.0
IL EAST ST. LOUIS	46	47	186.6	345.0	19143	2563	19026	2562	0.1	0.0	100.0
IL FREEPORT	23	41	50.0	219.0	12406	710	12128	704	10.3	5.8	100.0
IL HARRISBURG	3	34	1000.0	302.0	34357	759	24621	570	0.0	0.0	100.0
IL JACKSONVILLE	14	15	50.0	94.0	3790	58	3778	58	5.5	5.2	100.0
IL JOLIET	66	53	134.4	393.0	15996	7887	17763	8010	0.0	0.0	90.0
IL LASALLE	35	10	4.2	418.0	18453	1214	17920	772	1.8	7.5	96.4
IL MACOMB	22	21	50.0	149.0	4469	57	4409	56	1.4	1.7	100.0
IL MARION	27	17	61.5	233.0	13712	366	13708	363	2.7	1.0	99.7
IL MOLINE	8	38	836.6	308.0	28284	857	24345	827	0.0	0.0	99.8
IL MOLINE	24	23	50.0	276.0	14161	557	14009	556	0.0	0.0	100.0
IL MOUNT VERNON	13	21	592.3	302.0	28244	707	20594	430	0.0	0.0	100.0
IL OLNEY	16	19	50.0	283.0	16293	258	16405	258	0.1	1.0	98.9
IL PEORIA	19	40	90.1	194.0	14017	570	12447	537	1.8	0.5	99.9
IL PEORIA	25	57	120.2	207.0	15183	573	14420	567	0.3	0.0	99.9
IL PEORIA	31	30	50.0	195.0	12249	549	11981	545	0.3	0.0	100.0
IL PEORIA	47	46	50.0	216.0	12912	553	12880	553	1.6	0.2	100.0
IL PEORIA	59	39	50.0	178.0	6389	406	6393	409	0.4	0.5	99.5
IL QUINCY	10	54	1000.0	238.0	26173	313	23635	294	0.0	0.0	100.0
IL QUINCY	16	32	50.0	302.0	15165	198	15084	197	0.0	0.0	99.8
IL QUINCY	27	34	50.0	173.0	4121	103	4109	102	4.1	1.1	100.0
IL ROCK ISLAND	4	58	1000.0	408.0	37725	1120	31894	1005	0.0	0.0	99.8
IL ROCKFORD	13	54	1000.0	216.0	24061	1472	18731	913	0.0	0.0	100.0
IL ROCKFORD	17	16	196.0	203.0	15163	881	13542	775	1.5	1.0	100.0
IL ROCKFORD	39	42	50.0	176.0	11480	691	11331	686	1.1	0.9	100.0
IL SPRINGFIELD	20	42	75.2	436.0	23636	680	21745	607	0.1	0.0	100.0
IL SPRINGFIELD	49	53	50.0	189.0	5296	228	5296	228	0.0	0.0	100.0
IL SPRINGFIELD	55	44	50.0	439.0	21743	581	21659	581	0.0	0.0	100.0
IL URBANA	12	33	778.3	302.0	28501	970	22557	808	0.0	0.0	100.0
IL URBANA	27	26	88.0	139.0	11120	335	11296	336	3.4	1.0	98.4
IN ANGOLA	63	12	3.2	144.0	10301	560	10281	559	0.0	0.0	100.0
IN BLOOMINGTON	4	53	1000.0	357.0	31346	2064	24868	1805	0.2	0.1	99.9
IN BLOOMINGTON	30	14	50.0	216.0	12337	504	12192	503	2.0	0.9	100.0

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
IN BLOOMINGTON	42	56	236.0	317.0	14996	1559	14261	1516	0.3	0.3	100.0
IN BLOOMINGTON	63	27	50.0	328.0	16403	1563	16250	1555	0.0	0.0	99.9
IN ELKHART	28	58	358.8	335.0	21179	1308	20784	1220	8.2	10.0	99.4
IN EVANSVILLE	7	28	696.1	305.0	28593	796	26079	763	0.0	0.0	100.0
IN EVANSVILLE	9	54	1000.0	177.0	22441	717	17469	617	0.5	0.1	100.0
IN EVANSVILLE	14	58	184.8	311.0	16923	576	17035	577	1.5	0.3	99.3
IN EVANSVILLE	25	59	56.5	314.0	17143	587	17090	588	3.1	1.8	99.8
IN EVANSVILLE	44	45	50.0	296.0	15321	562	15301	562	0.1	0.0	100.0
IN FORT WAYNE	15	4	1.0	253.0	10500	585	10038	557	0.0	0.0	100.0
IN FORT WAYNE	21	24	50.0	226.0	12253	651	11554	603	1.4	0.7	99.2
IN FORT WAYNE	33	19	50.0	235.0	11933	635	11732	608	0.1	0.1	99.4
IN FORT WAYNE	39	40	50.0	223.0	13192	678	13477	689	2.3	1.3	97.9
IN FORT WAYNE	55	36	50.0	238.0	11227	620	11227	620	0.0	0.0	100.0
IN GARY	50	51	194.8	494.0	25797	8325	25387	8307	3.0	0.6	99.9
IN GARY	56	17	50.0	306.0	15222	4407	15198	4390	1.3	1.8	99.9
IN HAMMOND	62	36	75.8	146.0	11370	6950	11286	6855	0.0	0.0	99.9
IN INDIANAPOLIS	6	25	1000.0	302.0	31298	2348	27352	2226	0.0	0.0	97.0
IN INDIANAPOLIS	8	9	15.3	305.0	24826	2179	24755	2134	1.2	0.5	94.6
IN INDIANAPOLIS	13	46	1000.0	299.0	27302	2262	22987	2053	0.3	0.0	99.7
IN INDIANAPOLIS	20	21	50.0	259.0	15689	1647	15114	1632	0.0	0.0	99.9
IN INDIANAPOLIS	40	16	50.0	302.0	17013	1689	17045	1685	1.8	0.7	98.4
IN INDIANAPOLIS	59	45	114.5	304.0	18753	1777	18429	1759	0.1	0.2	98.2
IN INDIANAPOLIS	69	44	50.0	167.0	2526	1016	2526	1016	0.0	0.0	100.0
IN KOKOMO	29	54	139.9	236.0	13621	1123	13694	1187	0.9	3.5	99.5
IN LAFAYETTE	18	11	3.2	238.0	12618	509	12438	485	3.4	0.8	99.9
IN MARION	23	32	260.9	295.0	19262	1850	19056	1848	0.3	0.9	98.4
IN MUNCIE	49	52	50.0	155.0	9558	534	9550	532	1.8	1.3	99.7
IN RICHMOND	43	39	59.9	302.0	14996	2761	14735	2655	3.8	4.7	99.3
IN SALEM	58	51	50.0	346.0	15053	1217	14714	1209	1.4	0.3	99.9
IN SOUTH BEND	16	42	390.9	326.0	25322	1436	23194	1284	2.0	2.7	99.4
IN SOUTH BEND	22	30	242.3	325.0	24373	1378	22931	1365	3.5	8.8	99.2
IN SOUTH BEND	34	35	50.0	246.0	13979	944	14096	961	7.1	6.1	97.1
IN SOUTH BEND	46	48	50.0	305.0	15185	987	14975	960	4.6	2.9	100.0
IN TERRE HAUTE	2	36	1000.0	290.0	32150	898	22591	576	0.0	0.0	99.9
IN TERRE HAUTE	10	24	855.9	293.0	26981	710	25223	675	2.0	4.9	98.8
IN TERRE HAUTE	38	39	56.8	299.0	14220	406	14127	389	0.4	0.1	100.0
IN VINCENNES	22	52	60.4	174.0	11033	250	11009	249	1.2	1.6	99.9
KS COLBY	4	17	1000.0	229.0	28663	51	22993	38	0.0	0.0	100.0
KS ENSIGN	6	5	6.8	219.0	28358	121	27103	117	0.0	0.0	99.7
KS FORT SCOTT	20	40	327.0	233.0	19340	329	19106	325	0.1	0.0	100.0
KS GARDEN CITY	11	16	606.3	244.0	23127	118	22492	114	0.0	0.0	99.4
KS GARDEN CITY	13	18	673.9	265.0	25000	114	23749	114	0.0	0.0	100.0

STATE AND CITY	DIGITAL TELEVISION SERVICE						EXISTING NTSC				DTV/ NTSC AREA MATCH (%)
	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
KS GOODLAND	10	14	714.6	299.0	27752	43	26772	41	0.8	1.8	100.0
KS GREAT BEND	2	22	1000.0	296.0	31693	199	29002	175	0.0	0.0	100.0
KS HAYS	7	20	1000.0	216.0	24887	100	23445	95	0.0	0.0	100.0
KS HAYS	9	16	495.6	332.0	29090	130	24912	114	0.0	0.0	98.7
KS HUTCHINSON	8	29	1000.0	244.0	23973	670	18724	566	0.0	0.0	100.0
KS HUTCHINSON	12	19	544.3	463.0	37037	755	32857	724	0.3	0.0	100.0
KS HUTCHINSON	36	35	117.3	733.0	16065	605	16065	605	0.2	0.0	100.0
KS LAKIN	3	23	1000.0	171.0	25489	91	21264	88	0.0	0.0	99.8
KS LAWRENCE	38	36	168.6	330.0	16625	1755	16553	1731	0.3	0.1	99.4
KS PITTSBURG	7	30	667.9	332.0	29825	494	28150	475	0.0	0.0	100.0
KS SALINA	18	17	50.0	317.0	12033	156	11974	156	0.9	5.2	100.0
KS TOPEKA	11	23	815.1	305.0	27129	708	23472	909	0.0	0.0	96.1
KS TOPEKA	13	44	912.4	421.0	34202	632	28513	553	0.0	0.0	100.0
KS TOPEKA	27	28	50.0	320.0	16927	404	16384	388	0.0	0.0	100.0
KS TOPEKA	49	48	120.8	451.0	19798	477	19151	444	0.0	0.0	100.0
KS WICHITA	3	45	1000.0	305.0	32834	684	27039	660	0.0	0.0	99.9
KS WICHITA	10	21	625.7	314.0	28411	675	26335	664	0.0	0.0	100.0
KS WICHITA	24	26	137.1	328.0	17810	618	17898	618	1.8	0.1	99.5
KS WICHITA	33	31	174.6	240.0	16869	613	16869	613	0.0	0.0	100.0
KY ASHLAND	25	26	50.0	152.0	7413	388	6797	371	4.5	8.1	100.0
KY ASHLAND	61	44	50.0	189.0	8436	457	8234	441	0.6	0.3	98.7
KY BEATTYVILLE	65	7	3.2	197.0	5903	89	4788	66	0.0	0.0	100.0
KY BOWLING GREEN	13	33	1000.0	226.0	24743	589	20458	466	0.0	0.0	100.0
KY BOWLING GREEN	24	18	50.0	198.0	10561	244	9937	235	2.2	1.1	100.0
KY BOWLING GREEN	40	16	50.0	244.0	10618	240	10382	236	1.7	1.0	100.0
KY BOWLING GREEN	53	48	50.0	247.0	11890	254	11637	250	2.6	1.5	100.0
KY CAMPBELLSVILLE	34	19	50.0	314.0	14021	267	13341	248	2.8	5.4	100.0
KY COVINGTON	54	24	50.0	122.0	5890	1572	5419	1533	3.7	1.6	100.0
KY DANVILLE	56	4	1.0	351.0	15951	687	15417	674	4.3	2.2	99.3
KY ELIZABETHTOWN	23	43	50.0	198.0	12088	734	10995	409	0.5	0.2	100.0
KY HARLAN	44	51	50.0	601.0	18668	547	16849	475	2.2	4.0	99.6
KY HAZARD	35	16	50.0	384.0	15054	347	13472	295	4.2	3.4	100.0
KY HAZARD	57	12	3.2	475.0	16532	383	14617	324	0.3	0.3	100.0
KY LEXINGTON	18	22	50.0	195.0	12859	624	12783	622	0.9	0.2	99.5
KY LEXINGTON	27	59	72.3	300.0	16825	679	16781	678	1.3	0.5	99.7
KY LEXINGTON	36	40	69.5	305.0	17808	692	17412	691	1.5	1.3	99.9
KY LEXINGTON	46	42	50.0	265.0	13599	637	13491	635	4.6	2.3	99.0
KY LOUISVILLE	3	47	1000.0	555.0	45139	2883	35162	2244	0.3	0.2	99.6
KY LOUISVILLE	11	55	447.7	390.0	27492	1480	26136	1462	0.0	0.0	99.8
KY LOUISVILLE	15	17	50.0	262.0	13848	1186	13303	1177	1.4	0.3	100.0
KY LOUISVILLE	21	8	3.2	212.0	12357	1139	11893	1114	3.4	0.6	98.1

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
KY LOUISVILLE	32	26	160.2	384.0	25254	1450	24714	1433	5.4	1.7	100.0
KY LOUISVILLE	41	49	247.8	391.0	25464	1450	23878	1395	4.3	1.1	100.0
KY LOUISVILLE	68	38	50.0	249.0	13093	1166	12722	1158	0.0	0.0	99.5
KY MADISONVILLE	19	20	81.1	241.0	14290	551	14161	549	2.7	4.6	99.8
KY MADISONVILLE	35	42	50.0	317.0	14285	293	13997	291	2.3	1.9	100.0
KY MOREHEAD	38	15	50.0	293.0	13653	218	12686	200	0.3	0.4	100.0
KY MOREHEAD	67	21	65.6	247.0	15554	349	15470	346	0.0	0.0	97.9
KY MURRAY	21	36	50.0	201.0	12306	288	12298	288	8.7	3.9	100.0
KY NEWPORT	19	29	258.7	306.0	19927	2281	19628	2340	1.0	0.4	98.7
KY OWENSBORO	31	30	50.0	140.0	9949	461	9789	459	1.1	0.4	100.0
KY OWENTON	52	44	50.0	216.0	11101	423	10787	409	0.5	0.5	100.0
KY PADUCAH	6	32	1000.0	482.0	43501	865	38359	809	0.0	0.0	99.8
KY PADUCAH	29	41	50.0	152.0	7265	177	7069	174	3.7	3.4	100.0
KY PADUCAH	49	50	68.2	327.0	14893	435	14881	435	0.3	0.2	99.8
KY PIKEVILLE	22	24	50.0	430.0	16937	452	15936	431	0.9	0.7	99.7
KY SOMERSET	29	14	50.0	445.0	18571	401	17371	371	1.2	1.8	100.0
LA ALEXANDRIA	5	35	1000.0	485.0	42562	987	43135	982	0.0	0.0	97.2
LA ALEXANDRIA	25	26	67.5	415.0	19587	318	19531	317	1.5	0.8	100.0
LA ALEXANDRIA	31	32	50.0	333.0	17708	257	17600	256	0.9	0.9	100.0
LA BATON ROUGE	2	42	1000.0	515.0	44519	1833	40635	2324	0.0	0.0	95.8
LA BATON ROUGE	9	46	958.8	509.0	40157	1877	31609	1220	0.1	0.0	100.0
LA BATON ROUGE	27	25	79.6	303.0	16020	809	15122	761	0.2	0.0	99.8
LA BATON ROUGE	33	34	226.5	522.0	26892	1315	25957	1288	0.0	0.0	100.0
LA BATON ROUGE	44	45	143.3	426.0	16097	877	19373	985	0.1	0.0	83.1
LA COLUMBIA	11	57	1000.0	572.0	43149	690	32856	566	0.0	0.0	100.0
LA LAFAYETTE	3	28	1000.0	530.0	47367	911	35053	718	0.0	0.0	100.0
LA LAFAYETTE	10	56	1000.0	530.0	41182	1001	32293	794	0.0	0.0	100.0
LA LAFAYETTE	15	16	93.0	360.0	19890	586	19890	586	0.0	0.0	100.0
LA LAFAYETTE	24	23	64.3	369.0	18304	536	18304	536	0.0	0.0	100.0
LA LAKE CHARLES	7	8	3.2	451.0	29070	749	35159	940	0.0	0.0	82.5
LA LAKE CHARLES	18	20	50.0	314.0	17597	368	18010	374	0.4	0.1	97.7
LA LAKE CHARLES	29	30	84.6	394.0	19653	610	19649	610	0.3	0.1	100.0
LA MONROE	8	55	1000.0	576.0	43668	728	41197	688	0.4	0.8	100.0
LA MONROE	13	19	554.1	543.0	40749	688	36053	621	0.0	0.0	100.0
LA NEW ORLEANS	4	30	1000.0	305.0	34052	1782	33649	1767	0.0	0.0	100.0
LA NEW ORLEANS	6	43	1000.0	283.0	32237	1750	32893	1788	0.0	0.0	96.9
LA NEW ORLEANS	8	29	699.9	302.0	28503	1679	26365	1603	0.0	0.0	99.7
LA NEW ORLEANS	12	11	14.8	308.0	21811	1549	19930	1488	0.0	0.0	100.0
LA NEW ORLEANS	20	14	129.7	275.0	16707	1451	16429	1443	0.0	0.0	100.0
LA NEW ORLEANS	26	15	70.1	308.0	16761	1404	16186	1389	0.0	0.0	100.0
LA NEW ORLEANS	32	31	66.7	308.0	12114	1354	14995	1381	0.0	0.6	80.7
LA NEW ORLEANS	38	40	202.0	311.0	17993	1432	17993	1432	0.0	0.0	100.0

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
LA NEW ORLEANS	49	50	61.7	271.0	13440	1317	13440	1317	0.0	0.0	100.0
LA SHREVEPORT	3	28	1000.0	543.0	45594	1047	33729	899	0.0	0.0	99.7
LA SHREVEPORT	12	17	545.7	549.0	42207	1013	32645	899	2.3	1.0	100.0
LA SHREVEPORT	24	25	50.0	326.0	19138	561	18901	560	0.0	0.0	99.7
LA SHREVEPORT	33	34	202.0	553.0	28959	838	28076	809	0.0	0.0	100.0
LA SHREVEPORT	45	44	100.3	507.0	20150	618	20089	617	0.6	0.7	100.0
LA SLIDELL	54	24	63.2	213.0	12140	1346	12140	1346	0.0	0.0	100.0
LA WEST MONROE	14	36	404.8	572.0	33237	533	33516	598	0.6	0.1	97.9
LA WEST MONROE	39	38	50.0	152.0	9444	261	8715	256	0.1	0.0	100.0
MA ADAMS	19	36	50.0	637.0	19860	1696	16984	1124	4.0	1.3	100.0
MA BOSTON	2	19	1000.0	317.0	29979	6740	29402	6697	0.0	0.0	97.6
MA BOSTON	4	30	818.0	354.0	28923	6694	29628	6716	8.1	1.8	96.3
MA BOSTON	5	20	1000.0	299.0	29346	6612	25483	5683	5.4	1.7	97.0
MA BOSTON	7	42	947.9	306.0	27652	6651	26156	6552	0.0	0.0	100.0
MA BOSTON	25	31	67.5	357.0	19107	6051	18684	6013	1.3	0.6	96.9
MA BOSTON	38	39	70.8	354.0	20192	6230	19603	6037	10.4	3.9	99.5
MA BOSTON	44	43	50.0	329.0	16483	5731	16011	5657	13.3	4.5	98.2
MA BOSTON	68	32	50.0	249.0	12605	4708	12162	4583	0.0	0.0	98.6
MA CAMBRIDGE	56	41	50.0	360.0	17066	5802	16816	5805	1.9	0.8	98.2
MA LAWRENCE	62	18	52.6	186.0	6861	3440	10914	4377	0.0	0.0	61.4
MA MARLBOROUGH	66	23	50.0	326.0	19093	5977	17821	5420	0.4	0.1	99.7
MA NEW BEDFORD	6	49	1000.0	283.0	30222	5065	22848	2645	4.9	2.1	99.3
MA NEW BEDFORD	28	22	155.1	229.0	14921	3499	13032	2424	0.3	0.1	99.2
MA NORWELL	46	52	50.0	107.0	5376	2081	5745	1865	19.3	8.9	88.1
MA SPRINGFIELD	22	11	3.2	268.0	12785	2116	12269	2079	6.5	3.2	95.6
MA SPRINGFIELD	40	55	200.8	322.0	13479	2108	13687	2146	2.8	3.5	96.0
MA SPRINGFIELD	57	58	50.0	306.0	12528	1839	11414	1677	8.1	2.6	99.9
MA VINEYARD HAVEN	58	40	50.0	155.0	8686	528	8674	526	0.0	0.0	100.0
MA WORCESTER	27	29	50.0	466.0	18382	5509	16597	5107	0.1	0.2	91.7
MA WORCESTER	48	47	101.0	398.0	20329	3870	19394	3643	4.5	13.9	98.2
MD ANNAPOLIS	22	42	349.5	265.0	19689	6003	19485	5762	11.2	3.5	95.4
MD BALTIMORE	2	52	1000.0	305.0	29402	6740	29023	7078	0.0	0.0	95.2
MD BALTIMORE	11	59	1000.0	305.0	25782	6693	25368	6610	1.0	1.3	95.7
MD BALTIMORE	13	38	1000.0	302.0	25537	5874	22887	6187	1.0	1.0	95.9
MD BALTIMORE	24	41	50.0	326.0	15186	5643	15436	5451	2.4	1.2	96.1
MD BALTIMORE	45	46	50.0	386.0	18281	5774	18217	5762	0.9	3.8	98.9
MD BALTIMORE	54	40	140.8	349.0	20712	5507	19914	5667	7.8	1.8	98.7
MD BALTIMORE	67	29	50.0	250.0	11105	3999	10599	3156	13.9	6.3	96.4
MD FREDERICK	62	28	50.0	138.0	7183	1924	6929	1990	0.1	0.1	96.5
MD HAGERSTOWN	25	55	67.7	375.0	13709	652	13228	631	4.8	3.5	98.5
MD HAGERSTOWN	31	44	209.2	378.0	14847	769	13813	713	1.1	1.3	99.2
MD HAGERSTOWN	68	16	50.0	394.0	13806	703	10798	525	0.0	0.0	99.9

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
MD OAKLAND	36	54	50.0	216.0	5649	109	4898	97	3.1	1.4	100.0
MD SALISBURY	16	21	196.9	299.0	17447	470	17443	470	0.0	0.0	100.0
MD SALISBURY	28	56	85.1	157.0	13114	339	13190	341	0.0	0.0	99.4
MD SALISBURY	47	53	62.5	304.0	13990	417	13990	417	0.2	0.2	100.0
ME AUGUSTA	10	17	628.9	305.0	26947	791	24295	739	0.0	0.0	100.0
ME BANGOR	2	25	1000.0	192.0	22331	326	19917	297	0.0	0.0	99.9
ME BANGOR	5	19	464.6	402.0	30324	470	26450	429	0.0	0.0	99.7
ME BANGOR	7	14	994.4	250.0	25837	340	22964	288	0.0	0.0	99.9
ME BIDDEFORD	26	45	50.0	244.0	11213	646	11449	645	0.2	0.1	93.9
ME CALAIS	13	15	186.0	134.0	15131	32	12154	28	0.0	0.0	100.0
ME LEWISTON	35	28	50.0	258.0	9256	480	8947	473	2.8	1.1	100.0
ME ORONO	12	22	990.7	302.0	27549	331	24328	320	0.0	0.0	99.8
ME POLAND SPRING	8	46	256.7	1173.0	40168	982	38522	995	0.0	0.0	96.2
ME PORTLAND	6	44	1000.0	610.0	35125	1082	34674	1046	0.0	0.0	94.7
ME PORTLAND	13	38	826.4	491.0	32110	933	32033	995	3.1	8.6	95.7
ME PORTLAND	51	4	1.0	280.0	13863	608	13155	599	1.7	1.0	99.3
ME PRESQUE ISLE	8	16	59.9	107.0	8131	55	7518	53	0.0	0.0	99.5
ME PRESQUE ISLE	10	20	544.0	332.0	28867	80	26107	77	0.0	0.0	100.0
MI ALPENA	6	57	1000.0	448.0	37515	253	29145	180	0.0	0.0	99.1
MI ALPENA	11	13	12.2	204.0	17634	110	16801	108	0.0	0.0	99.2
MI ANN ARBOR	31	33	50.0	329.0	17256	3197	14239	2248	2.3	4.1	99.7
MI BAD AXE	35	15	50.0	155.0	6141	80	6141	80	0.0	0.0	100.0
MI BATTLE CREEK	41	20	122.9	329.0	22689	1793	22821	1789	6.2	4.8	99.1
MI BATTLE CREEK	43	44	191.7	323.0	21051	1811	21319	1786	4.4	2.1	95.8
MI BAY CITY	5	22	1000.0	305.0	32648	1711	25468	1309	0.2	0.5	99.9
MI CADILLAC	9	40	857.6	497.0	37337	656	33871	592	0.0	0.0	98.5
MI CADILLAC	27	58	50.0	180.0	7371	87	7043	84	0.0	0.0	100.0
MI CADILLAC	33	47	50.0	311.0	11377	151	11125	147	9.2	5.5	100.0
MI CALUMET	5	18	1000.0	295.0	23214	54	21939	53	0.0	0.0	99.8
MI CHEBOYGAN	4	14	1000.0	189.0	26704	147	24239	133	0.0	0.0	99.9
MI DETROIT	2	58	1000.0	305.0	29671	5601	26496	5215	29.2	8.9	90.2
MI DETROIT	4	45	1000.0	306.0	31676	5587	25357	5127	0.0	0.0	98.3
MI DETROIT	7	41	1000.0	305.0	26867	5516	24481	5147	2.9	0.5	99.3
MI DETROIT	20	21	50.0	293.0	16508	4641	16512	4692	5.0	2.4	99.3
MI DETROIT	50	14	50.0	293.0	17063	4770	15265	4505	0.8	0.3	100.0
MI DETROIT	56	43	50.0	293.0	14810	4513	16254	4720	9.2	3.7	91.1
MI DETROIT	62	44	121.8	327.0	17107	4516	18769	4695	0.6	0.1	91.1
MI EAST LANSING	23	55	56.8	296.0	16608	1379	16287	1333	1.9	1.1	100.0
MI ESCANABA	3	48	1000.0	363.0	36154	175	35639	173	0.0	0.0	99.9
MI FLINT	12	36	1000.0	287.0	27126	1943	24490	1807	0.7	0.5	99.4
MI FLINT	28	52	120.9	265.0	14635	2661	14356	2578	0.0	0.0	99.6



STATE AND CITY	DIGITAL TELEVISION SERVICE						EXISTING NTSC				DTV/ NTSC AREA MATCH (%)
	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
MI FLINT	66	16	60.7	287.0	18396	1552	18533	1571	0.1	0.0	99.2
MI GRAND RAPIDS	8	7	15.1	302.0	23097	1840	26015	1949	8.0	1.8	86.8
MI GRAND RAPIDS	13	39	1000.0	305.0	26490	1179	23938	1139	0.0	0.0	95.4
MI GRAND RAPIDS	17	19	50.0	334.0	17990	1481	18259	1488	3.1	4.3	96.2
MI GRAND RAPIDS	35	11	3.2	262.0	14630	1077	14702	1076	5.6	2.3	99.3
MI IRON MOUNTAIN	8	22	50.0	190.0	12831	75	11714	67	0.0	0.0	100.0
MI JACKSON	18	34	50.0	73.0	1772	152	1772	152	0.0	0.0	100.0
MI KALAMAZOO	3	2	7.2	305.0	28693	1975	30599	2051	13.1	4.6	91.7
MI KALAMAZOO	52	5	1.0	125.0	4044	342	4028	341	5.6	2.4	100.0
MI KALAMAZOO	64	45	50.0	319.0	16437	1351	17368	1439	0.0	0.0	94.6
MI LANSING	6	59	1000.0	305.0	30080	2427	19821	1773	0.0	0.0	97.7
MI LANSING	47	38	50.0	305.0	15311	1012	15380	1012	1.8	0.6	99.2
MI LANSING	53	51	50.0	299.0	11745	777	11637	775	0.1	0.0	100.0
MI MANISTEE	21	17	50.0	104.0	4535	47	4479	46	1.3	2.3	100.0
MI MARQUETTE	6	35	1000.0	296.0	32976	194	24010	149	0.0	0.0	99.9
MI MARQUETTE	13	33	740.1	332.0	29653	185	25973	170	0.0	0.0	100.0
MI MOUNT CLEMENS	38	39	148.0	192.0	12866	4149	13046	4167	6.5	2.6	98.2
MI MOUNT PLEASANT	14	56	50.0	158.0	8653	265	8617	264	3.0	1.7	100.0
MI MUSKEGON	54	24	80.0	294.0	13717	1048	13471	1042	0.1	0.0	99.7
MI ONONDAGA	10	57	1000.0	299.0	27147	1924	20902	1404	0.0	0.0	100.0
MI SAGINAW	25	30	193.3	402.0	25367	1892	24865	1838	0.0	0.0	98.7
MI SAGINAW	49	48	50.0	287.0	13994	1230	13882	1198	0.0	0.0	100.0
MI SAULT STE. MARI	8	56	1000.0	290.0	26042	78	25375	82	0.0	0.0	96.4
MI SAULT STE. MARI	10	49	977.6	370.0	31041	90	27587	86	0.0	0.0	100.0
MI TRAVERSE CITY	7	50	1000.0	411.0	34182	404	30396	329	5.0	7.0	100.0
MI TRAVERSE CITY	29	31	63.0	399.0	20257	268	19263	257	0.2	0.1	100.0
MI UNIVERSITY CENT	19	18	50.0	140.0	12016	682	11960	680	2.7	2.4	100.0
MI VANDERBILT	45	59	50.0	324.0	14759	141	14486	139	0.0	0.0	100.0
MN ALEXANDRIA	7	24	581.9	341.0	30569	401	28777	388	0.0	0.0	100.0
MN ALEXANDRIA	42	14	50.0	358.0	21267	314	19835	213	0.1	0.1	100.0
MN APPLETON	10	31	696.7	381.0	32661	244	28120	202	0.0	0.0	100.0
MN AUSTIN	6	33	1000.0	320.0	33538	594	27107	510	0.0	0.0	99.9
MN AUSTIN	15	20	50.0	116.0	9286	171	9153	168	0.6	2.0	100.0
MN BEMIDJI	9	18	523.6	329.0	29798	106	26575	83	0.0	0.0	100.0
MN BRAINERD	22	28	50.0	227.0	9946	102	9937	102	2.5	0.5	100.0
MN DULUTH	3	33	1000.0	302.0	31348	273	31104	278	0.0	0.0	97.5
MN DULUTH	8	38	1000.0	290.0	27761	258	24845	244	0.0	0.0	100.0
MN DULUTH	10	43	1000.0	301.0	28230	261	25074	238	0.0	0.0	100.0
MN DULUTH	21	17	50.0	180.0	5782	179	5746	179	8.0	6.8	100.0
MN HIBBING	13	36	511.2	204.0	14891	113	13719	109	0.0	0.0	100.0
MN MANKATO	12	38	845.4	317.0	29278	393	25681	326	0.0	0.0	100.0
MN MINNEAPOLIS	4	32	1000.0	436.0	39593	2983	33920	2902	0.0	0.0	99.9

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
MN MINNEAPOLIS	9	26	631.6	435.0	34517	2903	29749	2798	0.0	0.0	99.7
MN MINNEAPOLIS	11	35	762.3	439.0	35551	2939	31918	2853	0.0	0.0	99.9
MN MINNEAPOLIS	23	22	186.1	351.0	21525	2665	21464	2663	0.0	0.0	100.0
MN MINNEAPOLIS	29	21	175.1	373.0	22419	2676	21411	2662	0.8	0.1	100.0
MN MINNEAPOLIS	45	44	182.8	375.0	21129	2649	21056	2648	0.0	0.0	100.0
MN REDWOOD FALLS	43	27	50.0	167.0	8284	74	8244	74	0.0	0.0	100.0
MN ROCHESTER	10	36	772.2	381.0	31622	556	26783	462	0.0	0.0	100.0
MN ROCHESTER	47	46	50.0	104.0	3712	139	3640	137	0.0	0.0	100.0
MN ST. CLOUD	41	40	92.1	448.0	20220	2596	19027	2349	0.0	0.0	100.0
MN ST. PAUL	2	34	1000.0	399.0	37452	2965	34436	2909	0.0	0.0	99.6
MN ST. PAUL	5	50	1000.0	436.0	39359	2991	36686	2927	0.0	0.0	98.6
MN ST. PAUL	17	16	50.0	396.0	13296	2506	13263	2505	0.2	0.0	100.0
MN THIEF RIVER FAL	10	57	692.6	183.0	12720	121	10201	106	0.0	0.0	100.0
MN WALKER	12	20	736.5	283.0	27768	190	25818	176	0.0	0.0	100.0
MN WORTHINGTON	20	15	72.7	332.0	17875	145	17891	145	0.6	1.8	99.9
MO CAPE GIRARDEAU	12	57	1000.0	610.0	43667	916	37135	781	0.1	0.1	100.0
MO CAPE GIRARDEAU	23	22	62.0	543.0	22999	524	22580	518	0.0	0.0	100.0
MO COLUMBIA	8	36	1000.0	242.0	26054	441	21983	413	0.0	0.0	100.0
MO COLUMBIA	17	22	53.9	348.0	20500	413	20055	411	3.4	3.8	100.0
MO HANNIBAL	7	29	1000.0	271.0	27374	319	24036	291	0.0	0.0	100.0
MO JEFFERSON CITY	13	12	15.1	308.0	24445	446	21642	404	0.0	0.0	99.6
MO JEFFERSON CITY	25	20	56.0	314.0	16148	326	15871	324	0.0	0.1	99.7
MO JOPLIN	12	43	1000.0	311.0	27520	507	23933	429	0.6	0.3	97.8
MO JOPLIN	16	46	176.1	313.0	21689	398	20104	392	1.6	0.5	99.6
MO JOPLIN	26	25	50.0	283.0	14621	302	14417	300	0.1	0.0	100.0
MO KANSAS CITY	4	34	1000.0	344.0	34558	2095	30394	1903	0.0	0.0	100.0
MO KANSAS CITY	5	24	1000.0	342.0	33260	1944	28753	1935	0.0	0.0	96.0
MO KANSAS CITY	9	14	471.0	357.0	30105	1965	28907	1910	0.0	0.0	97.9
MO KANSAS CITY	19	18	50.0	357.0	19068	1751	18797	1734	4.9	0.5	100.0
MO KANSAS CITY	32	31	200.8	322.0	23377	1763	23325	1763	0.3	0.0	100.0
MO KANSAS CITY	41	42	50.0	323.0	16422	1681	16223	1676	0.0	0.0	99.9
MO KANSAS CITY	50	51	50.0	341.0	16177	1670	15490	1659	0.9	0.1	100.0
MO KANSAS CITY	62	47	129.7	340.0	21142	1803	20991	1799	0.0	0.0	99.5
MO KIRKSVILLE	3	33	1000.0	339.0	34545	352	27492	260	0.0	0.0	99.6
MO POPLAR BLUFF	15	18	50.0	184.0	10131	127	9950	123	0.1	0.0	100.0
MO SEDALIA	6	15	1000.0	235.0	28672	471	24120	402	0.0	0.0	99.9
MO SPRINGFIELD	3	44	1000.0	622.0	47586	735	41787	671	0.0	0.0	98.9
MO SPRINGFIELD	10	52	1000.0	631.0	45444	749	40916	683	0.0	0.0	100.0
MO SPRINGFIELD	21	23	50.0	546.0	26748	495	26097	488	0.7	0.3	99.8
MO SPRINGFIELD	27	28	237.5	515.0	27119	502	25568	481	1.0	0.7	100.0
MO SPRINGFIELD	33	19	162.6	596.0	27381	523	27053	518	0.5	0.3	99.8
MO ST. JOSEPH	2	53	1000.0	247.0	29250	1473	28365	1498	0.0	0.0	99.2

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
MO ST. JOSEPH	16	21	245.7	326.0	17846	1569	17080	1404	1.9	9.9	100.0
MO ST. LOUIS	2	43	1000.0	332.0	34129	2771	28971	2678	0.0	0.0	99.4
MO ST. LOUIS	4	56	1000.0	335.0	32806	2762	29620	2723	0.0	0.0	98.0
MO ST. LOUIS	5	35	1000.0	332.0	34185	2779	33240	2764	0.0	0.0	99.4
MO ST. LOUIS	9	39	990.9	326.0	28522	2688	24359	2623	0.6	0.1	100.0
MO ST. LOUIS	11	26	778.9	308.0	28630	2710	26261	2667	0.0	0.0	100.0
MO ST. LOUIS	24	14	88.5	305.0	19966	2538	19531	2532	0.5	0.1	99.9
MO ST. LOUIS	30	31	68.2	335.0	20264	2555	20128	2554	0.0	0.0	100.0
MS BILOXI	13	39	822.1	408.0	34271	1095	27954	738	0.0	0.0	100.0
MS BILOXI	19	16	50.8	478.0	21138	634	21018	648	1.0	0.8	99.3
MS BOONEVILLE	12	55	501.9	229.0	15553	295	13444	261	0.0	0.0	100.0
MS BUDE	17	18	50.0	341.0	16476	224	14775	207	2.7	3.5	99.3
MS COLUMBUS	4	35	1000.0	610.0	47921	736	42821	652	0.0	0.0	97.8
MS GREENVILLE	15	17	103.3	271.0	15891	259	15891	259	0.0	0.0	100.0
MS GREENWOOD	6	54	1000.0	597.0	50197	869	40373	595	0.0	0.0	100.0
MS GREENWOOD	23	25	50.0	317.0	15296	249	15236	249	0.0	0.0	100.0
MS GULFPORT	25	48	128.4	488.0	22650	745	22499	767	1.8	6.0	98.5
MS HATTIESBURG	22	58	52.0	244.0	14644	277	14576	277	0.0	0.0	100.0
MS HOLLY SPRINGS	40	41	129.2	142.0	9985	1026	9904	1026	0.0	0.0	100.0
MS JACKSON	3	51	1000.0	610.0	46699	917	34506	734	0.0	0.0	99.8
MS JACKSON	12	52	1000.0	497.0	38935	784	33270	721	0.1	0.0	99.3
MS JACKSON	16	21	239.7	359.0	21185	592	21939	592	2.1	1.3	94.7
MS JACKSON	29	20	50.0	598.0	24998	638	24663	631	3.1	1.5	99.9
MS JACKSON	40	41	50.0	479.0	23283	614	22928	602	0.5	0.2	100.0
MS LAUREL	7	28	1000.0	155.0	21287	345	19210	328	0.0	0.0	100.0
MS MERIDIAN	11	49	1000.0	165.0	21891	290	19815	260	0.0	0.0	100.0
MS MERIDIAN	14	44	50.0	369.0	18021	314	17016	300	0.9	0.7	100.0
MS MERIDIAN	24	26	50.0	177.0	9932	150	9884	150	0.1	0.0	100.0
MS MERIDIAN	30	31	50.0	187.0	11126	167	11090	167	4.2	2.2	100.0
MS MISSISSIPPI STA	2	38	1000.0	381.0	37226	550	29916	422	0.0	0.0	100.0
MS NATCHEZ	48	49	82.2	316.0	15256	178	15268	178	0.0	0.0	99.9
MS OXFORD	18	36	50.0	423.0	17703	338	18417	348	0.5	0.3	96.1
MS TUPELO	9	57	1000.0	542.0	41492	673	38641	617	0.1	0.0	100.0
MS WEST POINT	27	16	53.0	512.0	22357	423	22373	423	2.0	1.8	99.5
MT BILLINGS	2	17	1000.0	165.0	22231	135	23159	136	3.5	0.2	95.0
MT BILLINGS	6	18	1000.0	249.0	27382	130	26226	135	0.0	0.0	99.1
MT BILLINGS	8	11	14.5	229.0	21573	133	20805	129	0.2	0.0	100.0
MT BOZEMAN	7	16	56.9	249.0	8504	59	8797	59	0.0	0.0	95.5
MT BOZEMAN	9	20	50.0	33.0	2264	46	2200	46	0.0	0.0	100.0
MT BUTTE	4	15	1000.0	576.0	32132	125	40009	138	0.0	0.0	80.0
MT BUTTE	6	2	11.2	591.0	43956	163	38276	141	0.0	0.0	100.0

STATE AND CITY	DIGITAL TELEVISION SERVICE						EXISTING NTSC				DTV/ NTSC AREA MATCH (%)
	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
MT BUTTE	18	19	110.7	585.0	14658	57	13761	57	0.1	0.0	99.2
MT GLENDIVE	5	15	125.6	152.0	13546	14	11386	12	0.0	0.0	100.0
MT GREAT FALLS	3	44	1000.0	180.0	22092	88	23804	89	0.0	0.0	92.3
MT GREAT FALLS	5	39	1000.0	180.0	21932	89	22921	89	0.0	0.0	94.8
MT GREAT FALLS	16	45	125.6	319.0	15237	85	15402	85	0.1	0.0	98.4
MT HARDIN	4	22	1000.0	323.0	30058	135	29423	136	0.0	0.0	97.7
MT HELENA	10	29	776.4	579.0	27784	95	26705	87	0.0	0.0	98.8
MT HELENA	12	14	169.8	686.0	30107	150	28974	149	0.0	0.0	99.1
MT KALISPELL	9	38	52.5	850.0	23448	85	23069	79	0.0	0.0	98.4
MT MILES CITY	3	13	3.2	33.0	5349	11	5430	11	0.0	0.0	98.2
MT MISSOULA	8	35	1000.0	655.0	32011	129	32749	127	0.2	0.0	96.0
MT MISSOULA	11	27	50.0	631.0	10001	86	8972	85	0.0	0.0	100.0
MT MISSOULA	13	40	1000.0	610.0	32561	129	33340	131	1.1	0.0	97.3
MT MISSOULA	23	36	96.6	642.0	17675	117	17374	118	0.0	0.0	99.0
NC ASHEVILLE	13	56	647.6	853.0	31351	1685	33144	1786	0.0	0.0	91.3
NC ASHEVILLE	21	57	329.8	765.0	27272	1483	27004	1467	1.0	0.6	97.2
NC ASHEVILLE	33	25	101.0	816.0	22699	1450	20498	1338	0.8	1.0	99.4
NC ASHEVILLE	62	45	140.4	556.0	22273	1368	21386	1334	0.6	0.2	99.6
NC BELMONT	46	47	208.8	594.0	31814	2297	28640	2125	4.0	1.6	100.0
NC BURLINGTON	16	14	52.3	256.0	14242	1373	11351	1056	1.6	0.4	99.6
NC CHAPEL HILL	4	59	1000.0	469.0	40300	2842	30307	2263	0.0	0.0	99.9
NC CHARLOTTE	3	23	1000.0	567.0	46452	3199	35588	2375	1.0	0.8	98.7
NC CHARLOTTE	9	34	740.5	359.0	30151	2143	24160	1859	7.2	4.8	100.0
NC CHARLOTTE	18	27	86.5	366.0	21413	1769	20090	1610	12.6	4.9	96.2
NC CHARLOTTE	36	22	162.3	595.0	32095	2305	31309	2289	2.7	1.3	96.9
NC CHARLOTTE	42	24	50.0	390.0	17305	1525	18348	1606	5.9	2.2	93.3
NC COLUMBIA	2	20	1000.0	302.0	33275	507	27798	245	0.0	0.0	100.0
NC CONCORD	58	44	148.9	422.0	24897	2091	24274	2084	3.7	1.8	99.3
NC DURHAM	11	52	1000.0	607.0	42896	2304	38519	2109	0.1	0.0	97.5
NC DURHAM	28	27	226.3	585.0	33775	2032	34874	2096	0.6	0.4	95.0
NC FAYETTEVILLE	40	38	205.6	561.0	30687	2123	30578	2229	0.6	0.4	92.6
NC FAYETTEVILLE	62	36	50.0	256.0	9617	539	9597	537	0.0	0.0	99.8
NC GOLDSBORO	17	55	531.8	480.0	32476	2034	30320	1902	2.9	0.8	98.6
NC GREENSBORO	2	51	1000.0	561.0	42754	2851	36651	2442	0.0	0.0	97.8
NC GREENSBORO	48	33	50.0	517.0	20533	1563	20380	1507	4.0	1.8	96.9
NC GREENSBORO	61	43	50.0	168.0	8844	982	8520	976	0.1	0.0	100.0
NC GREENVILLE	9	10	22.1	573.0	38134	1128	33999	1054	0.0	0.0	91.1
NC GREENVILLE	14	21	50.0	209.0	11543	487	11352	467	0.0	0.0	100.0
NC GREENVILLE	25	23	50.0	351.0	15427	645	14301	598	2.2	1.7	100.0
NC HICKORY	14	40	50.0	183.0	7426	504	7711	511	7.5	4.8	91.0
NC HIGH POINT	8	35	759.4	387.0	30793	2217	25181	1796	0.1	0.0	100.0
NC JACKSONVILLE	19	44	212.3	561.0	25214	728	25182	727	0.1	0.0	100.0

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
NC JACKSONVILLE	35	34	52.4	301.0	15041	415	14985	415	0.3	0.1	100.0
NC KANNAPOLIS	64	50	50.0	300.0	15248	1477	15907	1497	0.0	0.0	95.5
NC LEXINGTON	20	19	84.5	297.0	17330	1424	16748	1352	4.7	2.3	99.5
NC LINVILLE	17	54	130.3	546.0	17895	879	16899	842	0.9	0.3	98.3
NC LUMBERTON	31	25	96.2	319.0	20289	846	20623	853	7.5	8.9	98.0
NC MOREHEAD CITY	8	24	976.6	249.0	20009	303	13893	96	0.0	0.0	100.0
NC NEW BERN	12	48	1000.0	591.0	43008	1180	34531	862	0.0	0.0	100.0
NC RALEIGH	5	53	1000.0	604.0	47437	2615	40781	2317	0.0	0.0	99.6
NC RALEIGH	22	57	469.2	510.0	30571	2098	28232	1903	7.0	3.2	99.8
NC RALEIGH	50	49	198.0	548.0	31572	1972	30988	1968	2.4	4.2	99.6
NC ROANOKE RAPIDS	36	39	50.0	368.0	19289	539	18410	517	1.3	0.6	100.0
NC ROCKY MOUNT	47	15	94.5	371.0	17002	1184	17134	1181	0.5	0.1	96.5
NC WASHINGTON	7	32	806.2	594.0	44677	1298	36849	1102	0.0	0.0	100.0
NC WILMINGTON	3	46	1000.0	594.0	51153	1051	41539	758	0.0	0.0	100.0
NC WILMINGTON	6	54	1000.0	588.0	48041	1581	38276	1195	0.0	0.0	100.0
NC WILMINGTON	26	30	212.7	500.0	22230	481	22206	480	0.0	0.0	100.0
NC WILMINGTON	39	29	151.3	553.0	26659	635	26311	627	0.0	0.0	100.0
NC WILSON	30	42	75.4	539.0	22163	1279	21978	1266	7.1	2.5	100.0
NC WINSTON-SALEM	12	31	805.4	604.0	38013	2216	32992	2000	0.0	0.0	98.1
NC WINSTON-SALEM	26	32	262.6	504.0	22544	1618	23447	1642	0.4	0.1	92.6
NC WINSTON-SALEM	45	29	149.6	597.0	25134	1747	23587	1651	0.9	0.6	99.0
ND BISMARCK	3	22	906.8	425.0	37269	123	29285	111	0.0	0.0	99.8
ND BISMARCK	5	31	1000.0	427.0	39795	126	33172	116	0.0	0.0	100.0
ND BISMARCK	12	23	601.0	466.0	36324	123	31990	113	0.0	0.0	99.8
ND BISMARCK	17	16	50.0	290.0	13983	90	13803	89	0.1	0.0	100.0
ND DEVILS LAKE	8	59	1000.0	451.0	36452	170	35321	170	0.0	0.0	98.6
ND DICKINSON	2	19	1000.0	256.0	29196	46	29160	45	0.0	0.0	98.3
ND DICKINSON	7	18	1000.0	223.0	21489	37	20573	34	0.0	0.0	92.4
ND DICKINSON	9	20	739.7	246.0	23645	43	21684	37	0.0	0.0	100.0
ND ELLENDALE	19	20	50.0	179.0	8894	12	8866	12	4.6	1.3	100.0
ND FARGO	6	21	1000.0	351.0	36126	339	30659	253	0.0	0.0	100.0
ND FARGO	11	58	1000.0	610.0	43197	343	39529	319	0.0	0.0	95.9
ND FARGO	13	23	427.0	344.0	29025	239	27002	226	0.0	0.0	100.0
ND FARGO	15	19	196.5	379.0	19387	250	19399	250	0.0	0.0	99.9
ND GRAND FORKS	2	56	1000.0	408.0	35965	170	32916	167	0.0	0.0	99.9
ND JAMESTOWN	7	14	1000.0	135.0	19707	50	15434	41	0.0	0.0	100.0
ND MINOT	6	57	1000.0	323.0	34005	100	31671	98	0.0	0.0	99.9
ND MINOT	10	58	1000.0	207.0	17900	72	20623	77	0.0	0.0	83.8
ND MINOT	13	45	1000.0	344.0	30372	96	28469	90	0.0	0.0	100.0
ND MINOT	14	15	50.0	829.0	12063	67	12055	67	6.5	1.9	100.0
ND PEMBINA	12	15	486.2	427.0	29986	36	24366	34	0.0	0.0	100.0
ND VALLEY CITY	4	38	1000.0	619.0	52327	409	46357	376	0.0	0.0	100.0

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
ND WILLISTON	4	51	1000.0	278.0	29166	51	25943	45	0.0	0.0	98.9
ND WILLISTON	8	52	719.1	323.0	25295	43	24027	42	0.0	0.0	99.8
ND WILLISTON	11	14	447.6	299.0	24273	43	22884	42	0.0	0.0	99.6
NE ALBION	24	23	87.1	378.0	23553	99	23453	99	0.7	0.1	100.0
NE ALLIANCE	13	24	619.7	469.0	35748	92	31465	83	0.0	0.0	99.8
NE BASSETT	7	15	494.7	453.0	36326	51	32997	38	0.0	0.0	99.9
NE GRAND ISLAND	11	32	770.5	308.0	28628	207	24684	183	0.0	0.0	100.0
NE GRAND ISLAND	17	19	50.0	187.0	11158	148	11170	148	0.1	0.0	99.9
NE HASTINGS	5	21	1000.0	223.0	28512	220	26274	213	0.6	0.2	99.9
NE HASTINGS	29	14	50.0	372.0	20167	166	20155	166	2.6	0.8	100.0
NE HAYES CENTER	6	18	1000.0	216.0	28849	84	26822	80	0.0	0.0	100.0
NE KEARNEY	13	36	752.6	338.0	30437	213	27104	197	0.0	0.0	100.0
NE LEXINGTON	3	26	1000.0	323.0	34465	169	25618	118	0.0	0.0	100.0
NE LINCOLN	8	31	702.8	440.0	35318	625	28642	477	0.0	0.0	99.9
NE LINCOLN	10	25	624.6	454.0	37031	749	33522	687	0.0	0.0	99.9
NE LINCOLN	12	40	1000.0	253.0	26202	1040	24175	1023	0.0	0.0	99.8
NE MCCOOK	8	12	11.6	216.0	22870	50	21284	45	0.0	0.0	99.5
NE MERRIMAN	12	17	589.6	328.0	28624	31	24104	23	0.1	0.0	100.0
NE NORFOLK	19	16	50.0	348.0	16097	204	14712	199	3.9	2.3	100.0
NE NORTH PLATTE	2	22	1000.0	192.0	26243	64	24037	61	0.0	0.0	99.9
NE NORTH PLATTE	9	16	567.9	311.0	28654	66	25659	61	0.0	0.0	100.0
NE OMAHA	3	45	1000.0	418.0	39181	1131	30293	1040	0.0	0.0	100.0
NE OMAHA	6	22	1000.0	418.0	39359	1136	36448	1117	0.0	0.0	100.0
NE OMAHA	7	20	550.3	415.0	34379	1099	29303	991	0.0	0.0	100.0
NE OMAHA	15	38	406.2	453.0	26114	1040	25781	1039	3.0	0.9	100.0
NE OMAHA	26	17	50.0	130.0	9260	698	9120	696	4.5	0.5	100.0
NE OMAHA	42	43	214.9	577.0	33989	1108	33700	1106	0.9	0.1	100.0
NE SCOTTSBLUFF	4	20	1000.0	610.0	50074	108	40276	93	0.0	0.0	99.9
NE SCOTTSBLUFF	10	29	1000.0	256.0	24339	75	22210	70	0.0	0.0	99.8
NE SUPERIOR	4	34	1000.0	344.0	35113	236	24571	116	0.0	0.0	100.0
NH BERLIN	40	15	50.0	91.0	2588	23	1839	20	0.0	0.0	100.0
NH CONCORD	21	33	74.6	320.0	16735	1911	17048	1880	2.8	5.9	96.7
NH DERRY	50	35	96.1	213.0	9823	3191	10043	3191	3.0	15.4	96.6
NH DURHAM	11	57	1000.0	302.0	25758	3758	24132	2649	0.5	0.2	98.4
NH KEENE	52	49	50.0	329.0	7340	204	5671	135	0.0	0.0	100.0
NH LITTLETON	49	48	50.0	390.0	7270	74	6258	62	0.7	0.1	100.0
NH MANCHESTER	9	59	1000.0	314.0	24405	4731	23489	4322	0.0	0.0	97.0
NH MERRIMACK	60	34	50.0	308.0	10385	1917	10603	1876	4.4	2.1	93.7
NJ ATLANTIC CITY	53	46	50.0	85.0	1323	203	1323	203	0.0	0.0	100.0
NJ ATLANTIC CITY	62	49	98.5	133.0	11223	1021	9334	753	2.6	1.9	100.0
NJ BURLINGTON	48	27	50.0	335.0	17337	6471	16922	6439	3.9	1.4	98.1

STATE AND CITY	DIGITAL TELEVISION SERVICE						EXISTING NTSC				DTV/ NTSC AREA MATCH (%)
	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
NJ CAMDEN	23	22	71.7	271.0	17321	5932	17865	6092	3.3	3.9	96.9
NJ LINDEN	47	36	148.9	460.0	15152	16271	14745	16110	0.8	0.1	99.7
NJ MONTCLAIR	50	51	179.2	243.0	14372	15468	14138	15296	0.0	0.0	94.4
NJ NEW BRUNSWICK	58	18	50.0	223.0	11833	12755	8997	10885	2.0	8.6	100.0
NJ NEWARK	13	61	198.7	500.0	23049	17015	23140	17110	1.6	0.6	94.2
NJ NEWARK	68	53	55.9	439.0	16001	15982	15412	15684	0.4	0.1	99.7
NJ NEWTON	63	8	3.2	223.0	11538	5709	10979	8387	3.0	18.9	93.7
NJ PATERSON	41	40	69.1	421.0	17576	16545	17028	16233	0.8	0.2	99.9
NJ SECAUCUS	9	38	136.4	500.0	26254	17915	22677	16641	1.9	0.3	99.5
NJ TRENTON	52	43	50.0	271.0	13758	7778	13051	7454	1.8	1.0	97.5
NJ VINELAND	65	66	107.8	280.0	16418	5655	16899	5868	2.3	3.2	97.1
NJ WEST MILFORD	66	29	50.0	217.0	4104	3917	2891	2439	1.1	0.2	100.0
NJ WILDWOOD	40	36	50.0	128.0	9396	448	9396	448	3.4	1.5	100.0
NM ALBUQUERQUE	4	26	293.2	1280.0	46755	759	50842	779	0.0	0.0	90.9
NM ALBUQUERQUE	5	25	285.3	1289.0	46814	759	51101	776	0.0	0.0	91.6
NM ALBUQUERQUE	7	21	92.2	1292.0	38823	752	39015	751	0.0	0.0	98.9
NM ALBUQUERQUE	13	16	106.9	1287.0	41933	752	40657	749	0.0	0.0	100.0
NM ALBUQUERQUE	23	24	50.0	1259.0	29909	731	29481	726	0.1	0.0	98.9
NM ALBUQUERQUE	32	17	50.0	1236.0	9145	648	8577	647	0.3	0.0	99.9
NM ALBUQUERQUE	41	42	50.0	1266.0	24251	724	23639	717	0.2	0.0	100.0
NM ALBUQUERQUE	50	51	50.0	1276.0	32970	735	31739	729	0.0	0.0	100.0
NM CARLSBAD	6	19	1000.0	366.0	34885	156	32739	118	0.0	0.0	99.6
NM CLOVIS	12	20	598.0	204.0	21300	84	18025	82	0.0	0.0	100.0
NM FARMINGTON	3	8	31.7	138.0	20222	111	20910	114	0.0	0.0	96.7
NM FARMINGTON	12	17	1000.0	125.0	18078	114	16423	107	0.0	0.0	100.0
NM HOBBS	29	16	50.0	159.0	2995	39	2995	39	0.0	0.0	100.0
NM LAS CRUCES	22	23	50.0	137.0	10017	209	9113	124	0.2	0.0	100.0
NM LAS CRUCES	48	36	99.3	134.0	7546	598	7295	571	0.0	0.0	100.0
NM PORTALES	3	32	1000.0	351.0	35934	187	35342	187	0.0	0.0	100.0
NM ROSWELL	8	35	839.0	536.0	40236	162	39969	159	0.0	0.0	97.2
NM ROSWELL	10	41	987.6	610.0	45138	183	38701	168	0.0	0.0	100.0
NM ROSWELL	27	28	50.0	115.0	5832	58	5824	58	0.8	0.1	100.0
NM SANTA FE	2	27	321.1	1275.0	47290	762	52571	786	0.0	0.0	89.8
NM SANTA FE	11	10	23.3	618.0	36578	732	33228	708	0.0	0.0	100.0
NM SANTA FE	19	29	208.5	33.0	7469	139	7063	136	0.0	0.0	100.0
NM SILVER CITY	10	12	3.2	485.0	15964	46	13028	42	0.0	0.0	100.0
NV ELKO	10	8	3.2	564.0	13671	27	9850	27	0.1	0.0	100.0
NV HENDERSON	5	24	1000.0	363.0	22268	732	27543	734	0.0	0.0	78.2
NV LAS VEGAS	3	2	11.2	387.0	34344	745	31087	735	0.0	0.0	100.0
NV LAS VEGAS	8	7	26.4	610.0	31021	739	27145	737	0.0	0.0	99.9
NV LAS VEGAS	10	11	19.3	372.0	21343	730	19621	730	0.0	0.0	99.7
NV LAS VEGAS	13	17	590.5	610.0	28901	737	25542	733	0.0	0.0	100.0

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
NV LAS VEGAS	15	16	50.0	564.0	11527	725	12220	726	0.2	0.0	90.0
NV LAS VEGAS	21	22	103.2	353.0	12232	728	11359	726	0.6	0.0	99.9
NV LAS VEGAS	33	29	50.0	581.0	13627	726	12481	726	0.0	0.0	100.0
NV PARADISE	39	40	102.1	367.0	9421	724	8797	724	0.0	0.0	100.0
NV RENO	2	32	1000.0	656.0	27353	385	35365	451	0.0	0.0	76.7
NV RENO	4	34	1000.0	133.0	11905	331	18649	393	0.0	0.0	63.7
NV RENO	5	15	50.0	140.0	5739	293	7799	315	0.0	0.0	73.3
NV RENO	8	23	315.2	893.0	33814	480	34281	492	0.0	0.0	97.3
NV RENO	11	44	525.4	856.0	27170	388	28173	392	0.0	0.0	94.7
NV RENO	21	22	50.0	189.0	5432	265	5264	261	1.3	0.4	93.8
NV RENO	27	26	125.9	894.0	22554	394	20515	387	0.2	4.7	100.0
NV WINNEMUCCA	7	12	3.2	650.0	11120	12	7696	12	0.0	0.0	100.0
NY ALBANY	10	26	1000.0	305.0	21162	1290	19688	1230	1.3	0.8	99.6
NY ALBANY	13	15	505.7	357.0	21407	1277	18951	1181	0.4	0.0	100.0
NY ALBANY	23	4	1.0	366.0	18238	1287	16337	1162	0.5	0.9	99.1
NY AMSTERDAM	55	50	136.8	223.0	8687	858	8459	848	0.0	0.0	99.8
NY BATAVIA	51	53	50.0	124.0	8027	951	7369	911	2.1	18.3	100.0
NY BINGHAMTON	12	7	8.6	369.0	23743	906	22315	790	0.3	1.7	99.8
NY BINGHAMTON	34	4	1.0	281.0	15489	662	13102	489	0.3	0.1	99.9
NY BINGHAMTON	40	8	3.2	375.0	14057	533	12037	441	0.1	0.1	99.7
NY BINGHAMTON	46	42	50.0	375.0	13841	512	12317	450	0.1	0.1	100.0
NY BUFFALO	2	33	1000.0	287.0	31314	2191	26823	1718	1.7	0.8	97.5
NY BUFFALO	4	39	1000.0	366.0	34568	2229	32541	1918	0.4	0.2	98.5
NY BUFFALO	7	38	238.1	433.0	26280	1807	21697	1528	0.3	0.0	99.3
NY BUFFALO	17	43	156.0	330.0	21137	1391	21060	1373	2.0	0.9	99.5
NY BUFFALO	23	32	50.0	314.0	15722	1307	15706	1311	0.6	0.2	97.2
NY BUFFALO	29	14	50.0	280.0	15724	1323	15534	1311	2.1	0.6	99.8
NY BUFFALO	49	34	148.9	376.0	16701	1440	16849	1451	0.0	0.1	97.1
NY CARTHAGE	7	35	1000.0	221.0	23938	277	22351	250	3.1	3.4	100.0
NY CORNING	48	50	50.0	166.0	2398	128	1874	83	0.0	0.0	100.0
NY ELMIRA	18	2	1.0	376.0	13827	546	11052	366	0.1	0.1	99.7
NY ELMIRA	36	55	50.0	320.0	11704	380	10408	316	0.6	0.5	99.9
NY GARDEN CITY	21	22	88.3	122.0	10285	12547	9063	11134	1.3	0.4	98.7
NY JAMESTOWN	26	27	238.7	463.0	20750	1485	20662	1438	0.7	0.5	98.0
NY KINGSTON	62	21	98.0	591.0	18233	1732	15913	1456	0.2	0.2	99.0
NY NEW YORK	2	56	364.6	482.0	28354	18053	24095	16955	0.0	0.0	98.4
NY NEW YORK	4	28	163.5	515.0	27891	18116	25113	17182	0.7	0.1	94.6
NY NEW YORK	5	44	224.8	515.0	28095	17949	25113	17159	9.0	4.8	97.6
NY NEW YORK	7	45	164.3	491.0	26043	17845	23891	17189	1.6	0.2	99.5
NY NEW YORK	11	33	116.8	506.0	24825	17618	23184	17102	1.8	0.5	96.1
NY NEW YORK	25	24	80.7	395.0	18412	16618	18363	16695	6.3	1.6	98.7
NY NEW YORK	31	30	104.1	475.0	17322	16202	17886	16434	5.3	1.7	95.6



STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
NY NORTH POLE	5	14	215.8	607.0	31001	438	25552	424	0.0	0.0	95.4
NY NORWOOD	18	23	50.0	243.0	13073	149	12357	136	0.0	0.0	100.0
NY PLATTSBURGH	57	38	50.0	741.0	14864	260	14412	258	0.0	0.0	100.0
NY POUGHKEEPSIE	54	27	117.5	490.0	16625	2059	14940	1742	1.5	0.4	99.4
NY RIVERHEAD	55	57	131.5	194.0	10114	3061	10190	3221	2.4	9.8	97.9
NY ROCHESTER	8	45	1000.0	152.0	20761	1182	17894	1108	1.5	1.4	99.9
NY ROCHESTER	10	58	1000.0	152.0	20721	1182	17186	1079	0.0	0.0	99.9
NY ROCHESTER	13	59	1000.0	152.0	20612	1179	16740	1100	0.0	0.0	99.9
NY ROCHESTER	21	16	50.0	152.0	9247	1000	9891	1015	17.2	3.2	92.8
NY ROCHESTER	31	28	50.0	152.0	11335	1021	11142	998	0.1	0.0	100.0
NY SCHENECTADY	6	39	1000.0	311.0	25950	1438	25617	1434	1.1	0.4	94.9
NY SCHENECTADY	17	34	156.4	299.0	17363	1188	17014	1155	2.1	0.7	99.2
NY SCHENECTADY	45	43	98.6	338.0	14144	1089	13868	1071	1.2	0.3	99.5
NY SMITHTOWN	67	23	50.0	219.0	11054	2941	10985	3074	0.1	0.2	99.0
NY SPRINGVILLE	67	46	50.0	160.0	1575	98	992	36	0.0	0.0	100.0
NY SYRACUSE	3	54	1000.0	305.0	29245	1469	26185	1295	0.0	0.0	97.9
NY SYRACUSE	5	47	1000.0	290.0	27926	1394	26367	1340	0.0	0.0	96.8
NY SYRACUSE	9	17	108.2	462.0	23696	1289	21052	1205	0.2	0.1	99.2
NY SYRACUSE	24	25	86.5	422.0	22744	1269	21801	1245	0.2	0.6	100.0
NY SYRACUSE	43	44	50.0	445.0	13952	1009	13359	970	1.0	0.5	99.9
NY SYRACUSE	68	19	50.0	445.0	14537	1032	13052	978	0.0	0.0	100.0
NY UTICA	2	29	546.1	421.0	27212	1189	22175	666	0.7	0.2	97.1
NY UTICA	20	30	50.0	244.0	11161	455	12328	447	0.3	0.1	86.7
NY UTICA	33	27	50.0	193.0	10688	671	9838	625	5.0	7.1	100.0
NY WATERTOWN	16	41	50.0	370.0	16951	206	16449	200	1.2	1.4	100.0
NY WATERTOWN	50	21	50.0	387.0	14424	176	14002	173	0.4	0.3	99.8
OH AKRON	23	59	449.1	293.0	22395	3919	20985	3623	1.5	0.1	99.7
OH AKRON	49	50	50.0	299.0	13287	3159	13146	3112	9.0	7.9	99.7
OH AKRON	55	30	108.8	356.0	18196	3465	18536	3478	0.5	1.7	95.4
OH ALLIANCE	45	46	50.0	253.0	13961	1862	13494	1972	0.5	0.3	97.7
OH ATHENS	20	27	50.0	244.0	14130	480	13715	456	2.9	2.7	100.0
OH BOWLING GREEN	27	56	50.0	320.0	16401	1112	16601	1148	0.0	0.0	98.8
OH CAMBRIDGE	44	35	50.0	393.0	15459	605	14436	551	0.1	0.1	100.0
OH CANTON	17	39	50.0	137.0	9384	1382	8453	1277	6.7	4.7	100.0
OH CANTON	67	47	85.1	148.0	11032	2892	11092	2864	0.1	0.0	97.5
OH CHILLICOTHE	53	46	154.7	362.0	18653	1769	17836	1689	6.6	4.8	99.5
OH CINCINNATI	5	35	1000.0	305.0	31943	3036	27785	2835	0.0	0.0	99.4
OH CINCINNATI	9	10	15.4	305.0	23606	2609	23981	2781	8.3	5.3	92.7
OH CINCINNATI	12	31	839.3	305.0	27626	2572	25519	2800	0.3	0.1	96.9
OH CINCINNATI	48	34	50.0	326.0	18013	2267	17522	2170	2.9	2.6	99.1
OH CINCINNATI	64	33	95.5	337.0	21010	2751	20336	2719	0.0	0.0	99.7

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
OH CLEVELAND	3	2	9.3	305.0	27851	3824	28219	3783	0.0	0.0	90.7
OH CLEVELAND	5	15	1000.0	311.0	32803	4064	26249	3694	1.9	0.5	100.0
OH CLEVELAND	8	31	937.2	305.0	28382	3886	25576	3659	0.0	0.0	99.8
OH CLEVELAND	25	26	66.9	304.0	17099	3291	15343	3019	6.6	2.5	99.9
OH CLEVELAND	61	34	50.0	354.0	18152	3325	18024	3318	1.3	3.4	99.9
OH COLUMBUS	4	14	1000.0	274.0	29825	2326	20823	1872	0.1	0.5	99.9
OH COLUMBUS	6	13	40.8	286.0	24515	2056	22531	1855	0.0	0.0	96.3
OH COLUMBUS	10	21	897.9	271.0	25581	2069	22429	1915	11.7	8.8	99.6
OH COLUMBUS	28	36	65.8	293.0	17256	1672	16990	1675	2.5	2.7	97.7
OH COLUMBUS	34	38	50.0	329.0	16958	1672	16567	1642	2.5	1.6	99.8
OH DAYTON	2	50	1000.0	305.0	31600	3422	23541	3049	0.6	0.1	99.7
OH DAYTON	7	41	493.2	348.0	27263	3242	22628	3069	0.0	0.0	99.9
OH DAYTON	16	58	104.6	350.0	20293	2869	18568	2681	3.4	2.1	99.9
OH DAYTON	22	51	138.8	351.0	20578	2964	19726	2774	5.7	2.1	94.5
OH DAYTON	45	30	133.5	357.0	18639	2431	18391	2724	6.1	1.2	95.0
OH LIMA	35	20	50.0	165.0	10462	439	10054	433	2.7	4.2	100.0
OH LIMA	44	47	50.0	207.0	11873	480	11788	478	0.0	0.0	100.0
OH LORAIN	43	28	125.6	336.0	19371	3374	18868	3315	5.4	2.3	99.3
OH MANSFIELD	68	12	3.2	180.0	11703	560	11882	566	0.0	0.0	97.2
OH NEWARK	51	24	50.0	189.0	10379	1287	9830	1265	8.6	16.8	100.0
OH OXFORD	14	28	50.0	91.0	6062	1091	5898	1202	22.9	31.5	97.1
OH PORTSMOUTH	30	17	50.0	237.0	15306	537	14379	446	2.7	1.1	100.0
OH PORTSMOUTH	42	43	50.0	382.0	14521	456	14020	445	3.7	3.1	99.3
OH SANDUSKY	52	42	50.0	236.0	13436	657	13432	657	0.1	0.0	100.0
OH SHAKER HEIGHTS	19	10	3.6	351.0	18511	3396	18107	3086	17.1	3.6	88.9
OH SPRINGFIELD	26	18	50.0	149.0	11998	1308	11922	1299	2.0	2.6	99.6
OH STEUBENVILLE	9	57	1000.0	268.0	25596	3369	21576	2862	0.0	0.0	99.9
OH TOLEDO	11	17	543.6	305.0	28616	4266	26457	4003	0.0	0.0	100.0
OH TOLEDO	13	19	559.0	305.0	21300	2438	22248	2293	6.0	2.9	90.6
OH TOLEDO	24	49	315.8	424.0	23784	2278	23321	2257	6.2	2.1	100.0
OH TOLEDO	30	29	50.0	314.0	16186	1774	16109	1767	4.5	2.9	100.0
OH TOLEDO	36	46	66.2	372.0	17224	1402	17031	1398	5.7	2.0	100.0
OH TOLEDO	40	5	1.0	174.0	10435	925	11127	958	9.6	2.7	93.7
OH YOUNGSTOWN	21	20	147.0	302.0	20889	2676	19013	1952	3.6	4.4	99.8
OH YOUNGSTOWN	27	41	50.0	436.0	19743	2533	19241	2366	1.9	4.9	99.2
OH YOUNGSTOWN	33	36	50.0	177.0	11361	1212	11212	1190	5.6	4.9	100.0
OH ZANESVILLE	18	40	50.0	162.0	10820	399	10509	384	2.1	5.0	100.0
OK ADA	10	26	642.3	445.0	36091	448	32152	390	0.0	0.0	100.0
OK BARTLESVILLE	17	15	152.9	316.0	16167	791	15901	782	0.0	0.0	97.6
OK CHEYENNE	12	8	15.7	299.0	26702	90	23103	77	0.0	0.0	100.0
OK CLAREMORE	35	36	79.0	256.0	14049	786	14037	786	0.7	0.7	99.9
OK ENID	20	18	50.0	136.0	7094	71	7094	71	0.0	0.0	100.0

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
OK EUFAULA	3	31	1000.0	399.0	35124	656	25056	348	0.0	0.0	98.9
OK LAWTON	7	23	605.3	320.0	27415	384	26852	378	0.0	0.0	93.8
OK OKLAHOMA CITY	4	27	1000.0	469.0	42440	1352	38465	1290	0.0	0.0	99.1
OK OKLAHOMA CITY	5	16	1000.0	464.0	39681	1316	33032	1235	0.4	0.1	100.0
OK OKLAHOMA CITY	9	39	840.8	465.0	37311	1296	33951	1267	0.6	0.2	100.0
OK OKLAHOMA CITY	13	32	731.3	465.0	37597	1299	32294	1233	0.0	0.0	100.0
OK OKLAHOMA CITY	14	15	50.0	344.0	15252	1008	17082	1060	0.8	0.1	89.2
OK OKLAHOMA CITY	25	24	130.8	469.0	25445	1151	25388	1151	0.0	0.0	100.0
OK OKLAHOMA CITY	34	33	50.0	369.0	16799	1038	18533	1078	0.3	0.2	90.5
OK OKLAHOMA CITY	43	42	57.7	475.0	23167	1123	23352	1128	2.2	0.8	98.6
OK OKLAHOMA CITY	52	51	50.0	183.0	11406	980	11642	992	0.0	0.0	97.4
OK OKLAHOMA CITY	62	50	50.0	240.0	14486	1002	14607	1004	0.0	0.0	98.8
OK OKMULGEE	44	28	133.8	277.0	15920	821	15326	816	0.3	0.1	100.0
OK SHAWNEE	30	29	207.4	255.0	20211	1092	19843	1087	0.8	0.6	100.0
OK TULSA	2	56	1000.0	558.0	46668	1242	39680	1155	0.0	0.0	99.7
OK TULSA	6	55	1000.0	573.0	47667	1267	38333	1100	0.0	0.0	99.8
OK TULSA	8	58	1000.0	578.0	42260	1170	36166	1095	0.0	0.0	100.0
OK TULSA	11	38	838.3	521.0	39756	1140	35069	1080	0.0	0.0	99.5
OK TULSA	23	22	129.2	399.0	25825	990	25477	988	0.9	0.3	100.0
OK TULSA	41	42	50.0	460.0	20869	913	20817	913	0.0	0.0	97.5
OK TULSA	47	48	50.0	460.0	18322	876	17256	866	0.0	0.0	99.9
OK TULSA	53	49	50.0	182.0	11957	763	11952	763	0.3	0.0	98.0
OR BEND	3	11	20.1	227.0	19106	104	22110	104	0.0	0.0	86.4
OR BEND	21	18	50.0	197.0	6180	86	5596	83	0.0	0.0	100.0
OR COOS BAY	11	21	50.0	192.0	9207	67	8895	63	0.0	0.0	99.5
OR COOS BAY	23	22	50.0	190.0	3059	56	2667	52	0.6	0.2	99.7
OR CORVALLIS	7	39	1000.0	375.0	24328	917	23686	848	0.0	0.0	97.6
OR EUGENE	9	14	547.9	539.0	32350	680	28911	574	0.0	0.0	99.7
OR EUGENE	13	25	629.7	451.0	27781	593	25081	519	0.0	0.0	99.9
OR EUGENE	16	17	72.7	512.0	18041	420	17099	415	0.5	0.1	99.8
OR EUGENE	28	29	50.0	276.0	8602	343	7830	333	1.2	0.2	100.0
OR EUGENE	34	31	97.6	259.0	9072	382	8740	379	0.0	0.0	100.0
OR KLAMATH FALLS	2	40	1000.0	671.0	35666	86	44515	159	0.0	0.0	79.4
OR KLAMATH FALLS	22	33	50.0	656.0	7845	56	6265	55	0.0	0.0	100.0
OR KLAMATH FALLS	31	29	50.0	691.0	5471	55	4555	54	0.0	0.0	100.0
OR LA GRANDE	13	5	1.0	787.0	21321	76	14506	39	0.9	0.2	100.0
OR MEDFORD	5	15	664.3	823.0	38563	341	44981	370	0.0	0.0	85.7
OR MEDFORD	8	42	550.4	818.0	31908	308	32810	322	0.0	0.0	95.5
OR MEDFORD	10	35	309.7	1009.0	33858	276	34402	277	0.0	0.0	97.5
OR MEDFORD	12	38	510.0	823.0	32605	310	31335	314	0.0	0.0	98.7
OR MEDFORD	26	27	50.0	428.0	6395	161	5790	151	0.0	0.0	100.0
OR PENDLETON	11	8	22.0	472.0	30046	267	28921	260	0.1	0.0	99.2

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
OR PORTLAND	2	43	1000.0	475.0	30189	1998	35413	2000	0.0	0.0	84.8
OR PORTLAND	6	40	1000.0	533.0	30619	1892	36086	2002	0.0	0.0	84.5
OR PORTLAND	8	46	1000.0	539.0	29454	1981	27469	1845	0.4	0.0	98.0
OR PORTLAND	10	27	675.5	530.0	29878	1962	28520	1882	0.0	0.0	99.8
OR PORTLAND	12	30	735.3	543.0	30042	1959	28256	1882	0.0	0.0	99.8
OR PORTLAND	24	45	160.7	463.0	17258	1710	17370	1762	0.5	0.1	95.0
OR ROSEBURG	4	19	50.0	305.0	10683	87	12503	98	0.0	0.0	85.4
OR ROSEBURG	36	18	50.0	211.0	3812	69	2997	62	0.0	0.0	98.8
OR ROSEBURG	46	45	50.0	109.0	2111	65	1700	60	0.7	0.4	100.0
OR SALEM	22	20	54.6	363.0	18188	1839	16795	1405	0.0	0.0	100.0
OR SALEM	32	33	256.8	544.0	24262	1922	23053	1826	0.4	1.1	100.0
PA ALLENTOWN	39	62	50.0	302.0	11219	2237	11343	2543	5.5	11.9	96.2
PA ALLENTOWN	69	46	50.0	313.0	11087	2075	9892	1919	2.5	7.8	99.6
PA ALTOONA	10	32	1000.0	338.0	21871	796	20969	764	0.0	0.0	98.1
PA ALTOONA	23	24	50.0	324.0	7008	344	5674	289	0.6	0.0	100.0
PA ALTOONA	47	46	50.0	308.0	12472	576	11515	530	1.5	0.3	100.0
PA BETHLEHEM	60	59	67.4	284.0	10914	3323	10389	2283	0.9	2.6	95.6
PA CLEARFIELD	3	15	1000.0	268.0	27149	731	25059	691	0.0	0.0	97.3
PA ERIE	12	52	1000.0	305.0	27852	731	24477	671	0.0	0.0	100.0
PA ERIE	24	58	50.0	290.0	13453	464	13321	456	0.0	0.0	99.8
PA ERIE	35	16	50.0	287.0	11280	432	11012	422	0.3	0.3	100.0
PA ERIE	54	50	50.0	268.0	13301	442	13006	426	0.1	0.1	100.0
PA ERIE	66	22	50.0	271.0	10828	414	10264	396	0.0	0.0	100.0
PA GREENSBURG	40	50	50.0	299.0	13058	2424	13820	2528	1.2	3.1	92.4
PA HARRISBURG	21	4	1.0	372.0	17633	1864	16062	1741	3.0	3.3	96.2
PA HARRISBURG	27	57	115.5	346.0	13200	1309	15276	1653	9.4	7.1	85.3
PA HARRISBURG	33	36	50.0	427.0	16220	1774	16987	1804	3.3	1.9	92.8
PA HAZLETON	56	9	3.2	329.0	11237	794	8230	489	1.9	0.6	99.7
PA JOHNSTOWN	6	34	1000.0	341.0	27271	2717	27752	2648	0.0	0.0	94.3
PA JOHNSTOWN	8	29	662.0	368.0	21527	2628	18655	2234	0.0	0.0	99.3
PA JOHNSTOWN	19	30	162.1	325.0	17170	2422	16346	2044	0.3	0.4	97.4
PA LANCASTER	8	58	382.7	415.0	21401	2864	21703	2785	1.3	1.1	94.0
PA LANCASTER	15	23	50.0	415.0	17230	2072	17386	2079	9.7	7.5	95.0
PA PHILADELPHIA	3	26	1000.0	305.0	31386	9263	25543	7578	0.0	0.0	98.9
PA PHILADELPHIA	6	64	1000.0	332.0	30479	9176	27031	7747	0.0	0.0	97.3
PA PHILADELPHIA	10	67	791.8	354.0	25161	8072	23491	7190	0.4	0.3	95.5
PA PHILADELPHIA	17	54	172.0	320.0	18786	6675	19964	6768	0.4	0.4	92.8
PA PHILADELPHIA	29	42	273.3	347.0	22158	7212	23279	7499	15.2	10.0	92.7
PA PHILADELPHIA	35	34	50.0	284.0	11498	5617	11619	5690	1.1	1.6	97.5
PA PHILADELPHIA	57	32	108.6	353.0	16275	6365	15698	6210	2.7	0.7	99.1
PA PITTSBURGH	2	25	1000.0	302.0	28831	3488	26900	3339	7.7	5.2	97.3

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
PA PITTSBURGH	4	51	1000.0	293.0	27941	3209	24960	3089	0.0	0.0	97.0
PA PITTSBURGH	11	48	1000.0	302.0	26332	3429	23126	3090	0.0	0.0	99.9
PA PITTSBURGH	13	38	1000.0	210.0	23083	3079	20243	2892	1.0	0.3	100.0
PA PITTSBURGH	16	26	50.0	215.0	11220	2353	12154	2493	1.1	0.2	90.5
PA PITTSBURGH	22	42	330.8	280.0	15791	2649	14380	2580	0.6	0.4	98.4
PA PITTSBURGH	53	43	51.9	312.0	16273	2744	16057	2729	3.3	1.6	99.0
PA READING	51	25	120.0	395.0	14707	3607	16585	5176	5.1	5.0	84.9
PA RED LION	49	30	50.0	177.0	9595	1498	8685	1319	5.6	7.2	99.1
PA SCRANTON	16	49	73.5	506.0	18628	1383	18311	1353	0.4	0.5	97.6
PA SCRANTON	22	13	4.3	505.0	22657	1671	21186	1555	1.4	1.5	97.4
PA SCRANTON	38	31	50.0	385.0	14891	855	13968	817	6.0	3.2	98.8
PA SCRANTON	44	41	50.0	509.0	15873	1209	14479	1057	3.4	6.1	99.0
PA SCRANTON	64	32	50.0	374.0	3270	481	2498	441	4.2	0.4	100.0
PA WILKES-BARRE	28	11	3.7	509.0	22448	1642	21831	1618	6.7	9.6	95.8
PA WILLIAMSPORT	53	29	50.0	222.0	3514	156	2437	121	0.0	0.0	100.0
PA YORK	43	47	225.5	417.0	18468	2298	18552	2529	7.3	12.6	96.1
RI BLOCK ISLAND	69	17	50.0	213.0	11722	1628	11291	1552	0.0	0.0	100.0
RI PROVIDENCE	10	51	1000.0	305.0	27786	6170	23550	5267	11.2	3.0	100.0
RI PROVIDENCE	12	13	15.3	305.0	26516	5943	25661	5488	8.4	2.5	99.2
RI PROVIDENCE	36	21	50.0	182.0	10571	2351	11133	2569	8.0	3.2	93.6
RI PROVIDENCE	64	54	92.6	315.0	14609	3667	13709	2800	0.0	0.0	99.6
SC ALLENDALE	14	33	50.0	244.0	13632	364	13573	358	1.3	2.0	99.8
SC ANDERSON	40	14	50.0	311.0	15464	1025	14654	984	0.1	0.0	99.5
SC BEAUFORT	16	44	50.0	390.0	19731	670	19643	670	1.2	0.9	100.0
SC CHARLESTON	2	59	1000.0	594.0	50697	985	45904	819	0.0	0.0	100.0
SC CHARLESTON	4	53	1000.0	597.0	51379	974	41971	713	0.0	0.0	100.0
SC CHARLESTON	5	52	1000.0	597.0	51423	987	46921	835	0.0	0.0	100.0
SC CHARLESTON	7	49	1000.0	564.0	33353	825	30920	757	0.0	0.0	100.0
SC CHARLESTON	24	40	329.2	542.0	29291	697	27779	655	0.0	0.0	100.0
SC CHARLESTON	36	35	97.7	256.0	14028	502	14020	502	0.0	0.0	100.0
SC COLUMBIA	10	41	874.0	472.0	36808	1452	33424	1229	0.8	0.2	96.9
SC COLUMBIA	19	17	232.0	533.0	28744	1051	27875	1020	0.2	0.0	99.4
SC COLUMBIA	25	8	3.2	253.0	16297	769	15619	757	14.0	5.1	97.1
SC COLUMBIA	35	32	50.0	314.0	14227	726	14039	721	9.8	4.2	99.8
SC COLUMBIA	57	48	109.7	193.0	13082	714	13074	714	20.3	6.4	99.9
SC CONWAY	23	58	85.1	250.0	16081	450	15408	427	0.5	0.3	100.0
SC FLORENCE	13	56	1000.0	594.0	43246	1416	38937	1320	0.0	0.0	100.0
SC FLORENCE	15	16	50.0	594.0	29016	1066	28884	1054	2.7	2.6	99.8
SC FLORENCE	21	20	73.8	567.0	22692	787	22073	775	0.1	0.1	99.9
SC FLORENCE	33	45	50.0	241.0	12380	382	12120	379	1.0	0.6	100.0
SC GREENVILLE	4	59	1000.0	610.0	41044	1886	39428	1774	0.0	0.0	92.0
SC GREENVILLE	16	35	50.0	351.0	16128	1098	16413	1105	0.3	0.1	97.2

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
SC GREENVILLE	29	9	5.1	392.0	18622	1164	19313	1191	0.5	0.3	92.9
SC GREENWOOD	38	18	50.0	235.0	14183	772	14390	764	0.4	0.4	97.9
SC HARDEEVILLE	28	27	226.7	457.0	24859	570	24815	568	0.2	0.0	100.0
SC MYRTLE BEACH	43	18	124.6	463.0	25516	758	25592	760	0.0	0.1	99.7
SC ROCK HILL	30	15	50.0	210.0	11306	1017	11334	1006	6.5	6.5	95.6
SC ROCK HILL	55	39	147.1	570.0	30046	2244	29164	2209	6.1	3.8	99.6
SC SPARTANBURG	7	53	1000.0	610.0	38918	2224	38650	2204	0.0	0.0	97.5
SC SPARTANBURG	49	43	50.0	296.0	15798	1060	15059	977	2.7	1.7	99.9
SC SUMTER	27	28	50.0	354.0	17101	715	16471	529	3.2	1.2	100.0
SC SUMTER	63	38	50.0	165.0	2186	116	2118	115	0.0	0.0	100.0
SD ABERDEEN	9	28	672.0	427.0	34180	131	28565	112	0.0	0.0	100.0
SD ABERDEEN	16	17	50.0	357.0	20455	75	20039	71	0.0	0.0	100.0
SD BROOKINGS	8	18	801.6	229.0	24013	139	20117	127	0.7	2.6	100.0
SD EAGLE BUTTE	13	25	660.8	518.0	39363	20	34778	17	0.0	0.0	100.0
SD FLORENCE	3	25	1000.0	512.0	44498	192	44067	198	0.0	0.0	97.0
SD HURON	12	22	979.2	259.0	25074	80	21367	69	0.0	0.0	99.3
SD LEAD	5	29	1000.0	564.0	42705	145	43909	149	0.0	0.0	94.1
SD LEAD	11	30	793.0	576.0	40395	145	38672	144	0.0	0.0	99.7
SD LOWRY	11	15	368.5	317.0	27749	29	21318	24	0.0	0.0	100.0
SD MARTIN	8	23	1000.0	265.0	25911	29	23533	27	0.0	0.0	100.0
SD MITCHELL	5	26	1000.0	460.0	40741	373	38297	340	0.0	0.0	96.5
SD PIERRE	4	19	1000.0	378.0	36571	51	32608	46	0.0	0.0	99.9
SD PIERRE	10	21	586.1	488.0	35323	58	32008	55	0.0	0.0	99.3
SD RAPID CITY	3	22	1000.0	201.0	23926	126	23814	128	0.0	0.0	95.6
SD RAPID CITY	7	18	945.5	204.0	20618	122	18203	118	0.0	0.0	99.9
SD RAPID CITY	9	26	76.3	202.0	13922	106	13113	106	0.0	0.0	99.4
SD RAPID CITY	15	16	50.0	155.0	10537	103	10141	98	3.5	0.3	100.0
SD RELIANCE	6	14	1000.0	338.0	34748	59	32119	56	0.0	0.0	99.6
SD SIOUX FALLS	11	32	819.1	610.0	43499	531	34181	412	0.0	0.0	100.0
SD SIOUX FALLS	13	29	769.2	610.0	41744	447	35241	417	0.0	0.0	98.1
SD SIOUX FALLS	17	7	3.2	151.0	6670	160	6618	159	2.6	3.5	100.0
SD SIOUX FALLS	23	24	50.0	54.0	1623	122	1623	122	0.2	0.0	100.0
SD SIOUX FALLS	36	40	50.0	293.0	15246	228	15226	228	1.5	0.9	99.9
SD SIOUX FALLS	46	47	154.0	607.0	32796	387	31976	377	0.0	0.0	100.0
SD VERMILLION	2	34	1000.0	232.0	29218	441	28686	434	0.0	0.0	99.8
TN CHATTANOOGA	3	55	1000.0	320.0	26184	1033	27338	1025	0.0	0.0	90.3
TN CHATTANOOGA	9	35	1000.0	317.0	24577	993	21972	892	0.0	0.0	99.7
TN CHATTANOOGA	12	47	1000.0	384.0	27223	1041	25944	1001	0.0	0.0	98.0
TN CHATTANOOGA	45	29	50.0	329.0	15572	752	14511	722	0.8	1.0	100.0
TN CHATTANOOGA	61	40	127.3	370.0	13957	723	13584	702	0.0	0.0	99.0
TN CLEVELAND	53	42	50.0	356.0	11706	709	11072	686	2.8	2.2	99.9
TN COOKEVILLE	22	52	73.5	425.0	19872	346	19688	347	1.6	1.7	99.6

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
TN COOKEVILLE	28	36	50.0	279.0	10675	200	9879	192	4.3	2.8	100.0
TN CROSSVILLE	20	50	355.9	738.0	34644	1251	33955	1230	0.2	0.1	99.3
TN GREENEVILLE	39	38	129.8	802.0	20934	1058	19728	970	1.3	1.0	99.7
TN HENDERSONVILLE	50	51	140.6	235.0	11900	996	11660	966	4.2	1.9	99.6
TN JACKSON	7	43	920.0	323.0	29202	565	25511	510	0.0	0.0	100.0
TN JACKSON	16	39	336.3	322.0	20258	451	20105	449	0.9	0.5	99.8
TN JELICO	54	23	50.0	395.0	4856	221	3759	163	0.0	0.0	100.0
TN JOHNSON CITY	11	58	980.9	707.0	29717	1064	29358	1028	0.0	0.0	95.5
TN KINGSPORT	19	27	54.3	707.0	18226	695	18524	709	0.4	0.2	96.2
TN KNOXVILLE	6	26	1000.0	454.0	32436	1194	33026	1181	0.0	0.0	92.2
TN KNOXVILLE	8	30	663.5	382.0	19804	936	19888	941	0.0	0.0	95.0
TN KNOXVILLE	10	31	767.9	546.0	32432	1194	29785	1101	3.0	1.7	98.9
TN KNOXVILLE	15	17	92.1	513.0	19946	930	19520	922	0.6	0.3	99.8
TN KNOXVILLE	43	34	50.3	351.0	13921	812	13576	800	2.0	2.7	99.5
TN LEBANON	66	44	50.0	161.0	8926	919	8313	866	0.0	0.0	100.0
TN LEXINGTON	11	47	1000.0	195.0	23549	474	20401	417	0.0	0.0	100.0
TN MEMPHIS	3	28	1000.0	305.0	33403	1443	24845	1287	0.0	0.0	99.9
TN MEMPHIS	5	52	1000.0	308.0	32952	1427	29582	1379	0.0	0.0	99.3
TN MEMPHIS	10	29	670.8	329.0	29711	1364	24952	1276	2.0	0.6	100.0
TN MEMPHIS	13	53	1000.0	308.0	28576	1343	25719	1304	0.0	0.0	100.0
TN MEMPHIS	24	25	111.4	308.0	20834	1195	20718	1193	0.0	0.0	100.0
TN MEMPHIS	30	31	207.6	305.0	17506	1124	17330	1123	0.7	0.2	99.9
TN MEMPHIS	50	51	50.0	315.0	14801	1118	15581	1129	0.4	0.1	94.6
TN MURFREESBORO	39	38	183.2	250.0	15043	1090	14421	1066	3.5	2.5	100.0
TN NASHVILLE	2	27	1000.0	411.0	37573	1658	32297	1472	0.0	0.0	99.5
TN NASHVILLE	4	10	39.7	434.0	36718	1612	34521	1561	0.0	0.0	98.4
TN NASHVILLE	5	56	1000.0	425.0	37265	1656	33627	1569	0.0	0.0	99.0
TN NASHVILLE	8	46	936.5	390.0	31972	1497	28879	1420	0.0	0.0	100.0
TN NASHVILLE	17	15	121.8	354.0	23686	1338	23718	1337	1.3	0.5	99.2
TN NASHVILLE	30	21	183.0	430.0	23658	1364	23658	1364	1.9	2.6	98.5
TN NASHVILLE	58	23	52.6	240.0	13345	1075	13084	1067	4.2	3.6	100.0
TN SNEEDVILLE	2	41	1000.0	536.0	36323	1629	38851	1659	0.0	0.0	90.1
TX ABILENE	9	29	1000.0	259.0	26409	221	19985	205	4.5	3.3	100.0
TX ABILENE	32	24	50.0	287.0	17234	182	17206	182	0.7	0.2	100.0
TX ALVIN	67	36	107.6	543.0	19402	3615	22591	3738	0.1	0.0	85.9
TX AMARILLO	2	21	1000.0	401.0	38166	317	36338	310	0.0	0.0	99.9
TX AMARILLO	4	19	1000.0	433.0	40439	325	39077	324	0.0	0.0	100.0
TX AMARILLO	7	23	631.8	518.0	38673	315	35708	316	0.0	0.0	99.2
TX AMARILLO	10	9	20.8	466.0	36500	313	33165	304	0.0	0.0	100.0
TX AMARILLO	14	15	50.0	464.0	24095	285	23951	285	0.0	0.0	100.0
TX ARLINGTON	68	42	105.6	360.0	14497	3771	17975	3879	0.0	0.0	80.5

STATE AND CITY	DIGITAL TELEVISION SERVICE						EXISTING NTSC				DTV/ NTSC AREA MATCH (%)
	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
TX AUSTIN	7	56	1000.0	384.0	30828	1245	30089	1269	0.0	0.0	97.1
TX AUSTIN	18	22	66.7	335.0	18312	904	18352	904	4.3	0.8	98.8
TX AUSTIN	24	33	81.4	387.0	22472	997	20626	965	1.7	0.2	100.0
TX AUSTIN	36	21	158.2	374.0	25028	1084	23977	1044	0.1	0.0	99.9
TX AUSTIN	42	43	82.7	393.0	17588	911	16501	878	0.6	0.0	99.8
TX AUSTIN	54	49	177.6	374.0	21850	948	21914	1005	6.2	6.6	93.2
TX BAYTOWN	57	41	144.4	585.0	26201	3625	26197	3625	0.0	0.0	100.0
TX BEAUMONT	6	21	1000.0	293.0	32847	702	28386	640	0.0	0.0	100.0
TX BEAUMONT	12	50	1000.0	305.0	26741	650	23716	603	0.0	0.0	100.0
TX BEAUMONT	34	33	50.0	312.0	13852	541	13852	541	0.0	0.0	100.0
TX BELTON	46	47	50.0	384.0	15417	611	14824	547	1.3	0.3	100.0
TX BIG SPRING	4	33	136.0	116.0	12023	55	11902	55	0.0	0.0	99.9
TX BROWNSVILLE	23	24	100.0	445.0	19570	667	19566	667	0.0	0.0	100.0
TX BRYAN	3	59	1000.0	515.0	42756	2830	30202	522	0.0	0.0	100.0
TX BRYAN	28	29	50.0	220.0	12694	224	12742	224	0.4	0.1	99.6
TX COLLEGE STATION	15	12	3.2	119.0	4071	137	4071	137	0.0	0.0	100.0
TX CONROE	49	5	1.0	359.0	15427	3326	13430	2266	0.1	0.0	99.7
TX CONROE	55	42	155.3	570.0	31654	3838	31975	3838	3.5	0.3	98.5
TX CORPUS CHRISTI	3	47	1000.0	262.0	31435	490	30486	488	0.0	0.0	100.0
TX CORPUS CHRISTI	6	50	1000.0	291.0	28932	493	28236	490	0.0	0.0	100.0
TX CORPUS CHRISTI	10	18	631.2	287.0	27969	493	27637	491	0.0	0.0	100.0
TX CORPUS CHRISTI	16	23	50.0	296.0	15085	447	15085	447	0.0	0.0	100.0
TX CORPUS CHRISTI	28	27	50.0	232.0	10892	419	10892	419	0.0	0.0	100.0
TX DALLAS	4	35	1000.0	511.0	45408	4395	40690	4278	0.0	0.0	100.0
TX DALLAS	8	9	21.5	512.0	38703	4202	35954	4161	0.0	0.0	99.9
TX DALLAS	13	14	484.6	469.0	37811	4200	34201	4145	0.0	0.0	100.0
TX DALLAS	27	36	280.2	515.0	26874	4049	27151	4058	2.0	0.2	98.6
TX DALLAS	33	32	218.7	518.0	26899	4047	26714	4044	0.1	0.0	99.8
TX DALLAS	39	40	221.3	512.0	31240	4093	31248	4095	0.6	0.0	99.0
TX DALLAS	58	45	154.3	438.0	21176	3939	21140	3939	0.0	0.0	99.7
TX DECATUR	29	30	99.3	160.0	12473	3741	11916	3713	1.1	0.1	99.9
TX DEL RIO	10	28	1000.0	100.0	7805	47	7493	47	0.0	0.0	100.0
TX DENTON	2	43	1000.0	412.0	38925	4212	36831	4176	0.0	0.0	99.8
TX EAGLE PASS	16	18	50.0	85.0	2385	36	2385	36	0.0	0.0	100.0
TX EL PASO	4	18	1000.0	475.0	39024	722	39212	722	0.0	0.0	98.3
TX EL PASO	7	17	1000.0	265.0	22864	721	23481	722	0.0	0.0	91.1
TX EL PASO	9	16	650.3	582.0	40320	724	37215	723	0.0	0.0	99.9
TX EL PASO	13	30	1000.0	265.0	23268	720	21850	720	0.0	0.0	100.0
TX EL PASO	14	15	50.0	604.0	21194	719	19668	720	0.1	0.1	98.5
TX EL PASO	26	25	71.0	457.0	16234	717	16029	717	0.0	0.0	99.8
TX EL PASO	38	39	50.0	557.0	8401	628	7981	628	0.2	0.0	100.0
TX EL PASO	65	51	50.0	557.0	15868	703	15091	703	0.0	0.0	100.0



STATE AND CITY	DIGITAL TELEVISION SERVICE						EXISTING NTSC				DTV/ NTSC AREA MATCH (%)
	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
TX FORT WORTH	5	41	1000.0	514.0	45441	4404	39610	4227	0.0	0.0	100.0
TX FORT WORTH	11	19	552.2	509.0	39460	4217	34825	4150	1.0	0.1	100.0
TX FORT WORTH	21	18	220.0	503.0	26985	4045	27744	4053	0.9	0.1	97.1
TX FORT WORTH	52	51	172.9	328.0	14497	3809	14188	3802	0.0	0.0	99.9
TX GALVESTON	22	23	246.6	566.0	30569	3689	30801	3696	0.0	0.0	99.2
TX GALVESTON	48	47	168.1	358.0	18400	3461	18133	3350	0.0	0.0	99.8
TX GARLAND	23	24	172.9	348.0	12957	3159	12589	3047	1.7	0.4	100.0
TX GREENVILLE	47	46	50.0	155.0	2533	70	2533	70	0.0	0.0	100.0
TX HARLINGEN	4	31	1000.0	396.0	38632	687	36762	686	0.0	0.0	100.0
TX HARLINGEN	44	34	50.0	296.0	13869	657	13869	657	0.0	0.0	100.0
TX HARLINGEN	60	38	50.0	372.0	14082	661	14082	661	0.0	0.0	100.0
TX HOUSTON	2	35	1000.0	588.0	50318	3934	44930	3865	0.0	0.0	100.0
TX HOUSTON	8	9	8.4	564.0	36969	3852	37240	3850	0.3	0.0	98.4
TX HOUSTON	11	31	785.4	570.0	44534	3901	42875	3879	0.0	0.0	100.0
TX HOUSTON	13	32	796.8	588.0	44297	3900	41721	3870	0.0	0.0	100.0
TX HOUSTON	14	24	277.1	438.0	25772	3782	25619	3781	0.1	0.0	100.0
TX HOUSTON	20	19	239.0	552.0	27880	3788	27863	3788	0.6	0.1	100.0
TX HOUSTON	26	27	239.1	594.0	31352	3825	31101	3816	0.4	0.1	100.0
TX HOUSTON	39	38	208.4	594.0	27711	3779	27530	3776	0.0	0.0	100.0
TX HOUSTON	61	44	122.2	429.0	20486	3695	20482	3695	0.0	0.0	100.0
TX IRVING	49	48	181.4	365.0	19464	3910	19323	3907	0.5	0.2	100.0
TX JACKSONVILLE	56	22	101.2	482.0	19968	553	19872	552	2.3	2.7	99.9
TX KATY	51	52	70.9	500.0	20118	3688	20050	3687	0.0	0.0	100.0
TX KERRVILLE	35	32	207.4	536.0	23092	1416	22701	1411	1.6	1.4	99.8
TX KILLEEN	62	23	50.0	408.0	16884	540	16864	540	0.0	0.0	99.4
TX LAKE DALLAS	55	54	70.7	142.0	10413	3602	10253	3565	0.0	0.0	100.0
TX LAREDO	8	15	526.4	312.0	26393	140	25684	137	0.0	0.0	99.9
TX LAREDO	13	14	143.5	280.0	19978	143	20347	143	8.6	5.3	95.8
TX LAREDO	27	19	81.0	67.0	6996	132	6972	132	0.0	0.0	100.0
TX LLANO	14	27	174.1	269.0	18908	236	17301	119	6.9	4.9	99.9
TX LONGVIEW	51	52	169.0	381.0	17537	536	17275	521	0.6	0.4	99.7
TX LUBBOCK	5	39	1000.0	226.0	28414	364	28269	364	0.0	0.0	99.8
TX LUBBOCK	11	43	1000.0	232.0	25326	351	24403	349	1.8	0.3	100.0
TX LUBBOCK	13	38	1000.0	268.0	25086	342	24059	342	0.0	0.0	100.0
TX LUBBOCK	16	25	50.0	83.0	5191	235	5179	235	0.3	0.0	100.0
TX LUBBOCK	28	27	52.7	256.0	16287	300	16194	300	1.3	0.0	100.0
TX LUBBOCK	34	35	121.0	256.0	14190	295	14980	295	0.0	0.0	94.5
TX LUFKIN	9	43	813.3	204.0	17819	221	16010	206	8.8	10.0	99.7
TX MCALLEN	48	46	80.1	288.0	14991	658	14959	656	0.0	0.0	100.0
TX MIDLAND	2	26	1000.0	323.0	34576	345	33060	341	0.0	0.0	100.0
TX NACOGDOCHES	19	18	50.0	222.0	8477	141	8445	140	6.7	3.1	100.0
TX ODESSA	7	31	1000.0	226.0	25478	279	25006	278	0.0	0.0	100.0

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
TX ODESSA	9	15	486.4	387.0	33018	325	29562	297	0.0	0.0	100.0
TX ODESSA	24	23	99.8	335.0	18882	289	18874	289	0.8	0.0	100.0
TX ODESSA	36	22	50.0	88.0	4555	225	4823	225	0.0	0.0	94.4
TX ODESSA	42	43	50.0	146.0	7035	243	7435	243	0.0	0.0	94.6
TX PORT ARTHUR	4	40	1000.0	360.0	36385	778	32998	763	0.0	0.0	99.7
TX RIO GRANDE CITY	40	20	50.0	113.0	10336	106	10328	106	0.0	0.0	100.0
TX ROSENBERG	45	46	65.7	439.0	19437	3656	19380	3655	0.0	0.0	100.0
TX SAN ANGELO	3	16	204.5	183.0	17390	120	16339	119	0.0	0.0	100.0
TX SAN ANGELO	6	19	1000.0	277.0	30653	140	26403	127	0.0	0.0	99.5
TX SAN ANGELO	8	11	18.8	442.0	32951	154	29799	148	0.0	0.0	99.4
TX SAN ANTONIO	4	58	1000.0	451.0	40688	1703	37111	1591	0.0	0.0	99.4
TX SAN ANTONIO	5	55	1000.0	424.0	37732	1587	36112	1588	0.0	0.0	97.5
TX SAN ANTONIO	9	20	827.3	283.0	26936	1510	25660	1499	0.6	0.3	99.6
TX SAN ANTONIO	12	48	989.1	451.0	35839	1572	34879	1571	0.5	0.4	99.0
TX SAN ANTONIO	23	16	50.0	261.0	11425	1363	11306	1362	1.2	0.2	99.9
TX SAN ANTONIO	29	30	231.8	443.0	23843	1505	23364	1497	0.3	0.1	100.0
TX SAN ANTONIO	41	39	196.8	432.0	22602	1488	22090	1466	0.0	0.0	100.0
TX SAN ANTONIO	60	38	125.6	456.0	19327	1465	18560	1454	0.0	0.0	100.0
TX SHERMAN	12	20	394.0	543.0	38698	684	29746	384	0.0	0.0	100.0
TX SNYDER	17	10	3.2	135.0	5587	21	5431	21	0.0	0.0	99.9
TX SWEETWATER	12	20	560.8	427.0	32329	238	29841	233	2.7	0.6	97.4
TX TEMPLE	6	50	1000.0	573.0	47381	1090	35310	971	0.0	0.0	99.2
TX TEXARKANA	6	15	1000.0	482.0	43756	1018	32460	884	0.0	0.0	100.0
TX TYLER	7	38	1000.0	302.0	28271	703	23380	619	0.0	0.0	100.0
TX VICTORIA	19	34	50.0	149.0	7797	117	7797	117	0.1	0.0	100.0
TX VICTORIA	25	15	52.3	311.0	16145	165	16084	164	0.0	0.0	100.0
TX WACO	10	53	732.0	552.0	39010	853	35434	811	0.0	0.0	99.9
TX WACO	25	26	234.7	558.0	28933	716	26263	595	0.0	0.0	100.0
TX WACO	34	20	50.0	155.0	4781	201	4721	201	0.1	0.0	100.0
TX WACO	44	57	200.2	552.0	22375	599	22407	608	0.7	0.0	98.9
TX WESLACO	5	13	40.0	290.0	32933	672	31728	675	0.0	0.0	99.7
TX WICHITA FALLS	3	28	1000.0	305.0	33377	388	30557	369	0.0	0.0	100.0
TX WICHITA FALLS	6	22	1000.0	311.0	32101	367	28057	358	0.0	0.0	94.2
TX WICHITA FALLS	18	15	96.3	329.0	17791	320	17915	320	2.4	1.0	99.3
UT CEDAR CITY	4	14	365.6	836.0	36597	75	40743	86	0.0	0.0	88.8
UT OGDEN	9	34	304.0	893.0	20702	1368	21568	1375	0.2	0.0	95.4
UT OGDEN	30	29	60.3	1190.0	22509	1371	21299	1358	0.0	0.0	99.5
UT PROVO	11	39	402.8	896.0	23981	1360	24644	1359	0.0	0.0	94.9
UT PROVO	16	17	253.0	57.0	8179	329	7461	295	0.0	0.0	100.0
UT SALT LAKE CITY	2	35	737.0	933.0	33667	1402	44486	1484	0.0	0.0	75.2
UT SALT LAKE CITY	4	40	529.6	1180.0	34890	1401	44280	1479	0.0	0.0	77.1

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
UT SALT LAKE CITY	5	38	539.4	1152.0	35596	1407	47582	1468	0.0	0.0	74.8
UT SALT LAKE CITY	7	42	430.5	924.0	29562	1392	30768	1397	0.1	0.0	95.9
UT SALT LAKE CITY	13	28	190.6	1116.0	21249	1385	19545	1356	0.0	0.0	96.5
UT SALT LAKE CITY	14	27	84.2	1181.0	28260	1384	26587	1374	0.1	0.0	99.7
UT ST. GEORGE	12	9	3.2	42.0	1767	43	1631	41	0.0	0.0	100.0
VA ARLINGTON	14	15	90.2	173.0	14889	5804	15213	5853	4.8	0.8	97.5
VA ASHLAND	65	47	50.0	262.0	11365	925	10517	908	0.0	0.0	100.0
VA BRISTOL	5	28	1000.0	680.0	36741	1255	38646	1387	0.0	0.0	89.7
VA CHARLOTTESVILLE	29	32	234.1	363.0	20632	651	20736	649	2.5	4.9	95.6
VA CHARLOTTESVILLE	41	14	50.0	352.0	8353	227	7661	205	2.0	0.7	99.8
VA DANVILLE	24	41	50.0	107.0	5695	306	5650	296	5.5	3.0	99.4
VA FAIRFAX	56	57	50.0	215.0	11753	4371	11068	4071	3.9	2.0	98.8
VA FRONT ROYAL	42	21	50.0	398.0	7856	243	6366	225	2.7	1.8	100.0
VA GOLDVEIN	53	30	50.0	229.0	14199	3791	13042	2821	1.1	0.2	99.9
VA GRUNDY	68	49	50.0	763.0	14722	612	13657	575	0.0	0.0	99.9
VA HAMPTON	13	41	923.2	301.0	28338	1715	23151	1590	0.0	0.0	100.0
VA HAMPTON-NORFOLK	15	16	113.5	294.0	17265	1537	17265	1537	0.5	0.0	100.0
VA HARRISONBURG	3	49	95.2	646.0	16415	443	20828	532	1.6	0.4	75.5
VA LYNCHBURG	13	56	1000.0	625.0	33092	1044	26866	836	0.0	0.0	97.7
VA LYNCHBURG	21	20	186.3	500.0	18430	642	18438	627	1.1	5.3	95.9
VA MANASSAS	66	43	68.5	168.0	12144	3867	12814	4000	0.1	0.0	93.8
VA MARION	52	42	50.0	445.0	11661	316	9959	265	0.9	0.5	99.9
VA NORFOLK	3	58	1000.0	299.0	33646	1832	26137	1739	0.0	0.0	100.0
VA NORFOLK	33	38	226.8	277.0	14070	1498	14074	1498	0.0	0.0	100.0
VA NORFOLK	49	46	50.0	155.0	6111	1349	6111	1349	0.0	0.0	100.0
VA NORTON	47	32	50.0	591.0	18409	750	15776	624	1.1	0.6	100.0
VA PETERSBURG	8	22	520.7	320.0	27478	1244	24875	1178	0.0	0.0	99.6
VA PORTSMOUTH	10	31	729.0	302.0	28891	1778	26971	1652	13.8	3.4	100.0
VA PORTSMOUTH	27	19	60.4	296.0	18588	1563	18925	1566	0.4	0.1	98.2
VA RICHMOND	6	25	1000.0	256.0	31166	1473	26888	1361	0.0	0.0	99.6
VA RICHMOND	12	54	1000.0	241.0	25977	1257	20983	1103	0.0	0.0	99.7
VA RICHMOND	23	24	108.8	327.0	21675	1104	21868	1106	0.0	0.0	99.0
VA RICHMOND	35	26	67.8	384.0	22035	1068	22414	1089	7.2	3.5	96.5
VA RICHMOND	57	44	50.0	293.0	13908	945	13872	945	2.8	0.4	100.0
VA ROANOKE	7	18	605.0	610.0	37673	1237	33927	1131	0.0	0.0	99.6
VA ROANOKE	10	30	773.7	610.0	33596	1141	31364	1092	0.1	0.1	97.5
VA ROANOKE	15	3	1.0	634.0	25760	930	20742	827	1.4	1.0	99.2
VA ROANOKE	27	17	88.7	607.0	19044	818	18536	815	3.4	2.8	95.1
VA ROANOKE	38	36	50.0	616.0	14302	649	13842	640	2.6	1.6	99.4
VA STAUNTON	51	11	3.2	680.0	7437	249	6357	220	1.3	0.5	100.0
VA VIRGINIA BEACH	43	29	133.3	261.0	18835	1572	18847	1573	0.0	0.0	99.9
VT BURLINGTON	3	53	817.0	835.0	40609	564	39340	592	0.0	0.0	91.9

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
VT BURLINGTON	22	16	50.0	835.0	27349	485	24512	444	0.3	0.2	99.9
VT BURLINGTON	33	32	50.0	815.0	24890	447	23364	428	0.6	0.3	100.0
VT BURLINGTON	44	43	50.0	840.0	25178	453	23659	428	0.3	0.1	99.8
VT HARTFORD	31	25	72.6	677.0	16298	365	15770	351	2.4	1.9	97.1
VT RUTLAND	28	56	50.0	429.0	10646	249	10054	243	0.0	0.0	100.0
VT ST. JOHNSBURY	20	18	50.0	592.0	17041	177	13973	146	0.6	0.3	100.0
VT WINDSOR	41	24	50.0	684.0	18661	458	16023	370	2.0	2.9	99.1
WA BELLEVUE	33	32	50.0	286.0	4020	1944	3539	1889	7.0	9.0	99.8
WA BELLEVUE	51	50	50.0	739.0	21493	2960	21087	2949	0.1	0.4	100.0
WA BELLINGHAM	12	35	612.2	722.0	39879	1034	37790	581	0.0	0.0	99.7
WA BELLINGHAM	24	19	50.0	676.0	6322	206	5934	193	0.0	0.0	100.0
WA CENTRALIA	15	19	50.0	347.0	12675	317	11570	297	1.3	2.3	97.0
WA EVERETT	16	31	290.6	239.0	15341	2878	14315	2789	0.2	0.0	99.4
WA KENNEWICK	42	44	50.0	390.0	14786	250	14141	238	0.0	0.0	100.0
WA PASCO	19	18	50.0	366.0	15893	242	15293	225	0.0	0.0	100.0
WA PULLMAN	10	17	189.6	408.0	25735	256	23762	208	0.0	0.0	99.9
WA RICHLAND	25	26	50.0	411.0	17257	267	16636	250	0.0	0.0	100.0
WA RICHLAND	31	38	50.0	370.0	6994	162	6483	158	0.0	0.0	100.0
WA SEATTLE	4	38	1000.0	247.0	26917	3048	28573	3061	0.0	0.0	93.9
WA SEATTLE	5	48	1000.0	250.0	27042	3052	27359	3034	0.0	0.0	94.5
WA SEATTLE	7	39	1000.0	250.0	23973	3014	23832	3015	0.0	0.0	98.6
WA SEATTLE	9	41	1000.0	252.0	22539	2947	23225	2982	0.0	0.0	92.7
WA SEATTLE	22	25	247.1	271.0	20306	2972	18838	2933	0.1	0.0	100.0
WA SEATTLE	45	44	50.0	287.0	4035	1885	3533	1818	1.6	1.6	100.0
WA SPOKANE	2	20	1000.0	671.0	44955	567	46495	549	0.0	0.0	93.8
WA SPOKANE	4	13	27.3	933.0	47131	538	49444	551	0.0	0.0	94.4
WA SPOKANE	6	15	1000.0	653.0	45136	562	45962	568	0.0	0.0	96.5
WA SPOKANE	7	39	945.6	558.0	35010	543	34472	518	0.0	0.0	98.7
WA SPOKANE	22	36	50.0	429.0	16529	434	15967	423	0.6	0.1	98.9
WA SPOKANE	28	30	95.4	601.0	26297	494	24953	477	0.2	2.7	100.0
WA TACOMA	11	36	772.7	363.0	27063	3031	25764	2978	0.0	0.0	99.6
WA TACOMA	13	18	602.8	610.0	34985	3160	31399	3038	0.0	0.0	98.7
WA TACOMA	20	14	135.4	491.0	21540	2985	20756	2893	0.8	0.4	99.9
WA TACOMA	28	27	50.0	232.0	11775	2542	11033	2456	1.3	5.4	99.6
WA TACOMA	56	42	152.4	570.0	26206	2943	25599	3046	0.1	0.2	99.1
WA VANCOUVER	49	48	107.7	527.0	17144	1772	16628	1743	0.0	0.0	99.9
WA WENATCHEE	27	46	50.0	424.0	10409	106	8623	101	0.0	0.0	100.0
WA YAKIMA	23	16	50.0	293.0	9705	196	8523	195	0.0	0.0	100.0
WA YAKIMA	29	33	50.0	296.0	9706	198	8783	198	0.0	0.0	100.0
WA YAKIMA	35	14	50.0	293.0	10411	199	8832	197	2.6	0.8	100.0
WA YAKIMA	47	21	50.0	280.0	9737	194	8382	193	0.0	0.0	100.0
WI APPLETON	32	59	50.0	336.0	17094	760	16889	750	0.0	0.0	100.0

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
WI CHIPPEWA FALLS	48	49	50.0	213.0	11489	233	11695	238	0.1	0.0	96.8
WI EAGLE RIVER	34	28	52.8	127.0	9995	70	10007	71	1.1	0.7	99.1
WI EAU CLAIRE	13	39	944.3	607.0	41500	711	37390	643	0.0	0.0	98.7
WI EAU CLAIRE	18	15	50.0	226.0	11397	231	11320	230	0.3	0.1	100.0
WI FOND DU LAC	68	44	122.7	506.0	26083	1986	26740	2424	0.1	1.6	96.3
WI GREEN BAY	2	23	1000.0	381.0	37771	1055	35158	1004	1.0	0.4	99.9
WI GREEN BAY	5	56	1000.0	341.0	35496	1037	33443	988	0.0	0.0	99.9
WI GREEN BAY	11	51	1000.0	384.0	33121	1007	31547	956	3.5	2.4	100.0
WI GREEN BAY	26	41	285.5	356.0	23465	924	23171	915	3.0	1.5	100.0
WI GREEN BAY	38	42	50.0	360.0	17370	729	17366	728	0.0	0.0	99.3
WI JANESVILLE	57	32	79.3	342.0	15937	1061	16225	1067	1.1	0.6	97.0
WI KENOSHA	55	40	97.2	144.0	11200	2080	10924	2040	0.4	0.1	100.0
WI LA CROSSE	8	53	1000.0	469.0	36877	681	29076	525	0.5	0.4	100.0
WI LA CROSSE	19	14	50.0	347.0	16453	300	15633	286	6.5	3.5	100.0
WI LA CROSSE	25	17	50.0	306.0	12633	250	11804	228	0.2	0.1	100.0
WI LA CROSSE	31	30	50.0	347.0	17544	310	16864	297	2.6	1.7	100.0
WI MADISON	3	50	380.2	469.0	30593	1315	25483	1060	2.7	6.4	99.8
WI MADISON	15	19	50.0	352.0	18214	816	17836	771	0.1	0.0	98.3
WI MADISON	21	20	50.0	453.0	21941	893	21768	888	2.0	1.3	98.7
WI MADISON	27	26	228.3	455.0	25909	1056	26561	1071	2.8	4.2	97.1
WI MADISON	47	11	3.2	450.0	19564	832	19310	822	1.1	1.4	98.4
WI MANITOWOC	16	19	50.0	129.0	3415	81	3415	81	1.5	0.7	100.0
WI MAYVILLE	52	43	50.0	120.0	2183	87	2155	85	1.3	0.8	100.0
WI MENOMONIE	28	27	50.0	346.0	17181	344	16347	319	0.2	0.0	100.0
WI MILWAUKEE	4	28	1000.0	305.0	33003	2715	24264	2170	0.0	0.0	98.8
WI MILWAUKEE	6	33	1000.0	305.0	33449	2801	22286	2072	0.0	0.0	99.9
WI MILWAUKEE	10	8	9.9	343.0	26703	2457	24134	2110	0.0	0.0	98.4
WI MILWAUKEE	12	34	832.8	305.0	29063	2570	22473	2066	0.0	0.0	100.0
WI MILWAUKEE	18	61	519.8	307.0	20074	2243	19192	2150	0.0	0.0	100.0
WI MILWAUKEE	24	25	111.2	313.0	17125	2087	17044	2071	0.8	0.2	99.7
WI MILWAUKEE	30	22	50.0	293.0	13307	1847	13315	1848	1.0	1.3	99.8
WI MILWAUKEE	36	35	59.6	283.0	13997	1854	14630	1875	1.3	0.8	95.7
WI MILWAUKEE	58	46	139.7	339.0	22271	2212	20629	2155	0.5	1.1	99.7
WI PARK FALLS	36	47	50.0	445.0	19939	106	19134	97	1.7	1.4	100.0
WI RACINE	49	48	176.4	303.0	17140	2103	16621	1997	0.9	0.3	100.0
WI RHINELANDER	12	16	510.5	506.0	39393	351	29821	251	0.0	0.0	100.0
WI SUPERIOR	6	19	1000.0	308.0	32476	286	28518	256	0.0	0.0	99.9
WI SURING	14	21	50.0	201.0	13334	541	13330	541	0.2	0.3	100.0
WI WAUSAU	7	40	836.0	369.0	30184	481	27045	431	0.0	0.0	97.2
WI WAUSAU	9	29	669.8	369.0	32021	491	25727	433	0.0	0.0	99.6
WI WAUSAU	20	24	50.0	300.0	17800	354	17796	354	1.3	0.6	99.8

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					AREA (Sq km)	PEOPLE (thous)	CURRENT SERVICE		NEW INTERFERENCE		
							AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
WV BLUEFIELD	6	46	1000.0	372.0	24174	682	24693	690	0.0	0.0	93.3
WV BLUEFIELD	40	14	50.0	387.0	15497	461	12482	337	0.1	0.1	100.0
WV CHARLESTON	8	41	388.5	372.0	26064	929	24529	889	0.0	0.0	99.7
WV CHARLESTON	11	19	71.4	525.0	22981	846	20575	785	0.0	0.0	100.0
WV CHARLESTON	29	39	50.0	212.0	11145	513	10379	426	0.5	0.3	100.0
WV CLARKSBURG	12	52	1000.0	262.0	23066	589	21524	531	0.1	0.0	99.8
WV CLARKSBURG	46	28	50.0	244.0	8517	286	7660	251	3.9	2.7	100.0
WV GRANDVIEW	9	53	1000.0	305.0	23498	599	22111	545	0.0	0.0	97.1
WV HUNTINGTON	3	23	444.5	388.0	30090	1068	27305	998	0.1	0.0	99.6
WV HUNTINGTON	13	54	430.9	387.0	26782	983	25164	948	6.3	4.5	100.0
WV HUNTINGTON	33	34	63.1	379.0	16652	735	16434	723	1.4	0.4	99.5
WV LEWISBURG	59	48	50.0	568.0	13201	308	12445	283	0.2	0.0	100.0
WV MARTINSBURG	60	12	3.2	312.0	11165	503	9860	476	0.1	0.0	99.7
WV MORGANTOWN	24	33	145.4	457.0	19594	1297	19799	1254	2.1	3.3	96.5
WV OAK HILL	4	50	1000.0	226.0	22396	568	22416	539	0.0	0.0	91.3
WV PARKERSBURG	15	49	50.0	189.0	9484	281	9187	271	6.7	7.7	100.0
WV WESTON	5	58	1000.0	268.0	27279	561	25870	516	0.0	0.0	96.2
WV WHEELING	7	32	996.9	293.0	25185	2292	23153	2013	0.0	0.0	98.6
WY CASPER	2	17	1000.0	610.0	44057	80	45716	79	0.0	0.0	94.3
WY CASPER	14	15	54.7	573.0	24755	65	23799	65	0.2	0.0	99.8
WY CASPER	20	18	50.0	582.0	9746	63	9090	63	3.7	0.0	95.5
WY CHEYENNE	5	30	1000.0	189.0	22470	345	22768	359	0.0	0.0	93.7
WY CHEYENNE	27	28	173.0	232.0	13238	331	13110	329	0.1	0.0	99.6
WY CHEYENNE	33	11	3.2	148.0	4174	71	3913	71	4.2	0.1	100.0
WY JACKSON	2	14	50.0	304.0	4438	11	4626	11	1.2	0.0	95.7
WY LANDER	4	8	60.0	463.0	36374	33	37280	33	0.0	0.0	96.7
WY LANDER	5	7	31.7	82.0	15722	31	19486	32	0.0	0.0	80.7
WY RAWLINS	11	9	3.2	70.0	2330	10	2097	10	0.0	0.0	100.0
WY RIVERTON	10	16	274.5	526.0	26376	48	25118	47	0.0	0.0	99.4
WY ROCK SPRINGS	13	21	393.4	495.0	33285	45	30589	45	0.0	0.0	100.0
WY SHERIDAN	12	21	1000.0	372.0	27652	37	27424	37	0.0	0.0	97.5
GU AGANA	8	2	1.0	305.0	Clear channels; no interference evaluation performed						
GU AGANA	10	4	3.2	304.0	Clear channels; no interference evaluation performed						
GU AGANA	12	5	3.2	61.0	Clear channels; no interference evaluation performed						
GU TAMUNING	14	17	50.0	33.0	Clear channels; no interference evaluation performed						
PR AGUADA	50	62	50.0	343.0	19152	-	13149	-	9.8	-	100.0
PR AGUADILLA	12	69	691.8	665.0	46001	-	38301	-	0.0	-	100.0
PR AGUADILLA	32	34	50.0	296.0	15358	-	4652	-	65.4	-	98.8
PR AGUADILLA	44	17	50.0	372.0	20575	-	13040	-	5.0	-	100.0
PR ARECIBO	54	53	50.0	600.0	27756	-	26609	-	11.4	-	99.3
PR ARECIBO	60	61	55.0	242.0	15529	-	15203	-	0.0	-	100.0
PR BAYAMON	36	59	50.0	329.0	18547	-	4283	-	14.9	-	100.0

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE		EXISTING NTSC				DTV/NTSC AREA MATCH (%)
					DURING TRANSITION		CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
PR CAGUAS	11	56	707.9	355.0	31007	-	21824	-	0.0	-	100.0
PR CAGUAS	58	57	50.0	329.0	18628	-	8316	-	13.2	-	100.0
PR CAROLINA	52	51	50.0	585.0	26949	-	21606	-	3.7	-	99.5
PR FAJARDO	13	33	281.8	863.0	45149	-	32793	-	0.0	-	100.0
PR FAJARDO	40	16	50.0	839.0	30510	-	28981	-	3.6	-	96.7
PR GUAYAMA	46	45	50.0	642.0	28750	-	27956	-	5.5	-	99.1
PR HUMACAO	68	49	50.0	594.0	27390	-	13282	-	3.6	-	100.0
PR MAYAGUEZ	3	35	1000.0	691.0	49598	-	40712	-	0.0	-	94.8
PR MAYAGUEZ	5	29	1000.0	610.0	45004	-	44597	-	0.0	-	91.1
PR MAYAGUEZ	16	63	50.0	347.0	19379	-	11527	-	41.7	-	100.0
PR MAYAGUEZ	22	23	50.0	620.0	28506	-	27691	-	0.0	-	99.9
PR NARANJITO	64	65	50.0	142.0	11499	-	10359	-	6.4	-	94.0
PR PONCE	7	66	407.4	826.0	46962	-	46824	-	0.0	-	100.0
PR PONCE	9	43	380.2	857.0	44518	-	45819	-	0.0	-	96.8
PR PONCE	14	15	50.0	861.0	33311	-	30272	-	1.1	-	99.9
PR PONCE	20	19	50.0	259.0	15818	-	7812	-	17.5	-	100.0
PR PONCE	26	25	50.0	302.0	17367	-	12274	-	9.6	-	100.0
PR PONCE	48	47	50.0	247.0	15454	-	7081	-	5.9	-	100.0
PR SAN JUAN	2	28	871.0	861.0	53035	-	46686	-	0.0	-	100.0
PR SAN JUAN	4	27	851.1	873.0	53006	-	41839	-	0.0	-	96.8
PR SAN JUAN	6	55	977.2	825.0	54314	-	41882	-	0.0	-	99.9
PR SAN JUAN	18	32	50.0	848.0	33066	-	22841	-	0.9	-	100.0
PR SAN JUAN	24	21	50.0	581.0	27602	-	21905	-	1.1	-	100.0
PR SAN JUAN	30	31	75.9	287.0	17985	-	17932	-	3.8	-	100.0
PR SAN SEBASTIAN	38	39	50.0	332.0	18642	-	8720	-	6.0	-	100.0
PR YAUCO	42	41	50.0	852.0	33204	-	31628	-	0.8	-	100.0
VI CHARLOTTE AMALI	10	50	776.2	558.0	41952	-	39160	-	0.0	-	100.0
VI CHARLOTTE AMALI	12	44	50.0	451.0	22957	-	15899	-	0.0	-	100.0
VI CHARLOTTE AMALI	17	48	50.0	429.0	22404	-	10386	-	0.1	-	100.0
VI CHRISTIANSTED	8	20	501.2	292.0	25457	-	24907	-	0.0	-	100.0
VI CHRISTIANSTED	27	5	1.0	121.0	14403	-	3162	-	94.1	-	100.0

Notes:

1) Data for Puerto Rico and the Virgin Islands were unavailable in a form suitable for calculations related to population.

2) The interference calculations for AK, HI, GU, PR and VI were made using FCC curves (47CFR 73.699) and do not include effects of terrain shielding.

State and City	DTV			State and City	DTV		
	Channel	N. Latitude	W. Longitude		Channel	N. Latitude	W. Longitude
AK Anchorage	18	61-25-22	149-52-20	AR Jonesboro	20	35-54-14	090-46-14
AK Anchorage	20	61-13-11	149-53-24	AR Jonesboro	49	35-53-27	090-54-06
AK Anchorage	22	61-20-10	149-30-47	AR Jonesboro	9	35-53-17	090-56-09
AK Anchorage	24	61-25-22	149-52-20	AR Little Rock	12	34-47-57	092-29-59
AK Anchorage	26	61-04-02	149-44-36	AR Little Rock	22	34-28-23	092-12-11
AK Anchorage	28	61-11-33	149-54-01	AR Little Rock	30	34-47-57	092-29-29
AK Anchorage	30	61-25-22	149-52-20	AR Little Rock	32	34-47-57	092-29-59
AK Anchorage	32	61-09-57	149-41-02	AR Little Rock	43	34-52-28	092-00-35
AK Bethel	3	60-47-33	161-46-22	AR Little Rock	47	34-28-23	092-12-11
AK Dillingham	9	59-02-30	158-27-30	AR Mountain View	35	35-48-47	092-17-24
AK Fairbanks	18	64-50-42	147-42-52	AR Newark	27	35-43-25	091-26-40
AK Fairbanks	22	64-48-44	147-42-02	AR Pine Bluff	24	34-31-52	092-02-42
AK Fairbanks	24	64-54-42	147-46-38	AR Pine Bluff	39	34-26-31	092-13-03
AK Fairbanks	26	64-50-36	147-42-48	AR Rogers	50	36-12-15	094-06-05
AK Fairbanks	28	64-50-36	147-42-48	AR Springdale	39	36-11-07	094-17-49
AK Juneau	6	58-18-04	134-25-21	AZ Flagstaff	18	34-58-04	111-30-30
AK Juneau	11	58-18-06	134-26-29	AZ Flagstaff	22	34-58-06	111-30-28
AK Ketchikan	8	55-20-35	131-38-38	AZ Flagstaff	27	34-58-05	111-30-29
AK Ketchikan	13	55-20-59	131-40-12	AZ Flagstaff	32	35-14-26	111-35-48
AK North Pole	20	64-52-44	148-03-10	AZ Green Valley	47	32-24-54	110-42-56
AK Sitka	2	57-03-02	135-20-03	AZ Kingman	19	35-01-57	114-21-56
AL Anniston	58	33-24-41	086-12-23	AZ Kingman	46	35-11-20	114-03-12
AL Bessemer	18	33-28-51	087-24-03	AZ Lake Havasu City	32	34-33-06	114-11-37
AL Birmingham	30	33-29-02	086-48-21	AZ Mesa	36	33-20-00	112-03-48
AL Birmingham	36	33-27-37	086-51-07	AZ Phoenix	17	33-20-02	112-03-40
AL Birmingham	50	33-29-19	086-47-58	AZ Phoenix	20	33-20-02	112-03-42
AL Birmingham	52	33-29-26	086-47-48	AZ Phoenix	24	33-20-01	112-03-45
AL Birmingham	53	33-29-19	086-47-58	AZ Phoenix	26	33-20-01	112-03-32
AL Demopolis	19	32-22-01	087-52-03	AZ Phoenix	29	33-20-00	112-03-49
AL Dothan	21	31-14-30	085-18-48	AZ Phoenix	31	33-20-03	112-03-43
AL Dothan	36	30-55-10	085-44-28	AZ Phoenix	34	33-20-00	112-03-46
AL Dozier	59	31-33-16	086-23-32	AZ Phoenix	49	33-20-01	112-03-44
AL Florence	14	34-35-01	087-47-14	AZ Phoenix	56	33-20-00	112-03-46
AL Florence	20	34-34-38	087-46-57	AZ Prescott	25	34-41-15	112-07-01
AL Florence	22	34-34-40	087-46-54	AZ Sierra Vista	44	31-45-33	110-48-02
AL Gadsden	26	33-48-53	086-26-55	AZ Tolleson	52	33-20-03	112-03-38
AL Gadsden	45	33-57-20	086-12-53	AZ Tucson	19	32-14-55	111-06-57
AL Homewood	28	33-29-04	086-48-25	AZ Tucson	23	32-24-56	110-42-49
AL Huntsville	24	34-44-14	086-31-46	AZ Tucson	25	31-42-18	110-55-26
AL Huntsville	32	34-44-15	086-32-02	AZ Tucson	28	32-12-53	111-00-21
AL Huntsville	41	34-38-11	086-30-42	AZ Tucson	30	32-24-55	110-42-54
AL Huntsville	49	34-42-39	086-32-07	AZ Tucson	32	32-14-56	111-06-58
AL Huntsville	59	34-44-19	086-31-56	AZ Tucson	35	32-24-54	110-42-59
AL Louisville	44	31-43-05	085-26-03	AZ Tucson	42	32-14-55	111-06-57
AL Mobile	9	30-41-17	087-47-54	AZ Yuma	16	33-03-17	114-49-34
AL Mobile	20	30-35-18	087-33-16	AZ Yuma	41	33-03-10	114-49-40
AL Mobile	27	30-41-20	087-49-49	CA Anaheim	32	34-11-14	117-42-01
AL Mobile	41	30-39-33	087-53-33	CA Arcata	22	40-43-36	123-58-18
AL Mobile	47	30-37-35	087-38-50	CA Bakersfield	10	35-27-14	118-35-37
AL Montgomery	14	32-22-52	086-17-30	CA Bakersfield	25	35-26-20	118-44-23
AL Montgomery	16	32-20-06	086-17-16	CA Bakersfield	33	35-27-11	118-35-25
AL Montgomery	46	32-24-11	086-11-48	CA Bakersfield	55	35-26-20	118-44-24
AL Montgomery	51	32-08-30	086-44-43	CA Barstow	44	34-36-34	117-17-11
AL Montgomery	57	31-58-32	086-09-46	CA Blythe	4	33-36-36	114-35-44
AL Mount Cheaha	56	33-29-07	085-48-33	CA Calipatria	50	33-03-19	114-49-39
AL Opelika	31	32-38-33	085-14-13	CA Ceres	15	37-35-21	120-57-23
AL Ozark	33	31-12-29	085-36-51	CA Chico	36	40-15-31	122-05-20
AL Selma	55	32-08-58	086-46-48	CA Chico	43	39-57-30	121-42-48
AL Troy	48	31-58-32	086-09-46	CA Clovis	44	36-44-45	119-16-57
AL Tuscaloosa	34	33-28-8	087-25-50	CA Coalinga	22	36-08-30	120-21-18
AL Tuskegee	24	32-03-36	085-57-02	CA Concord	63	37-53-34	121-53-53
AR Arkadelphia	46	33-54-26	093-06-46	CA Corona	39	34-13-27	118-03-45
AR El Dorado	27	33-04-41	092-13-41	CA Cotati	23	38-20-54	122-34-27
AR Fayetteville	15	36-00-57	094-04-59	CA El Centro	22	33-03-06	114-49-41
AR Fayetteville	45	35-48-53	094-01-41	CA El Centro	48	33-03-19	114-49-39
AR Fort Smith	18	35-30-43	094-21-38	CA Eureka	11	40-43-36	123-58-19
AR Fort Smith	21	35-04-16	094-40-46	CA Eureka	16	40-43-52	123-57-06
AR Fort Smith	27	35-42-37	094-08-15	CA Eureka	17	40-43-36	123-58-18
AR Hot Springs	14	34-22-21	093-02-47	CA Eureka	28	40-49-32	124-00-05



State and City	DTV			State and City	DTV		
	Channel	N. Latitude	W. Longitude		Channel	N. Latitude	W. Longitude
CA Fort Bragg	15	39-41-38	123-34-43	CA San Mateo	59	37-41-07	122-26-01
CA Fresno	7	37-04-23	119-25-52	CA Sanger	36	37-04-26	119-25-52
CA Fresno	9	37-04-38	119-26-00	CA Santa Ana	23	34-13-27	118-03-44
CA Fresno	14	37-04-14	119-25-31	CA Santa Barbara	21	34-31-31	119-57-29
CA Fresno	16	36-44-45	119-16-53	CA Santa Barbara	27	34-31-32	119-57-28
CA Fresno	40	36-44-45	119-16-52	CA Santa Maria	19	34-54-37	120-11-08
CA Hanford	20	37-04-22	119-25-53	CA Santa Rosa	54	38-40-10	122-37-52
CA Huntington Beach	48	33-58-19	117-56-57	CA Stockton	25	38-14-24	121-30-03
CA Los Angeles	31	34-13-36	118-03-56	CA Stockton	46	38-14-24	121-30-03
CA Los Angeles	35	34-13-35	118-03-56	CA Stockton	62	37-53-35	121-53-58
CA Los Angeles	36	34-13-32	118-03-52	CA Twentynine Palms	23	34-09-15	116-11-50
CA Los Angeles	41	34-13-26	118-03-45	CA Vallejo	34	37-45-20	122-27-05
CA Los Angeles	42	34-13-36	118-03-59	CA Ventura	49	34-19-51	119-01-22
CA Los Angeles	43	34-13-38	118-04-00	CA Visalia	28	36-40-02	118-52-42
CA Los Angeles	53	34-13-37	118-03-58	CA Visalia	50	36-17-14	118-50-17
CA Los Angeles	59	34-13-26	118-03-44	CA Watsonville	58	36-45-23	121-30-05
CA Los Angeles	60	34-13-57	118-04-18	CO Boulder	15	39-40-18	105-13-12
CA Los Angeles	65	34-13-29	118-03-47	CO Broomfield	38	39-40-55	105-29-49
CA Los Angeles	66	34-13-42	118-04-02	CO Castle Rock	46	39-25-58	104-39-18
CA Merced	38	37-31-59	120-01-36	CO Colorado Springs	10	38-44-41	104-51-41
CA Modesto	18	38-07-07	120-43-23	CO Colorado Springs	22	38-44-43	104-51-40
CA Monterey	31	36-45-23	121-30-05	CO Colorado Springs	24	38-44-45	104-51-38
CA Monterey	32	36-32-05	121-37-14	CO Craig	48	40-30-55	107-32-47
CA Novato	47	38-08-53	122-35-33	CO Denver	16	39-43-46	105-14-08
CA Oakland	56	37-45-20	122-27-05	CO Denver	17	39-43-46	105-14-12
CA Ontario	47	34-13-37	118-03-58	CO Denver	18	39-43-49	105-15-00
CA Oxnard	24	34-19-51	119-01-22	CO Denver	19	39-40-18	105-13-12
CA Palm Springs	46	33-52-00	116-25-56	CO Denver	32	39-4345	105-14-12
CA Palm Springs	52	33-38-55	116-33-34	CO Denver	34	39-43-59	105-14-12
CA Paradise	20	39-57-45	121-42-40	CO Denver	35	39-43-48	105-14-02
CA Porterville	48	36-17-14	118-50-17	CO Denver	40	39-35-59	105-12-35
CA Rancho Palos Verdes	51	33-21-00	118-21-05	CO Denver	43	39-40-24	105-13-03
CA Redding	14	40-36-10	122-39-00	CO Denver	51	39-43-59	105-14-12
CA Redding	18	40-36-09	122-39-01	CO Durango	15	37-15-44	107-53-58
CA Riverside	68	34-11-16	117-41-55	CO Fort Collins	21	40-38-32	104-49-05
CA Sacramento	21	38-15-52	121-29-22	CO Glenwood Springs	23	39-25-05	107-22-01
CA Sacramento	35	38-15-52	121-29-22	CO Glenwood Springs	39	39-32-49	107-19-24
CA Sacramento	48	38-37-49	120-51-20	CO Grand Junction	2	39-05-15	108-33-56
CA Sacramento	53	38-16-18	121-30-18	CO Grand Junction	7	39-02-55	108-15-06
CA Sacramento	55	38-16-18	121-30-18	CO Grand Junction	12	39-04-00	108-44-41
C Sacramento	61	38-14-24	121-30-03	CO Grand Junction	15	39-03-56	108-44-52
CA Salinas	13	36-45-22	121-30-05	CO Grand Junction	17	39-03-14	108-15-13
CA Salinas	43	37-03-30	121-46-33	CO LA Junta	30	37-59-06	103-32-19
CA San Bernardino	26	33-57-57	117-17-05	CO Lamar	50	38-05-14	102-37-02
CA San Bernardino	38	34-11-15	117-41-58	CO Leadville	49	39-14-52	106-17-28
CA San Bernardino	61	34-11-15	117-41-54	CO Longmont	29	40-05-47	104-54-04
CA San Diego	18	32-41-52	116-56-02	CO Montrose	13	38-31-02	107-51-12
CA San Diego	19	32-41-47	116-56-07	CO Pueblo	26	38-44-44	104-51-39
CA San Diego	25	32-50-20	117-14-56	CO Pueblo	42	38-22-25	104-33-27
CA San Diego	30	32-41-47	116-56-07	CO Steamboat Springs	10	40-27-43	106-51-02
CA San Diego	40	32-41-48	116-56-06	CO Sterling	23	40-34-57	103-01-56
CA San Diego	55	32-50-17	117-14-56	CT Bridgeport	42	41-21-43	073-06-48
CA San Francisco	19	37-45-20	122-27-05	CT Bridgeport	52	41-16-43	073-11-08
CA San Francisco	24	37-45-20	122-27-05	CT Hartford	5	41-42-13	072-49-57
CA San Francisco	27	37-41-12	122-26-03	CT Hartford	32	41-46-27	072-48-20
CA San Francisco	29	37-45-20	122-27-05	CT Hartford	33	41-46-30	072-48-20
CA San Francisco	30	37-45-20	122-27-05	CT Hartford	46	41-46-30	072-48-04
CA San Francisco	33	37-45-20	122-27-05	CT New Britain	35	41-42-02	072-49-57
CA San Francisco	39	37-45-20	122-27-05	CT New Haven	6	41-25-23	072-57-06
CA San Francisco	45	37-45-20	122-27-05	CT New Haven	10	41-25-23	072-57-06
CA San Francisco	51	37-29-57	121-52-16	CT New Haven	39	41-19-42	072-54-25
CA San Francisco	57	37-45-20	122-27-05	CT New London	34	41-25-05	072-11-55
CA San Jose	12	37-06-40	121-50-34	CT Norwich	45	41-31-11	072-10-04
CA San Jose	41	37-06-41	121-50-30	CT Waterbury	12	41-31-04	073-01-07
CA San Jose	49	37-29-05	121-51-51	DC Washington	27	38-57-49	077-06-18
CA San Jose	50	37-29-07	121-51-57	DC Washington	33	38-57-49	077-06-18
CA San Jose	52	37-29-17	121-51-59	DC Washington	34	38-57-01	077-04-47
CA San Luis Obispo	15	35-21-37	120-39-17	DC Washington	35	38-57-49	077-06-18
CA San Luis Obispo	34	35-21-38	120-39-21	DC Washington	36	38-57-21	077-04-57

State and City	DTV		N. Latitude W. Longitude
	Channel		
DC Washington	39	38-57-01 077-04-47	
DC Washington	48	38-56-24 077-04-54	
DC Washington	51	38-57-44 077-01-36	
DE Seaford	44	38-39-15 075-36-42	
DE Wilmington	31	39-41-43 075-17-55	
DE Wilmington	55	40-02-30 075-14-24	
FL Boca Raton	44	25-59-34 080-10-27	
FL Bradenton	5	27-29-42 082-34-17	
FL Bradenton	42	27-24-30 082-15-00	
FL Cape Coral	35	26-47-43 081-48-04	
FL Clearwater	21	28-11-04 082-45-39	
FL Clermont	17	28-34-51 081-04-32	
FL Cocoa	30	28-18-26 080-54-48	
FL Cocoa	51	28-18-26 080-54-48	
FL Daytona Beach	11	28-56-17 081-18-58	
FL Daytona Beach	49	29-17-10 081-29-37	
FL Fort Lauerdale	52	25-57-59 080-12-33	
FL Fort Myers	15	26-49-27 081-45-51	
FL Fort Myers	31	26-48-54 081-45-44	
FL Fort Myers	53	26-48-01 081-45-48	
FL Fort Pierce	38	27-26-05 080-21-42	
FL Fort Pierce	50	27-07-20 080-23-21	
FL Fort Walton Beach	25	30-26-36 086-35-56	
FL Fort Walton Beach	40	30-24-09 086-59-35	
FL Fort Walton Beach	49	30-23-43 086-30-11	
FL Gainesville	16	29-32-11 082-24-00	
FL Gainesville	36	29-42-34 082-23-40	
FL High Springs	28	29-37-47 082-34-24	
FL Hollywood	47	25-57-59 080-12-33	
FL Jacksonville	13	30-16-23 081-33-13	
FL Jacksonville	19	30-16-34 081-33-58	
FL Jacksonville	32	30-16-53 081-34-15	
FL Jacksonville	34	30-16-36 081-33-47	
FL Jacksonville	38	30-16-53 081-34-15	
FL Jacksonville	42	30-16-23 081-33-13	
FL Jacksonville	44	30-16-34 081-33-53	
FL Key West	3	24-33-18 081-48-07	
FL Key West	12	24-34-19 081-44-25	
FL Lake Worth	36	26-43-35 080-04-53	
FL Lakeland	19	27-50-15 081-56-53	
FL Leesburg	40	28-55-16 081-19-09	
FL Leesburg	46	28-51-35 081-46-27	
FL Live Oak	48	30-33-08 083-00-32	
FL Marathon	34	24-42-48 081-05-06	
FL Melbourne	20	28-18-26 080-54-48	
FL Melbourne	48	28-05-37 081-07-28	
FL Miami	8	25-57-49 080-12-44	
FL Miami	9	25-57-59 080-12-44	
FL Miami	18	25-57-30 080-12-44	
FL Miami	19	25-58-07 080-13-20	
FL Miami	20	25-57-30 080-12-44	
FL Miami	22	25-58-07 080-13-20	
FL Miami	24	25-58-07 080-13-20	
FL Miami	26	25-41-05 080-18-52	
FL Miami	30	25-32-24 080-28-07	
FL Miami	32	25-57-59 080-12-33	
FL Miami	46	25-59-34 080-10-27	
FL Naples	41	26-25-22 081-37-49	
FL Naples	45	26-25-22 081-37-49	
FL New Smyrna Beach	33	29-10-24 081-09-24	
FL Ocala	31	29-21-32 082-19-53	
FL Orange Park	10	30-04-27 081-48-23	
FL Orlando	14	28-29-21 081-46-13	
FL Orlando	22	28-36-17 081-05-13	
FL Orlando	23	28-36-08 081-05-37	
FL Orlando	39	28-36-08 081-05-37	
FL Orlando	41	28-34-51 081-04-32	
FL Orlando	58	28-36-08 081-05-37	
FL Palm Beach	49	26-45-47 080-12-19	

State and City	DTV		N. Latitude W. Longitude
	Channel		
FL Panama City	19	30-21-09 085-23-26	
FL Panama City	29	30-23-42 085-32-02	
FL Panama City	38	30-22-02 085-55-29	
FL Panama City	42	30-26-00 085-24-51	
FL Panama City Beach	47	30-10-59 085-46-42	
FL Pensacola	17	30-37-38 087-37-31	
FL Pensacola	31	30-26-36 087-14-03	
FL Pensacola	34	30-37-35 087-38-50	
FL Pensacola	45	30-35-18 087-33-16	
FL Sarasota	52	27-33-27 082-21-59	
FL St. Petersburg	24	28-11-04 082-45-39	
FL St. Petersburg	57	27-50-32 082-15-46	
FL St. Petersburg	59	27-49-48 082-15-59	
FL Tallahassee	2	30-35-11 084-14-11	
FL Tallahassee	22	30-40-06 083-58-06	
FL Tallahassee	32	30-21-29 084-36-39	
FL Tampa	7	27-50-32 082-15-46	
FL Tampa	12	27-49-09 082-14-26	
FL Tampa	29	27-50-32 082-15-46	
FL Tampa	34	27-50-53 082-15-48	
FL Tampa	47	27-50-32 082-15-46	
FL Tampa	54	27-49-48 082-15-59	
FL Tequesta	16	27-07-17 080-23-41	
FL Tice	33	26-47-08 081-47-41	
FL Venice	25	27-06-01 082-22-18	
FL West Palm Beach	13	26-35-17 080-12-28	
FL West Palm Beach	27	26-34-37 080-14-32	
FL West Palm Beach	28	26-34-37 080-14-32	
FL West Palm Beach	55	26-35-20 080-12-43	
GA Albany	17	31-19-52 083-51-44	
GA Albany	30	31-19-52 083-51-43	
GA Athens	22	33-48-18 084-08-40	
GA Athens	48	34-07-32 083-51-31	
GA Atlanta	10	33-45-24 084-19-55	
GA Atlanta	19	33-48-27 084-20-26	
GA Atlanta	20	33-46-57 084-23-20	
GA Atlanta	21	33-45-35 084-20-07	
GA Atlanta	25	33-48-27 084-20-26	
GA Atlanta	27	33-47-49 084-20-00	
GA Atlanta	39	33-45-51 084-21-42	
GA Atlanta	41	34-03-59 084-27-17	
GA Atlanta	43	33-45-34 084-23-19	
GA Augusta	30	33-25-15 081-50-19	
GA Augusta	31	33-24-29 081-50-36	
GA Augusta	42	33-24-15 081-50-19	
GA Augusta	51	33-25-00 081-50-06	
GA Bainbridge	50	30-39-01 084-12-13	
GA Baxley	35	31-45-53 082-13-38	
GA Brunswick	24	31-08-22 081-56-15	
GA Chatsworth	33	34-45-06 084-42-54	
GA Cochran	7	32-28-11 083-15-17	
GA Columbus	15	32-19-25 084-46-46	
GA Columbus	23	32-51-08 084-42-04	
GA Columbus	35	32-27-28 084-53-08	
GA Columbus	47	32-19-25 084-46-46	
GA Columbus	49	32-27-40 084-52-43	
GA Cordele	51	31-54-15 083-48-12	
GA Dalton	16	34-57-07 085-22-58	
GA Dawson	26	31-56-15 084-33-15	
GA Macon	16	32-44-58 083-33-35	
GA Macon	40	32-45-12 083-33-46	
GA Macon	45	32-45-10 083-33-32	
GA Macon	50	32-44-58 083-33-35	
GA Monroe	44	33-44-22 084-00-14	
GA Pelham	20	31-08-05 084-06-16	
GA Perry	32	32-45-09 08-33-35	
GA Rome	51	34-18-47 084-38-55	
GA Savannah	15	32-03-14 081-21-01	
GA Savannah	23	32-03-30 081-20-20	

State and City	DTV			State and City	DTV		
	Channel	N. Latitude	W. Longitude		Channel	N. Latitude	W. Longitude
GA Savannah	39	32-03-32	081-17-57	IA Sioux City	49	42-35-16	096-13-22
GA Savannah	46	32-08-48	081-37-05	IA Waterloo	35	42-18-59	091-51-31
GA Thomasville	52	30-40-13	083-56-26	IA Waterloo	55	42-24-04	091-50-43
GA Toccoa	24	34-36-44	083-22-05	ID Boise	21	43-45-16	116-05-56
GA Valdosta	43	31-10-18	083-21-57	ID Boise	26	43-45-16	116-05-56
GA Waycross	18	31-13-17	082-34-24	ID Boise	28	43-45-17	116-05-53
GA Wrens	36	33-15-33	082-17-09	ID Burley	48	42-32-05	113-47-46
HI Hilo	8	19-43-00	155-08-13	ID Caldwell	10	43-45-18	116-05-52
HI Hilo	18	19-43-57	155-04-04	ID Coeur D'Alene	45	47-43-54	116-43-47
HI Hilo	19	19-43-44	155-05-31	ID Filer	18	42-43-47	114-24-52
HI Hilo	21	19-43-57	155-04-04	ID Idaho Falls	9	43-30-02	112-39-36
HI Hilo	22	19-43-51	155-04-11	ID Idaho Falls	36	43-29-51	112-39-50
HI Hilo	23	19-43-51	155-04-11	ID Lewiston	32	46-27-27	117-05-56
HI Hilo	31	19-43-44	155-05-31	ID Moscow	35	46-40-54	116-58-13
HI Hilo	39	19-43-44	155-05-31	ID Nampa	24	43-45-20	116-05-55
HI Honolulu	8	21-17-46	157-50-36	ID Nampa	44	43-45-18	116-05-52
HI Honolulu	18	21-17-46	157-50-36	ID Pocatello	17	43-30-02	112-39-36
HI Honolulu	19	21-23-51	158-06-01	ID Pocatello	23	42-55-15	112-20-44
HI Honolulu	22	21-17-39	157-50-18	ID Twin Falls	16	42-43-48	114-24-52
HI Honolulu	23	21-24-03	158-06-10	ID Twin Falls	22	42-43-47	114-24-52
HI Honolulu	27	21-23-45	158-05-58	ID Twin Falls	34	42-43-42	114-24-43
HI Honolulu	31	21-18-49	157-51-43	ID Weiser	34	44-14-49	116-58-12
HI Honolulu	33	21-18-49	157-51-43	IL Aurora	59	41-52-44	087-38-10
HI Honolulu	35	21-17-09	157-50-19	IL Bloomington	28	40-38-45	089-10-45
HI Honolulu	39	21-23-45	158-05-58	IL Carbondale	40	38-06-15	089-14-37
HI Honolulu	40	21-17-37	157-50-34	IL Champaign	41	40-04-11	087-54-45
HI Honolulu	43	21-23-45	158-05-58	IL Champaign	48	40-06-23	088-26-59
HI Kailua Kona	25	19-42-56	155-55-00	IL Charleston	50	39-28-43	088-10-21
HI Kaneohe	41	21-19-49	157-45-24	IL Chicago	3	41-53-56	087-37-23
HI Lihue	7	21-58-41	159-22-16	IL Chicago	19	41-53-56	087-37-23
HI Lihue	12	21-58-41	159-22-16	IL Chicago	21	41-53-56	087-37-23
HI Lihue	28	21-58-41	159-22-16	IL Chicago	27	41-52-44	087-38-10
HI Lihue	45	21-58-41	159-22-16	IL Chicago	29	41-52-44	087-38-10
HI Wailuku	16	20-42-34	156-15-54	IL Chicago	31	41-53-56	087-37-23
HI Wailuku	20	20-49-24	156-27-27	IL Chicago	43	41-53-56	087-37-23
HI Wailuku	24	20-42-41	156-15-35	IL Chicago	45	41-53-56	087-37-23
HI Wailuku	28	20-53-25	156-30-22	IL Chicago	47	41-52-44	087-38-10
HI Wailuku	29	20-42-16	156-16-35	IL Chicago	52	41-52-44	087-38-10
HI Wailuku	30	20-42-40	156-15-34	IL Decatur	18	39-57-07	088-49-55
HI Wailuku	34	20-53-25	156-30-22	IL Decatur	22	39-57-03	088-52-05
HI Wailuku	36	20-42-41	156-15-26	IL East St. Louis	47	38-23-18	090-29-16
IA Ames	59	41-48-33	093-36-53	IL Freeport	41	42-17-48	089-10-15
IA Burlington	41	40-49-25	091-08-22	IL Harrisburg	34	37-36-46	088-52-20
IA Cedar Rapids	27	42-05-25	092-05-13	IL Jacksonville	15	39-44-08	090-10-32
IA Cedar Rapids	47	42-17-17	091-52-54	IL Joliet	53	41-53-56	087-37-23
IA Cedar Rapids	51	42-17-39	091-53-10	IL Lasalle	10	41-16-51	088-56-13
IA Cedar Rapids	52	42-18-59	091-51-31	IL Macomb	21	40-23-53	090-43-56
IA Centerville	44	40-43-30	092-52-12	IL Marion	17	37-33-26	089-01-24
IA Council Bluffs	33	41-15-15	095-50-07	IL Moline	23	41-19-17	090-22-47
IA Davenport	34	41-31-58	090-34-40	IL Moline	38	41-18-44	090-22-47
IA Davenport	49	41-19-17	090-22-47	IL Mount Vernon	21	38-32-39	088-55-26
IA Davenport	56	41-32-49	090-28-35	IL Olney	19	38-50-18	088-07-46
IA Des Moines	16	41-48-01	093-36-27	IL Peoria	30	40-38-07	089-32-19
IA Des Moines	19	41-48-33	093-36-53	IL Peoria	39	40-43-26	089-29-04
IA Des Moines	26	41-48-35	093-37-16	IL Peoria	40	40-39-11	089-35-14
IA Des Moines	31	41-48-35	093-37-16	IL Peoria	46	40-37-44	089-34-12
IA Des Moines	50	41-48-33	093-36-53	IL Peoria	57	40-37-48	089-32-51
IA Dubuque	43	42-31-5	090-37-16	IL Quincy	32	39-58-18	091-19-42
IA Fort Dodge	25	42-49-03	094-24-41	IL Quincy	34	39-58-44	091-18-33
IA Iowa City	25	41-45-26	091-31-31	IL Quincy	54	39-57-03	091-19-54
IA Iowa City	45	41-43-15	091-20-30	IL Rock Island	58	41-32-49	090-28-35
IA Mason City	18	43-22-20	092-49-59	IL Rockford	16	42-17-14	089-10-15
IA Mason City	42	43-22-20	092-49-59	IL Rockford	42	42-17-26	089-09-51
IA Ottumwa	14	41-11-42	091-57-15	IL Rockford	54	42-17-50	089-14-24
IA Red Oak	35	41-20-40	095-15-21	IL Springfield	42	39-48-15	089-27-40
IA Sioux City	28	42-30-53	096-18-13	IL Springfield	44	39-47-56	089-26-45
IA Sioux City	30	42-35-12	096-13-57	IL Springfield	53	39-47-27	089-30-53
IA Sioux City	39	42-30-53	096-18-13	IL Urbana	26	40-18-42	087-54-48
IA Sioux City	41	42-35-12	096-13-57	IL Urbana	33	40-02-18	088-40-10

State and City	DTV			State and City	DTV		
	Channel	N. Latitude	W. Longitude		Channel	N. Latitude	W. Longitude
IN Angola	12	41-27-15	084-48-10	KY Bowling Green	16	37-02-10	086-10-20
IN Bloomington	14	39-08-32	086-29-43	KY Bowling Green	18	37-03-52	086-26-07
IN Bloomington	27	39-24-16	086-08-37	KY Bowling Green	33	37-03-52	086-26-07
IN Bloomington	53	39-24-27	086-08-52	KY Bowling Green	48	37-05-22	086-38-05
IN Bloomington	56	39-24-12	086-08-50	KY Campbellsville	19	37-10-05	085-18-32
IN Elkhart	58	41-36-58	086-11-38	KY Covington	24	39-01-50	084-30-23
IN Evansville	28	38-01-27	087-21-43	KY Danville	4	37-47-18	084-40-49
IN Evansville	45	37-53-17	087-32-37	KY Elizabethtown	43	37-40-55	085-50-32
IN Evansville	54	38-01-27	087-21-43	KY Harlan	51	36-48-00	083-22-36
IN Evansville	58	37-53-14	087-31-07	KY Hazard	12	37-11-38	083-10-52
IN Evansville	59	37-51-56	087-34-04	KY Hazard	16	37-11-34	083-11-16
IN Fort Wayne	4	41-05-38	085-10-48	KY Lexington	22	38-03-56	084-29-13
IN Fort Wayne	19	41-05-40	085-10-36	KY Lexington	40	38-02-03	084-23-39
IN Fort Wayne	24	41-06-08	085-11-04	KY Lexington	42	37-52-45	084-19-33
IN Fort Wayne	36	41-06-33	085-11-44	KY Lexington	59	38-02-22	084-24-11
IN Fort Wayne	40	41-06-13	085-11-28	KY Louisville	8	38-01-59	085-45-16
IN Gary	17	41-20-56	087-24-02	KY Louisville	17	38-22-02	085-49-53
IN Gary	51	41-52-44	087-38-10	KY Louisville	26	38-22-10	085-50-02
IN Hammond	36	41-33-10	087-47-09	KY Louisville	38	38-22-02	085-49-53
IN Indianapolis	9	39-53-25	086-12-20	KY Louisville	47	38-27-23	085-25-28
IN Indianapolis	16	39-53-39	086-12-19	KY Louisville	49	38-21-00	085-50-57
IN Indianapolis	21	39-53-59	086-12-01	KY Louisville	55	38-21-23	085-50-52
IN Indianapolis	25	39-53-59	086-12-02	KY Madisonville	20	37-24-46	087-31-32
IN Indianapolis	44	39-50-25	086-10-34	KY Madisonville	42	37-11-25	087-30-47
IN Indianapolis	45	39-53-20	086-12-07	KY Morehead	15	38-10-38	083-24-18
IN Indianapolis	46	39-55-43	086-10-55	KY Morehead	21	38-17-25	083-22-56
IN Kokomo	54	40-20-20	085-57-15	KY Murray	36	36-41-33	088-32-10
IN Lafayette	11	40-23-20	086-36-46	KY Newport	29	39-07-19	084-32-52
IN Marion	32	40-08-57	085-56-15	KY Owensboro	30	3-51-06	087-19-43
IN Muncie	52	40-09-38	085-22-42	KY Owenton	44	38-31-32	084-48-40
IN Richmond	39	39-30-44	084-38-09	KY Paducah	32	37-11-31	088-58-53
IN Salem	51	38-21-00	085-50-57	KY Paducah	41	37-05-38	088-40-19
IN South Bend	30	41-37-00	086-13-01	KY Paducah	50	37-23-42	088-56-23
IN South Bend	35	41-36-59	086-11-43	KY Pikeville	24	37-17-06	082-31-29
IN South Bend	42	41-36-20	086-12-45	KY Somers	14	37-10-00	084-49-28
IN South Bend	48	41-35-43	086-09-38	LA Alexandria	26	31-33-56	092-32-50
IN Terre Haute	24	39-14-36	087-23-07	LA Alexandria	32	31-33-54	092-33-00
IN Terre Haute	36	39-14-33	087-23-29	LA Alexandria	35	31-02-15	092-29-45
IN Terre Haute	39	39-13-58	087-23-49	LA Baton Rouge	25	30-22-22	091-12-16
IN Vincennes	52	38-39-06	087-28-37	LA Baton Rouge	34	30-19-35	091-16-36
KS Colby	17	39-15-25	101-21-10	LA Baton Rouge	42	30-17-49	091-11-40
KS Ensign	5	37-38-28	100-20-40	LA Baton Rouge	45	30-19-35	091-16-36
KS Fort Scott	40	37-26-36	094-39-31	LA Baton Rouge	46	30-21-58	091-12-47
KS Garden City	16	37-46-40	100-52-08	LA Columbia	57	32-03-19	092-11-12
KS Garden City	18	37-39-01	100-40-06	LA Lafayette	16	30-21-44	092-12-53
KS Garden City	42	37-46-06	100-55-04	LA Lafayette	23	30-02-38	092-22-14
KS Goodland	14	39-28-09	101-33-20	LA Lafayette	28	30-02-19	092-22-15
KS Great Bend	22	38-25-54	098-46-18	LA Lafayette	56	30-19-18	092-22-41
KS Hays	16	38-46-16	098-44-17	LA Lake Charles	20	30-23-59	093-00-10
KS Hays	20	38-53-01	099-20-15	LA Lake Charles	30	30-17-26	093-34-35
KS Hutchinson	19	38-03-40	097-45-49	LA Lake Charles	8	30-23-43	093-00-08
KS Hutchinson	29	38-03-21	097-46-35	LA Monroe	19	32-11-45	092-04-10
KS Hutchinson	35	37-56-23	097-33-42	LA Monroe	55	32-11-45	092-04-10
KS Lakin	23	37-49-38	101-06-35	LA New Orleans	11	29-57-14	089-56-58
KS Lawrence	36	38-53-46	095-10-29	LA New Orleans	14	29-55-11	090-01-29
KS Oakley	40	39-07-42	100-51-12	LA New Orleans	15	29-58-55	089-56-58
KS Pittsburg	30	37-13-15	094-42-25	LA New Orleans	29	29-57-14	089-56-58
KS Salina	17	39-06-16	097-23-15	LA New Orleans	30	29-54-23	090-02-23
KS Topeka	23	39-03-51	095-45-49	LA New Orleans	31	29-58-57	089-57-09
KS Topeka	28	39-05-34	095-47-04	LA New Orleans	40	29-58-41	089-56-26
KS Topeka	44	39-00-19	096-02-58	LA New Orleans	43	29-57-01	089-57-28
KS Topeka	48	39-01-34	095-54-58	LA New Orleans	50	29-55-11	090-01-29
KS Wichita	21	37-46-54	097-31-10	LA Shreveport	17	32-40-29	093-55-59
KS Wichita	26	37-56-23	097-30-42	LA Shreveport	25	32-40-41	093-55-35
KS Wichita	31	37-47-47	097-31-59	LA Shreveport	28	32-41-08	093-56-00
KS Wichita	45	37-46-37	097-31-01	LA Shreveport	34	32-40-00	093-56-02
KY Ashland	26	38-27-43	082-37-12	LA Shreveport	44	32-40-00	093-56-02
KY Ashland	44	38-25-11	082-24-06	LA Slidell	24	30-17-08	089-54-18
KY Beattyville	7	37-36-23	083-41-16	LA West Monroe	36	32-05-41	092-10-39

State and City	DTV		State and City	DTV	
	Channel	N. Latitude W. Longitude		Channel	N. Latitude W. Longitude
LA West Monroe	38	32-30-21 092-08-54	MI Detroit	45	42-28-58 083-12-19
MA Adams	36	42-38-14 073-10-07	MI Detroit	58	42-27-38 083-12-50
MA Boston	19	42-18-37 071-14-14	MI East Lansing	55	42-42-08 084-24-51
MA Boston	20	42-18-37 071-14-14	MI Escanaba	48	46-08-04 086-56-52
MA Boston	30	42-18-37 071-14-14	MI Flint	16	43-13-18 084-03-14
MA Boston	31	42-18-12 071-13-08	MI Flint	36	43-13-48 084-03-35
MA Boston	32	42-20-50 071-04-59	MI Flint	52	42-53-57 083-27-42
MA Boston	39	42-18-12 071-13-08	MI Grand Rapids	7	42-41-13 085-30-35
MA Boston	42	42-18-40 071-13-00	MI Grand Rapids	11	42-57-35 085-53-45
MA Boston	43	42-18-37 071-14-14	MI Grand Rapids	19	42-41-15 085-31-57
MA Cambridge	41	42-18-12 071-13-08	MI Grand Rapids	39	43-18-34 085-54-44
MA Lawrence	18	42-21-29 071-03-40	MI Iron Mountain	22	45-49-10 088-02-35
MA Marlborough	23	42-23-01 071-29-35	MI Jackson	34	42-14-08 084-24-00
MA New Bedford	22	41-46-39 070-55-41	MI Kalamazoo	2	42-37-56 085-32-16
MA New Bedford	49	41-35-48 071-11-24	MI Kalamazoo	5	42-18-24 085-39-26
MA Norwell	52	42-01-36 071-03-35	MI Kalamazoo	45	42-33-52 085-27-31
MA Springfield	11	42-05-05 072-42-14	MI Lansing	38	42-28-03 084-39-06
MA Springfield	55	42-14-30 72-38-57	MI Lansing	51	42-25-11 084-31-26
MA Springfield	58	42-14-30 072-38-54	MI Lansing	59	42-41-14 084-22-35
MA Vineyard Haven	40	41-41-19 070-20-49	MI Manistee	17	44-03-57 086-19-58
MA Worcester	29	42-20-07 071-42-54	MI Marquette	33	46-21-09 087-51-32
MA Worcester	47	42-08-32 072-13-28	MI Marquette	35	46-20-11 087-50-55
MD Annapolis	42	39-00-36 076-36-33	MI Mount Clemens	39	42-33-15 082-53-15
MD Baltimore	29	39-27-01 076-46-37	MI Mount Pleasant	56	43-34-24 084-46-21
MD Baltimore	38	39-20-05 076-39-03	MI Muskegon	24	42-57-25 085-54-07
MD Baltimore	40	39-17-15 076-45-38	MI Onondaga	57	42-26-33 084-34-21
MD Baltimore	41	39-17-15 076-45-38	MI Saginaw	30	43-13-01 083-43-17
MD Baltimore	46	39-20-10 076-38-59	MI Saginaw	48	43-13-18 084-03-14
MD Baltimore	52	39-20-05 076-39-03	MI Sault Ste. Marie	49	46-03-49 084-06-08
MD Baltimore	59	39-20-05 076-39-03	MI Sault Ste. Marie	56	46-03-06 084-06-40
MD Frederick	28	39-17-53 077-20-35	MI Traverse City	31	44-44-54 085-04-08
MD Hagerstown	16	39-53-31 077-58-02	MI Traverse City	50	44-16-33 085-42-49
MD Hagerstown	44	39-39-04 077-58-15	MI University Center	18	43-33-43 083-58-54
MD Hagerstown	55	39-39-35 077-57-57	MI Vanderbilt	59	45-10-12 084-45-04
MD Oakland	54	39-24-14 079-17-37	MN Alexandria	14	45-41-59 095-10-36
MD Salisbury	21	38-30-16 075-38-35	MN Alexandria	24	45-41-03 095-08-14
MD Salisbury	53	38-30-06 075-44-09	MN Appleton	31	45-10-03 096-00-02
MD Salisbury	56	38-23-09 075-35-33	MN Austin	20	43-40-34 093-00-09
ME Augusta	17	44-09-16 070-00-37	MN Austin	33	43-37-42 093-09-12
ME Bangor	14	44-45-35 068-34-01	MN Bemidji	18	47-42-03 094-29-15
ME Bangor	19	44-42-13 069-04-47	MN Brainerd	28	46-25-21 094-27-41
ME Bangor	25	44-44-10 068-40-17	MN Crookston	16	47-46-30 096-36-36
ME Biddeford	45	43-25-00 070-48-09	MN Duluth	17	46-47-41 092-07-05
ME Calais	15	45-01-44 067-19-24	MN Duluth	33	46-47-07 092-07-15
ME Lewiston	28	43-51-06 070-19-40	MN Duluth	38	46-47-31 092-07-21
ME Orono	22	44-45-36 068-33-59	MN Duluth	43	46-47-13 092-07-17
ME Poland Spring	46	44-16-13 071-18-13	MN Hibbing	36	47-22-52 092-57-18
ME Portland	4	43-51-06 070-19-40	MN Hibbing	51	47-25-43 092-56-21
ME Portland	38	43-55-28 070-29-28	MN Mankato	38	43-56-14 094-24-41
ME Portland	44	43-51-32 070-42-40	MN Minneapolis	21	45-03-30 093-07-27
ME Presque Isle	16	46-43-44 068-00-07	MN Minneapolis	22	45-03-30 093-07-27
ME Presque Isle	20	46-33-05 067-48-37	MN Minneapolis	26	45-03-30 093-07-27
MI Alpena	13	44-42-25 083-31-23	MN Minneapolis	32	45-03-45 093-08-21
MI Alpena	57	45-08-17 084-09-44	MN Minneapolis	35	45-03-44 093-08-21
MI Ann Arbor	33	42-22-25 084-04-14	MN Minneapolis	44	45-03-44 093-08-21
MI Bad Axe	15	43-41-26 082-56-29	MN Redwood Falls	27	44-29-03 095-29-27
MI Battle Creek	20	42-34-15 085-28-11	MN Rochester	36	43-34-15 092-25-37
MI Battle Creek	44	42-40-45 085-03-57	MN Rochester	46	44-02-39 092-23-56
MI Bay City	22	43-28-13 083-50-35	MN St. Cloud	40	45-23-00 093-42-30
MI Cadillac	40	44-08-12 085-20-33	MN St. Paul	16	45-03-29 093-07-27
MI Cadillac	47	44-08-53 085-20-45	MN St. Paul	34	45-03-30 093-07-27
MI Cadillac	58	44-08-22 085-20-28	MN St. Paul	50	45-03-45 093-08-22
MI Calumet	18	47-02-12 088-41-42	MN Thief River Falls	57	48-01-19 096-22-12
MI Cheboygan	14	45-39-01 084-20-37	MN Walker	20	46-56-03 094-27-25
MI Detroit	14	42-29-01 083-18-44	MN Worthington	15	43-53-52 095-56-50
MI Detroit	21	42-29-01 083-18-44	MO Birch Tree	7	36-59-30 091-29-36
MI Detroit	41	42-28-15 083-15-00	MO Bowling Green	50	39-20-2 091-12-02
MI Detroit	43	42-29-01 083-18-44	MO Cape Girardeau	22	37-24-23 089-33-44
MI Detroit	44	42-26-52 083-10-23	MO Cape Girardeau	57	37-25-46 089-30-14

State and City	DTV			State and City	DTV		
	Channel	N. Latitude	W. Longitude		Channel	N. Latitude	W. Longitude
MO Columbia	22	38-46-29	092-33-22	MT Great Falls	44	47-32-09	111-17-02
MO Columbia	36	38-53-16	092-15-48	MT Great Falls	45	47-36-26	111-21-27
MO Hannibal	29	39-58-22	091-19-54	MT Hardin	22	45-44-29	108-08-19
MO Jefferson City	12	38-41-28	092-05-43	MT Helena	14	46-49-35	111-42-33
MO Jefferson City	20	38-42-16	092-05-20	MT Helena	29	46-35-47	112-17-47
MO Joplin	25	37-04-36	094-32-10	MT Kalispell	38	48-00-48	114-21-55
MO Joplin	43	37-04-36	094-32-10	MT Miles City	13	46-24-48	105-51-04
MO Joplin	46	37-04-33	094-33-16	MT Miles City	39	46-24-34	105-50-30
MO Kansas City	14	39-05-01	094-30-57	MT Missoula	27	46-48-09	113-58-21
MO Kansas City	18	39-04-59	094-28-49	MT Missoula	35	47-01-06	114-00-41
MO Kansas City	24	39-04-15	094-34-57	MT Missoula	36	47-01-10	114-00-46
MO Kansas City	31	38-52-16	094-26-15	MT Missoula	40	47-01-04	114-00-47
MO Kansas City	34	39-04-20	094-35-45	NC Asheville	25	35-25-32	082-45-25
MO Kansas City	42	39-04-20	094-35-45	NC Asheville	45	35-13-20	082-32-58
MO Kansas City	47	39-04-59	094-28-49	NC Asheville	56	35-25-32	082-45-25
MO Kansas City	51	39-01-19	094-30-50	NC Asheville	57	35-10-56	082-40-56
MO Kirksville	33	40-31-47	092-26-29	NC Belmont	47	35-21-44	081-09-19
MO Poplar Bluff	18	36-48-04	090-27-06	NC Burlington	14	35-56-22	079-25-47
MO Sedalia	15	38-44-47	093-16-30	NC Chapel Hill	59	35-51-59	079-10-00
MO Springfield	19	37-13-08	092-56-56	NC Charlotte	22	35-20-49	081-10-15
MO Springfield	23	37-13-08	092-56-56	NC Charlotte	23	35-21-51	081-11-13
MO Springfield	28	37-11-40	092-56-04	NC Charlotte	24	35-17-14	080-41-45
MO Springfield	44	37-10-11	092-56-30	NC Charlotte	27	35-15-56	080-44-06
MO Springfield	52	37-13-08	092-56-56	NC Charlotte	34	35-15-41	080-43-38
MO St. Joseph	21	39-39-03	094-40-11	NC Columbia	20	35-53-59	076-20-52
MO St. Joseph	53	39-46-12	094-47-53	NC Concord	44	35-21-30	080-36-37
MO St. Louis	14	38-21-40	090-32-58	NC Durham	27	35-40-35	078-32-09
MO St. Louis	26	38-31-47	090-17-58	NC Durham	52	35-40-05	078-31-58
MO St. Louis	31	38-34-50	090-19-45	NC Fayetteville	36	34-53-05	079-04-31
MO St. Louis	35	38-34-05	090-19-55	NC Fayetteville	38	35-30-45	078-58-40
MO St. Louis	39	38-28-56	090-23-53	NC Goldsboro	55	35-37-01	078-28-38
MO St. Louis	43	38-32-07	090-22-23	NC Greensboro	33	35-52-13	079-50-25
MO St. Louis	56	38-31-47	090-17-58	NC Greensboro	43	36-08-58	080-03-21
MS Biloxi	16	30-45-14	088-56-44	NC Greensboro	51	35-52-13	079-50-25
MS Biloxi	39	30-43-25	089-05-29	NC Greenville	10	35-21-55	077-23-38
MS Booneville	55	34-40-00	088-45-05	NC Greenville	21	35-26-44	077-22-08
MS Bude	18	31-22-19	090-45-05	NC Greenville	23	35-33-01	077-36-02
MS Columbus	35	33-45-06	088-52-40	NC Hickory	40	35-43-57	081-19-52
MS Greenville	17	33-39-26	090-42-18	NC High Point	35	35-48-47	079-50-36
MS Greenwood	25	33-22-34	090-32-32	NC Jacksonville	34	34-29-38	077-29-18
MS Greenwood	54	33-22-23	090-32-31	NC Jacksonville	44	35-06-18	077-20-15
MS Gulfport	48	30-44-48	089-03-30	NC Kannapolis	50	35-15-41	080-43-38
MS Hattiesburg	58	31-24-20	089-14-13	NC Lexington	19	35-58-09	079-49-29
MS Holly Springs	41	34-59-20	089-41-13	NC Linville	54	36-03-47	081-50-33
MS Jackson	20	32-12-46	090-22-54	NC Lumberton	25	34-47-51	079-02-41
MS Jackson	21	32-16-39	090-17-41	NC Morehead City	24	3453-01	076-30-21
MS Jackson	41	32-14-26	090-24-15	NC New Bern	48	35-06-18	077-20-15
MS Jackson	51	32-12-46	090-22-54	NC Raleigh	49	35-40-35	078-32-09
MS Jackson	52	32-14-26	090-24-15	NC Raleigh	53	35-40-35	078-32-09
MS Laurel	28	31-27-12	089-17-05	NC Raleigh	57	35-42-52	078-49-01
MS Meridian	26	32-18-43	088-41-33	NC Roanoke Rapids	39	36-17-28	077-50-10
MS Meridian	31	32-19-34	088-41-12	NC Rocky Mount	15	36-06-11	078-11-29
MS Meridian	44	32-08-18	089-05-36	NC Washington	32	35-21-55	077-23-38
MS Meridian	49	32-19-38	088-41-28	NC Wilmington	29	34-07-51	078-11-16
MS Mississippi State	38	33-21-07	089-08-56	NC Wilmington	30	34-07-51	078-11-16
MS Natchez	49	3140-08	091-41-30	NC Wilmington	46	34-07-51	078-11-16
MS Oxford	36	34-17-26	089-42-24	NC Wilmington	54	34-34-43	078-26-13
MS Tupelo	57	33-47-40	089-05-16	NC Wilson	42	35-49-53	078-08-50
MS West Point	16	33-47-40	089-05-16	NC Winston-Salem	29	36-22-37	080-22-08
MT Billings	11	45-45-35	108-27-14	NC Winston-Salem	31	36-22-31	080-22-27
MT Billings	17	45-46-00	108-27-27	NC Winston-Salem	32	36-22-34	080-22-14
MT Billings	18	45-48-26	108-20-25	ND Bismarck	16	46-35-11	100-48-20
MT Bozeman	16	45-40-24	110-52-02	ND Bismarck	22	46-35-17	100-48-07
MT Bozeman	20	45-40-00	111-03-10	ND Bismarck	23	46-35-17	100-48-26
MT Butte	2	46-00-27	112-26-30	ND Bismarck	31	46-36-19	100-48-30
MT Butte	15	46-00-27	112-26-30	ND Devils Lake	59	48-08-24	097-59-38
MT Butte	19	46-00-24	112-26-30	ND Devils Lake	25	48-06-42	098-51-29
MT Glendive	15	47-03-15	104-40-45	ND Dickinson	18	46-56-49	102-59-17
MT Great Falls	39	47-32-08	111-17-02	ND Dickinson	19	46-43-30	102-54-58

State and City	DTV			State and City	DTV		
	Channel	N. Latitude	W. Longitude		Channel	N. Latitude	W. Longitude
ND Dickinson	20	46-43-34	102-54-56	NM Albuquerque	17	35-12-51	106-27-01
ND Ellendale	20	46-17-55	098-51-58	NM Albuquerque	21	35-12-53	106-27-01
ND Fargo	19	46-40-26	096-13-40	NM Albuquerque	24	35-12-54	106-27-02
ND Fargo	21	47-00-43	097-11-58	NM Albuquerque	25	35-12-44	106-26-57
ND Fargo	23	47-00-48	097-11-37	NM Albuquerque	26	35-12-42	106-26-57
ND Fargo	58	47-20-36	097-17-17	NM Albuquerque	42	35-12-41	106-26-56
ND Grand Forks	56	48-08-24	097-59-38	NM Albuquerque	51	35-12-40	106-26-57
ND Jamestown	14	46-55-30	098-46-21	NM Carlsbad	19	32-47-39	104-12-27
ND Minot	15	48-03-13	101-23-05	NM Clovis	20	34-11-34	103-16-44
ND Minot	45	48-03-02	101-20-29	NM Farmington	8	36-41-48	108-10-39
ND Minot	57	48-03-03	101-23-24	NM Farmington	17	36-41-43	108-13-14
ND Minot	58	48-12-56	101-19-05	NM Hobbs	16	32-43-28	103-05-46
ND Pembina	15	48-59-42	097-24-26	NM Las Cruces	23	32-15-24	106-58-34
ND Valley City	38	47-16-45	097-20-18	NM Las Cruces	36	32-02-30	106-27-41
ND Williston	14	48-08-22	103-53-24	NM Portales	32	33-33-19	103-39-03
ND Williston	51	48-08-30	103-53-34	NM Roswell	28	33-24-58	104-33-59
ND Williston	52	48-08-02	103-51-36	NM Roswell	35	33-22-32	103-46-05
NE Albion	23	41-56-26	098-16-56	NM Roswell	41	33-03-20	103-49-12
NE Alliance	24	41-50-24	103-03-18	NM Santa Fe	10	35-47-15	106-31-35
NE Bassett	15	42-20-05	099-29-01	NM Santa Fe	27	35-12-55	106-27-02
NE Grand Island	19	40-43-43	098-34-12	NM Santa Fe	29	35-42-05	105-57-58
NE Grand Island	32	40-35-20	098-48-10	NM Silver City	12	32-51-46	108-14-28
NE Hastings	14	40-46-17	098-05-22	NM Silver City	33	32-46-12	108-16-41
NE Hastings	21	40-39-06	098-23-04	NM Socorro	31	34-03-29	106-53-29
NE Hayes Center	18	40-37-29	101-01-58	NV Elko	8	40-41-53	115-54-13
NE Kearney	36	40-39-28	098-52-04	NV Elko	15	40-50-00	115-45-41
NE Lexington	26	40-23-05	099-27-30	NV Henderson	24	36-00-26	115-00-23
NE Lincoln	25	40-48-08	097-10-46	NV Las Vegas	2	36-0030	115-00-20
NE Lincoln	31	40-52-59	097-18-20	NV Las Vegas	7	35-56-44	115-02-33
NE Lincoln	40	41-08-18	096-27-19	NV Las Vegas	11	36-00-27	115-00-24
NE Mccook	12	39-49-48	100-42-04	NV Las Vegas	16	35-56-44	115-02-31
NE Merriman	17	42-40-38	101-42-36	NV Las Vegas	17	35-56-43	115-02-32
NE Norfolk	16	42-14-15	097-16-41	NV Las Vegas	22	36-00-26	115-00-24
NE North Platte	16	41-01-16	101-09-10	NV Las Vegas	29	35-56-44	115-02-31
NE North Platte	22	41-12-13	100-43-58	NV Paradise	40	36-00-31	115-00-22
NE Omaha	17	41-15-28	096-00-32	NV Reno	15	39-35-01	119-47-52
NE Omaha	20	41-18-32	096-01-37NE	NV Reno	22	39-35-04	119-47-51
Omaha	22	41-18-40	096-01-37	NV Reno	23	39-18-49	119-53-00
NE Omaha	38	41-04-15	096-13-30	NV Reno	26	39-18-47	119-52-59
NE Omaha	43	41-04-15	096-13-30	NV Reno	32	39-15-29	119-42-37
NE Omaha	45	41-18-25	096-01-37	NV Reno	34	39-35-03	119-48-06
NE Scottsbluff	20	42-10-21	103-13-57	NV Reno	44	39-35-25	119-55-40
NE Scottsbluff	29	41-59-58	103-39-55	NV Winnemucca	12	41-00-41	117-45-59
NE Superior	34	40-05-13	097-55-13	NY Albany	4	42-37-01	074-00-46
NH Berlin	15	44-22-16	071-12-53	NY Albany	15	42-47-08	073-37-44
NH Concord	33	43-11-04	071-19-12	NY Albany	16	42-38-15	073-59-54
NH Derry	35	42-44-07	071-23-36	NY Amsterdam	50	42-59-05	074-10-49
NH Durham	57	43-10-33	071-12-29	NY Batavia	53	42-53-42	078-00-56
NH Keene	49	43-02-00	072-22-04	NY Binghamton	4	42-03-39	075-56-36
NH Littleton	48	44-21-14	071-44-23	NY Binghamton	7	42-03-33	075-57-06
NH Manchester	59	42-58-59	071-35-19	NY Binghamton	8	42-03-22	075-56-39
NH Merrimack	34	42-59-02	071-35-20	NY Binghamton	42	42-03-22	075-56-39
NJ Atlantic City	46	39-22-51	074-27-03	NY Buffalo	14	43-01-27	078-55-40
NJ Atlantic City	49	39-36-48	074-15-50	NY Buffalo	32	43-01-48	078-55-15
NJ Burlington	27	40-02-36	075-14-33	NY Buffalo	33	42-43-06	078-33-48
NJ Camden	22	39-43-41	074-50-39	NY Buffalo	34	42-46-58	078-27-28
NJ Linden	36	40-42-43	074-00-49	NY Buffalo	38	42-38-15	078-37-12
NJ Montclair	51	40-51-53	074-12-03	NY Buffalo	39	42-39-33	078-37-33
NJ New Brunswick	18	40-37-17	074-30-15	NY Buffalo	43	43-01-48	078-55-15
NJ Newark	53	40-44-54	073-59-10	NY Carthage	35	43-57-16	075-43-45
NJ Newark	61	40-42-43	074-00-49	NY Corning	50	42-09-43	077-02-15
NJ Newton	8	41-00-36	074-35-39	NY Elmira	2	42-06-22	076-52-17
NJ Paterson	40	40-44-54	073-59-10	NY Elmira	55	42-06-20	076-52-17
NJ Secaucus	38	40-42-43	074-00-49	NY Garden City	22	40-47-19	073-27-09
NJ Trenton	43	40-17-00	074-41-20	NY Jamestown	27	42-23-36	079-13-44
NJ Vineland	66	39-44-07	074-50-29	NY Kingston	21	42-05-06	074-06-00
NJ West Milford	29	41-07-14	074-12-03	NY New York	24	40-44-54	073-59-10
NJ Wildwood	36	39-07-28	074-45-56	NY New York	28	40-42-43	074-00-49
NM Albuquerque	16	35-12-40	106-26-57	NY New York	30	40-42-43	074-00-49

State and City	DTV		N. Latitude W. Longitude
	Channel		
NY New York	33	40-42-43 074-00-49	
NY New York	44	40-42-43 074-00-49	
NY New York	45	40-42-43 074-00-49	
NY New York	56	40-42-43 074-00-49	
NY North Pole	14	44-34-26 073-40-29	
NY Norwood	23	44-29-30 074-51-29	
NY Plattsburgh	38	44-41-43 073-53-00	
NY Poughkeepsie	27	41-43-09 073-59-47	
NY Riverhead	57	40-53-50 072-54-56	
NY Rochester	16	43-08-07 077-35-03	
NY Rochester	28	43-08-07 077-35-03	
NY Rochester	45	43-08-07 077-35-02	
NY Rochester	58	43-08-07 077-35-02	
NY Rochester	59	43-08-07 077-35-03	
NY Schenectady	34	42-38-13 074-00-06	
NY Schenectady	39	42-38-12 073-59-45	
NY Schenectady	43	42-37-37 074-00-40	
NY Smithtown	23	40-53-23 072-57-13	
NY Springville	46	42-24-16 07839-53	
NY Syracuse	17	42-56-42 076-01-28	
NY Syracuse	19	42-52-50 076-11-59	
NY Syracuse	25	42-56-42 076-01-28	
NY Syracuse	44	42-52-50 076-11-59	
NY Syracuse	47	42-57-19 076-06-34	
NY Syracuse	54	42-56-40 076-07-08	
NY Utica	27	43-02-14 075-26-40	
NY Utica	29	43-06-09 074-56-27	
NY Utica	30	43-08-43 075-10-35	
NY Watertown	21	43-52-47 075-43-11	
NY Watertown	41	43-51-44 075-43-40	
OH Akron	30	41-23-02 081-41-44	
OH Akron	50	41-04-58 081-38-00	
OH Akron	59	41-03-51 081-34-59	
OH Alliance	46	40-54-23 080-54-40	
OH Athens	27	39-18-50 082-08-54	
OH Bowling Green	56	41-08-13 083-54-23	
OH Cambridge	35	40-05-32 081-17-19	
OH Canton	39	40-51-04 081-16-37	
OH Canton	47	41-06-33 081-20-10	
OH Chillicothe	46	39-35-20 083-06-44	
OH Cincinnati	10	39-07-31 084-29-57	
OH Cincinnati	31	39-06-58 084-30-05	
OH Cincinnati	33	39-12-01 084-31-22	
OH Cincinnati	34	39-07-30 084-31-18	
OH Cincinnati	35	39-07-27 084-31-18	
OH Cleveland	2	41-23-09 081-41-23	
OH Cleveland	15	41-22-27 081-43-06	
OH Cleveland	26	41-20-28 081-44-24	
OH Cleveland	31	41-21-47 081-42-58	
OH Cleveland	34	41-23-02 081-42-06	
OH Columbus	13	39-56-16 083-01-16	
OH Columbus	14	39-58-15 083-01-39	
OH Columbus	21	39-58-16 083-01-40	
OH Columbus	36	40-09-33 082-55-21	
OH Columbus	38	40-09-34 082-55-22	
OH Dayton	30	39-43-28 084-15-18	
OH Dayton	41	39-44-02 084-14-52	
OH Dayton	50	39-43-07 084-15-22	
OH Dayton	51	39-43-15 084-15-39	
OH Dayton	58	39-43-16 084-15-00	
OH Lima	20	40-44-54 084-07-55	
OH Lima	47	40-45-47 084-10-59	
OH Lorain	28	41-22-45 081-43-12	
OH Mansfield	12	40-45-50 082-37-04	
OH Newark	24	39-56-53 082-24-33	
OH Oxford	28	39-30-26 084-44-09	
OH Portsmouth	17	38-45-42 083-03-41	
OH Portsmouth	43	38-45-42 083-03-41	
OH Sandusky	42	41-23-48 082-47-31	

State and City	DTV		N. Latitude W. Longitude
	Channel		
OH Shaker Heights	10	41-23-15 081-41-43	
OH Springfield	18	39-54-33 083-51-36	
OH Steubenville	57	40-19-06 080-24-07	
OH Toledo	5	41-44-41 084-01-06	
OH Toledo	17	41-40-22 083-22-47	
OH Toledo	19	41-41-00 083-24-49	
OH Toledo	29	41-39-27 083-25-55	
OH Toledo	46	41-39-21 083-26-40	
OH Toledo	49	41-40-03 083-21-22	
OH Youngstown	20	41-04-46 080-38-25	
OH Youngstown	3	41-03-43 080-38-07	
OH Youngstown	41	41-03-28 080-38-42	
OH Zanesville	40	39-55-42 081-59-06	
OK Ada	26	34-21-34 096-33-34	
OK Bartlesville	15	36-30-59 095-46-10	
OK Cheyenne	8	35-35-36 099-40-02	
OK Claremore	36	36-24-05 095-36-33	
OK Enid	18	36-28-35 097-53-52	
OK Eufaula	31	35-11-01 095-20-20	
OK Guymon	29	36-40-12 101-28-47	
OK Lawton	23	34-12-55 098-43-13	
OK Oklahoma City	15	35-34-30 097-29-04	
OK Oklahoma City	16	35-33-45 097-29-24	
OK Oklahoma City	24	35-32-58 097-29-18	
OK Oklahoma City	27	35-34-07 097-29-20	
OK Oklahoma City	32	35-32-58 097-29-50	
OK Oklahoma City	33	35-33-36 097-29-07	
OK Oklahoma City	39	35-32-58 097-29-50	
OK Oklahoma City	42	35-35-22 097-29-03	
OK Oklahoma City	50	35-34-24 097-29-08	
OK Oklahoma City	51	35-22-54 097-29-20	
OK Okmulgee	28	35-50-02 096-07-28	
OK Shawnee	29	35-16-50 097-20-14	
OK Tulsa	22	36-01-36 095-40-44	
OK Tulsa	38	36-01-15 095-40-32	
OK Tulsa	42	36-01-10 095-39-24	
OK Tulsa	48	36-01-15 095-40-32	
OK Tulsa	49	36-02-34 095-57-11	
OK Tulsa	55	36-01-15 095-40-32	
OK Tulsa	56	36-01-15 095-40-32	
OK Tulsa	58	35-58-09 095-36-55	
OR Bend	11	44-04-41 121-19-57	
OR Bend	18	44-04-40 121-19-49	
OR Coos Bay	21	43-23-26 124-07-46	
OR Coos Bay	22	43-23-39 124-07-56	
OR Corvallis	39	44-38-25 123-16-25	
OR Eugene	14	44-06-57 122-59-57	
OR Eugene	17	44-06-57 122-59-57	
OR Eugene	25	44-00-07 123-06-53	
OR Eugene	29	44-00-06 123-06-48	
OR Eugene	31	44-00-04 123-06-22	
OR Klamath Falls	29	42-05-50 121-37-59	
OR Klamath Falls	33	42-05-50 121-37-59	
OR Klamath Falls	40	42-05-48 121-37-57	
OR LA Grande	5	45-18-35 117-43-57	
OR Medford	15	42-41-49 123-13-39	
OR Medford	27	42-17-54 122-44-59	
OR Medford	35	42-04-55 122-43-07	
OR Medford	38	42-41-32 123-13-46	
OR Medford	42	42-41-32 123-13-45	
OR Pendleton	8	45-44-51 118-02-11	
OR Portland	27	45-31-22 122-45-07	
OR Portland	30	45-31-19 122-44-53	
OR Portland	40	45-30-58 122-43-59	
OR Portland	43	45-31-14 122-44-37	
OR Portland	45	45-30-58 122-43-59	
OR Portland	46	45-31-21 122-44-46	
OR Roseburg	18	43-14-09 123-19-16	
OR Roseburg	19	43-14-20 123-18-42	



State and City	DTV			State and City	DTV		
	Channel	N. Latitude	W. Longitude		Channel	N. Latitude	W. Longitude
OR Roseburg	45	43-12-22	123-21-56	SC Florence	16	34-21-53	079-19-49
OR Salm	20	45-00-00	122-41-37	SC Florence	20	34-21-53	079-19-49
OR Salem	33	45-00-28	122-20-05	SC Florence	45	34-16-46	079-44-37
PA Allentown	46	40-33-54	075-26-26	SC Florence	56	34-22-02	079-19-22
PA Allentown	62	40-33-58	075-26-06	SC Greenville	9	34-56-26	082-24-38
PA Altoona	24	40-34-06	078-26-38	SC Greenville	35	34-56-26	082-24-41
PA Altoona	32	40-34-01	078-26-31	SC Greenville	59	35-06-40	082-36-17
PA Altoona	46	40-34-12	078-26-26	SC Greenwood	18	34-22-21	082-10-03
PA Bethlehem	59	40-33-54	075-26-26	SC Hardeeville	27	32-02-48	081-20-27
PA Clearfield	15	41-07-21	078-26-28	SC Myrtle Beach	18	34-11-19	079-11-00
PA Erie	16	42-02-20	080-03-45	SC Rock Hill	15	34-50-24	081-01-07
PA Erie	22	42-02-31	080-03-57	SC Rock Hill	39	35-21-44	081-09-19
PA Erie	50	42-02-31	080-03-57	SC Spartanburg	43	34-53-09	081-49-15
PA Erie	52	42-03-52	080-00-19	SC Spartanburg	53	35-10-12	082-17-27
PA Erie	58	42-02-24	080-04-08	SC Sumter	28	33-52-52	080-16-14
PA Greensburg	50	40-23-30	079-46-51	SC Sumter	38	33-54-52	080-17-39
PA Harrisburg	4	40-20-44	076-52-09	SD Aberdeen	17	45-29-55	097-40-35
PA Harrisburg	36	40-20-45	076-52-06	SD Aberdeen	28	45-06-32	097-53-30
PA Harrisburg	57	40-18-57	076-57-02	SD Brookings	18	44-20-10	097-13-41
PA Hazleton	9	41-02-13	076-05-07	SD Eagle Butte	25	45-03-20	102-15-40
PA Johnstown	29	40-10-53	079-09-05	SD Florence	25	44-57-57	097-35-22
PA Johnstown	30	40-10-51	079-09-46	SD Huron	22	44-11-39	098-19-05
PA Johnstown	34	40-22-17	078-58-58	SD Lead	29	44-19-30	103-50-14
PA Lancaster	23	40-15-45	076-27-53	SD Lead	30	44-19-36	103-50-12
PA Lancaster	58	40-02-04	076-37-08	SD Lowry	15	45-16-34	099-59-03
PA Philadelphia	26	40-02-39	075-14-26	SD Martin	23	43-26-06	101-33-14
PA Philadelphia	32	40-02-21	075-14-13	SD Mitchell	26	43-37-56	097-22-21
PA Philadelphia	34	40-02-26	075-14-20	SD Pierre	19	44-03-07	100-05-03
PA Philadelphia	42	40-02-26	075-14-20	SD Pierre	21	43-57-55	099-35-56
PA Philadelphia	54	40-02-30	075-14-24	SD Rapid City	16	44-04-14	103-15-01
PA Philadelphia	64	40-02-39	075-14-26	SD Rapid City	18	44-04-00	103-15-01
PA Philadelphia	67	40-02-36	075-14-12	SD Rapid City	22	44-04-08	103-15-03
PA Pittsburgh	25	40-29-38	080-01-09	SD Rapid City	26	44-03-07	103-14-36
PA Pittsburgh	26	40-26-46	079-57-51	SD Reliance	14	43-57-55	099-36-11
PA Pittsburgh	38	40-26-46	079-57-51	SD Sioux Falls	7	43-29-20	096-45-40
PA Pittsburgh	42	40-26-23	079-43-11	SD Sioux Falls	24	43-32-07	096-44-34
PA Pittsburgh	43	40-29-43	080-00-17	SD Sioux Falls	29	43-31-07	096-32-05
PA Pittsburgh	48	40-27-48	080-00-18	SD Sioux Falls	32	43-31-07	096-32-05
PA Pittsburgh	51	40-16-49	079-48-11	SD Sioux Falls	40	43-51-57	096-37-15
PA Reading	25	40-19-35	075-42-15	SD Sioux Falls	47	43-30-17	096-33-22
PA Red Lion	30	39-54-18	076-35-00	SD Vermillion	34	43-03-00	096-47-12
PA Scranton	13	41-10-58	075-52-26	TN Chattanooga	29	35-12-26	085-16-52
PA Scranton	31	41-26-09	075-43-45	TN Chattanooga	35	35-09-41	085-19-03
PA Scranton	32	41-26-09	075-43-33	TN Chattanooga	40	35-12-34	085-16-39
PA Scranton	41	41-10-55	075-52-17	TN Chattanooga	47	35-08-06	085-19-25
PA Scranton	49	41-10-58	075-52-21	TN Chattanooga	55	35-09-40	085-18-52
PA Wilkes-Barre	11	41-11-01	075-52-02	TN Cleveland	42	34-55-57	084-58-32
PA Williamsport	29	41-11-57	077-07-38	TN Cookeville	36	36-07-44	085-20-47
PA York	47	40-01-38	076-36-00	TN Cookeville	52	36-10-26	085-20-37
RI Block Island	17	41-29-41	071-47-05	TN Crossville	50	6-06-33	084-20-17
RI Providence	13	41-52-37	071-16-56	TN Greeneville	38	36-01-24	082-42-56
RI Providence	21	41-48-18	071-28-24	TN Hendersonville	51	36-28-02	086-28-53
RI Providence	51	41-51-54	071-17-15	TN Jackson	39	35-47-22	089-06-14
RI Providence	54	41-52-14	071-17-45	TN Jackson	43	35-38-15	088-41-32
SC Allendale	33	33-11-13	081-23-54	TN Jellico	23	36-24-36	084-10-38
SC Anderson	14	34-38-51	082-16-13	TN Johnson City	58	36-25-55	082-08-15
SC Beaufort	44	32-42-44	080-40-49	TN Kingsport	27	36-25-54	082-08-15
SC Charleston	35	32-47-15	079-51-00	TN Knoxville	17	36-00-19	083-56-23
SC Charleston	40	32-56-24	079-41-45	TN Knoxville	26	36-00-13	083-56-35
SC Charleston	49	32-55-28	079-4-58	TN Knoxville	30	36-00-36	083-55-57
SC Charleston	52	32-55-28	079-41-58	TN Knoxville	31	36-00-19	083-56-23
SC Charleston	53	32-55-28	079-41-58	TN Knoxville	34	35-59-20	083-57-45
SC Charleston	59	32-56-24	079-41-45	TN Lebanon	44	36-09-13	086-22-46
SC Columbia	8	34-03-23	080-58-49	TN Lexington	47	35-42-12	088-36-10
SC Columbia	17	34-05-49	080-45-51	TN Memphis	25	35-12-11	089-48-16
SC Columbia	32	34-07-07	080-56-12	TN Memphis	28	35-10-52	089-49-56
SC Columbia	41	34-07-27	080-45-25	TN Memphis	29	35-09-17	089-49-20
SC Columbia	48	34-02-39	080-59-52	TN Memphis	31	35-09-17	089-49-20
SC Conway	58	33-57-05	079-06-31	TN Memphis	51	35-12-41	089-48-54

DTV				DTV			
State and City	Channel	N. Latitude	W. Longitude	State and City	Channel	N. Latitude	W. Longitude
TN Memphis	52	35-10-09	089-53-12	TX Greenville	46	33-09-32	096-08-34
TN Memphis	53	35-10-28	089-50-41	TX Harlingen	31	26-08-55	097-49-17
TN Murfreesboro	38	36-04-54	086-25-57	TX Harlingen	34	26-13-00	097-46-48
TN Nashville	10	36-08-27	086-51-56	TX Harlingen	38	26-07-14	097-49-18
TN Nashville	15	36-08-27	086-51-56	TX Houston	9	29-34-28	095-29-37
TN Nashville	21	36-15-50	086-47-38	TX Houston	19	29-34-34	095-30-36
TN Nashville	23	35-55-20	086-42-46	TX Houston	24	29-33-25	095-30-04
TN Nashville	27	36-02-49	086-49-49	TX Houston	27	29-34-28	095-29-37
TN Nashville	46	36-02-49	086-49-49	TX Houston	31	29-33-40	095-30-04
TN Nashville	56	36-16-05	086-47-16	TX Houston	32	29-34-27	095-29-37
TN Sneedville	41	36-22-52	083-10-48	TX Houston	35	29-34-06	095-29-57
TX Abilene	24	32-16-38	099-35-51	TX Houston	38	29-34-06	095-29-57
TX Abilene	29	32-17-13	099-44-20	TX Houston	44	29-33-25	095-30-04
TX Alvin	36	29-34-06	095-29-57	TX Irving	48	32-35-24	096-58-21
TX Amarillo	9	35-17-34	101-50-42	TX Jacksonville	22	32-03-40	095-18-50
TX Amarillo	15	35-20-33	101-49-21	TX Katy	52	29-33-40	095-30-04
TX Amarillo	19	35-18-52	101-50-47	TX Kerrville	32	29-36-37	098-53-35
TX Amarillo	21	35-20-33	101-49-21	TX Killeen	23	31-18-52	097-19-37
TX Amarillo	23	35-22-29	101-52-58	TX Lake Dallas	54	33-00-19	096-59-00
TX Arlington	42	32-35-24	096-58-21	TX Laredo	14	27-31-14	099-31-19
TX Austin	21	30-19-33	097-47-58	TX Laredo	15	27-40-21	099-39-51
TX Austin	22	30-19-20	097-48-10	TX Laredo	19	27-30-03	099-30-37
TX Austin	33	30-19-20	097-48-10	TX Llano	27	30-40-36	098-33-59
TX Austin	43	30-19-10	097-48-06	TX Longview	52	32-15-35	094-57-02
TX Austin	49	30-19-33	097-47-58	TX Lubbock	25	33-33-12	101-49-13
TX Austin	56	30-18-36	097-47-33	TX Lubbock	27	33-30-57	101-50-54
TX Baytown	41	29-17-56	095-14-11	TX Lubbock	35	33-30-08	101-52-20
TX Beaumont	21	30-08-24	093-58-44	TX Lubbock	38	33-31-33	101-52-07
TX Beaumont	33	30-10-41	093-54-26	TX Lubbock	39	33-34-55	101-53-25
TX Beaumont	50	30-11-26	093-53-08	TX Lubbock	43	33-32-32	101-50-14
TX Belton	47	30-59-12	097-37-47	TX Lufkin	43	31-25-09	094-48-02
TX Big Spring	33	32-15-14	101-26-44	TX Mcallen	46	26-05-20	098-03-4
TX Brownsville	24	26-05-59	097-50-16	TX Midland	26	32-05-14	102-17-12
TX Bryan	29	30-41-18	096-25-35	TX Nacogdoches	18	31-24-28	094-45-53
TX Bryan	59	30-33-10	096-01-50	TX Odessa	15	31-59-17	102-51-59
TX College Station	12	30-37-48	096-20-33	TX Odessa	22	31-51-59	102-22-50
TX Conroe	5	30-15-45	095-14-50	TX Odessa	23	32-05-51	102-17-21
TX Conroe	42	30-13-50	095-07-25	TX Odessa	31	31-51-50	102-34-41
TX Corpus Christi	18	27-46-50	097-38-03	TX Odessa	43	32-02-53	102-17-44
TX Corpus Christi	23	27-39-12	097-33-55	TX Port Arthur	40	30-09-31	093-59-11
TX Corpus Christi	27	27-45-11	097-38-14	TX Rio Grande City	20	26-25-47	098-49-25
TX Corpus Christi	47	27-39-29	097-36-04	TX Rosenberg	46	29-33-25	095-30-04
TX Corpus Christi	50	27-44-28	097-36-08	TX San Angelo	11	31-22-01	100-02-48
TX Dallas	9	32-35-06	096-58-41	TX San Angelo	16	31-37-22	100-26-14
TX Dallas	14	32-34-43	096-57-12	TX San Angelo	19	31-35-21	100-31-00
TX Dallas	32	32-35-22	096-58-10	TX San Antonio	16	29-31-25	098-43-25
TX Dallas	35	32-35-06	096-58-41	TX San Antonio	20	29-19-33	098-21-25
TX Dallas	36	32-35-22	096-58-10	TX San Antonio	30	29-17-27	098-16-12
TX Dallas	40	32-35-07	096-58-06	TX San Antonio	38	29-17-39	098-15-30
TX Dallas	45	32-35-22	096-58-10	TX San Antonio	39	29-17-39	098-15-30
TX Decatur	30	32-52-16	096-55-22	TX San Antonio	48	29-16-11	098-15-31
TX Del Rio	28	29-20-39	100-51-39	TX San Antonio	55	29-16-10	098-15-55
TX Denton	43	32-35-22	096-58-10	TX San Antonio	58	29-16-10	098-15-55
TX Eagle Pass	18	28-43-32	100-28-35	TX Sherman	20	34-01-58	096-48-00
TX El Paso	15	31-48-55	106-29-20	TX Snyder	10	32-46-52	100-53-52
TX El Paso	16	31-48-18	106-28-57	TX Sweetwater	20	32-24-48	100-06-25
TX El Paso	17	31-47-15	106-28-47	TX Temple	50	31-16-24	097-13-14
TX El Paso	18	31-47-46	106-28-57	TX Texarkana	15	32-54-12	094-00-23
TX El Paso	25	31-47-46	106-28-57	TX Texarkana	50	33-25-29	094-02-34
TX El Paso	30	31-47-15	106-28-47	TX Tyler	38	32-32-21	095-13-16
TX El Paso	39	31-48-55	106-29-17	TX Victoria	15	28-48-06	096-33-09
TX El Paso	51	31-48-55	106-29-17	TX Victoria	34	28-46-41	096-57-38
TX Fort Worth	18	32-35-22	096-58-10	TX Waco	20	31-30-31	097-10-03
TX Fort Worth	19	32-34-43	096-57-12	TX Waco	26	31-20-15	097-18-37
TX Fort Worth	41	32-35-15	096-57-59	TX Waco	53	31-19-19	097-18-58
TX Fort Worth	51	32-45-01	097-16-07	TX Waco	57	31-18-52	097-19-37
TX Galveston	23	29-17-56	095-14-11	TX Weslaco	13	26-09-54	097-48-45
TX Galveston	47	29-27-57	095-13-23	TX Wichita Falls	15	34-12-06	098-43-44
TX Garland	24	32-54-04	096-41-14	TX Wichita Falls	22	33-54-04	098-32-21

State and City	DTV	
	Channel	N. Latitude W. Longitude
TX Wichita Falls	28	33-53-23 098-33-20
UT Cedar City	14	37-32-32 113-04-05
UT Cedar City	44	37-40-41 113-04-08
UT Monticello	41	37-52-12 109-20-30
UT Ogden	29	40-39-25 112-12-07
UT Ogden	34	40-36-30 112-09-34
UT Provo	17	39-51-54 111-53-39
UT Provo	39	40-36-28 112-09-33
UT Salt Lake City	27	40-39-12 112-12-06
UT Salt Lake City	28	40-39-33 112-12-08
UT Salt Lake City	35	40-36-23 112-09-47
UT Salt Lake City	38	40-39-35 112-12-05
UT Salt Lake City	40	40-36-50 112-11-05
UT Salt Lake City	42	40-36-29 112-09-36
UT St. George	9	37-03-49 113-34-20
VA Arlington	15	38-56-24 077-04-54
VA Ashland	47	37-44-32 077-15-18
VA Bristol	28	36-26-57 082-06-31
VA Charlottesville	14	37-58-58 078-29-00
VA Charlottesville	32	37-59-00 078-28-54
VA Danville	41	36-30-36 079-28-23
VA Fairfax	57	38-52-28 077-13-24
VA Front Royal	21	38-57-36 078-19-52
VA Goldvein	30	38-37-42 077-26-20
VA Grundy	49	36-49-47 082-04-45
VA Hampton	41	36-49-00 076-28-05
VA Hampton-Norfolk	16	36-48-32 076-30-13
VA Harrisonburg	49	38-36-05 078-37-57
VA Lynchburg	20	37-19-14 079-37-59
VA Lynchburg	56	37-18-52 079-38-04
VA Manassas	43	38-47-16 077-19-49
VA Marion	42	36-54-01 081-32-35
VA Norfolk	38	36-48-32 076-30-13
VA Norfolk	46	36-48-32 076-30-13
VA Norfolk	58	36-48-56 076-28-00
VA Norton	32	36-53-52 082-37-22
VA Petersburg	22	37-30-46 077-36-06
VA Portsmouth	19	36-48-43 076-27-49
VA Portsmouth	31	36-49-14 076-30-41
VA Richmond	24	37-30-46 077-36-06
VA Richmond	25	37-34-00 077-28-36
VA Richmond	26	37-30-22 077-42-03
VA Richmond	44	37-30-46 077-36-06
VA Richmond	54	37-30-23 077-30-12
VA Roanoke	3	37-11-45 080-09-18
VA Roanoke	17	37-11-46 080-09-16
VA Roanoke	18	37-11-42 080-09-22
VA Roanoke	30	37-12-02 080-08-55
VA Roanoke	36	37-11-35 080-09-29
VA Staunton	11	38-09-54 079-18-51
VA Virginia Beach	29	36-49-14 076-30-41
VT Burlington	16	44-31-40 072-48-58
VT Burlington	32	44-31-32 072-48-54
VT Burlington	43	44-31-32 072-48-54
VT Burlington	53	44-31-36 072-48-57
VT Hartford	25	43-26-38 072-27-17
VT Rutland	56	43-39-32 073-06-25
VT St. Johnsbury	18	44-34-16 071-53-39
VT Windsor	24	43-26-15 072-27-09
WA Bellevue	32	47-36-17 122-19-46
WA Bellevue	50	47-30-14 121-58-29
WA Bellingham	19	48-40-48 122-50-23
WA Bellingham	35	48-40-40 122-49-48
WA Centralia	19	46-33-16 123-03-26
WA Everett	31	47-37-55 122-20-59
WA Kennewick	44	46-06-11 119-07-54
WA Pasco	18	46-05-51 119-11-30
WA Pullman	17	46-51-43 117-10-26
WA Richland	26	46-06-11 119-07-47

State and City	DTV	
	Channel	N. Latitude W. Longitude
WA Richland	38	46-06-23 119-07-50
WA Seattle	25	47-36-57 122-18-26
WA Seattle	38	47-37-55 122-21-09
WA Seattle	39	47-38-01 122-21-20
WA Seattle	41	47-36-58 122-18-28
WA Seattle	44	47-36-17 122-19-46
WA Seattle	48	47-37-55 122-20-59
WA Spokane	13	47-55-18 117-06-48
WA Spokane	15	47-34-52 117-17-47
WA Spokane	20	47-35-42 117-17-53
WA Spokane	30	47-34-44 117-17-46
WA Spokane	36	47-36-04 117-17-3
WA Spokane	39	47-34-34 117-17-58
WA Tacoma	14	47-32-50 122-47-39
WA Tacoma	18	47-32-53 122-48-22
WA Tacoma	27	47-16-41 122-30-42
WA Tacoma	36	47-36-56 122-18-29
WA Tacoma	42	47-32-53 122-48-22
WA Vancouver	48	45-31-22 122-45-07
WA Wenatchee	46	47-19-26 120-13-55
WA Yakima	14	46-31-57 120-30-37
WA Yakima	16	46-31-59 120-30-26
WA Yakima	21	46-31-58 120-30-33
WA Yakima	33	46-31-58 120-30-33
WI Appleton	59	44-21-30 087-58-48
WI Chippewa Falls	49	44-57-27 091-40-08
WI Eagle River	28	45-46-30 089-14-55
WI Eau Claire	15	44-57-39 091-40-05
WI Eau Claire	39	44-39-51 090-57-41
WI Fond Du Lac	44	43-21-44 088-53-45
WI Green Bay	23	44-24-35 088-00-05
WI Green Bay	41	44-21-30 087-58-48
WI Green Bay	42	44-24-35 088-00-05
WI Green Bay	51	44-24-31 087-59-29
WI Green Bay	56	44-24-21 088-00-19
WI Janesville	32	42-43-40 089-13-54
WI Kenosha	40	42-45-38 087-57-55
WI LA Crosse	14	43-48-23 091-22-04
WI LA Crosse	17	43-48-16 091-22-18
WI LA Crosse	30	43-48-17 091-22-06
WI LA Crosse	53	44-05-28 091-20-15
WI Madison	11	43-03-21 089-32-06
WI Madison	19	43-03-03 089-29-13
WI Madison	20	43-03-21 089-32-06
WI Madison	26	43-03-21 089-32-06
WI Madison	50	43-03-21 089-32-06
WI Manitowoc	19	44-07-31 087-37-41
WI Mayville	43	43-26-11 088-31-34
WI Menomonie	27	45-02-49 091-51-47
WI Milwaukee	8	43-05-38 087-54-10
WI Milwaukee	22	43-05-15 087-54-12
WI Milwaukee	25	43-05-15 087-54-13
WI Milwaukee	28	43-05-29 087-54-07
WI Milwaukee	33	43-05-24 087-53-47
WI Milwaukee	34	43-06-41 087-55-38
WI Milwaukee	35	43-05-48 087-54-19
WI Milwaukee	46	43-06-42 087-55-50
WI Milwaukee	61	43-05-48 087-54-19
WI Park Falls	47	45-56-43 090-16-28
WI Racine	48	43-05-15 087-54-01
WI Rhinelander	16	45-40-02 089-12-27
WI Superior	19	46-47-21 092-06-51
WI Suring	21	44-44-00 088-15-25
WI Wausau	24	44-55-14 089-41-31
WI Wausau	29	44-55-14 089-41-31
WI Wausau	40	44-55-14 089-41-31
WV Bluefield	14	37-13-08 081-15-39
WV Bluefield	46	37-15-21 081-10-55
WV Charleston	19	38-25-15 081-55-27

State and City	DTV		N. Latitude	W. Longitude
	Channel			
WV Charleston	39		38-28-12	081-46-35
WV Charleston	41		38-24-28	081-54-13
WV Clarksburg	28		39-1-02	080-20-37
WV Clarksburg	52		39-17-06	080-19-46
WV Grandview	53		37-53-46	080-59-21
WV Huntington	23		38-30-34	082-13-09
WV Huntington	34		38-29-41	082-12-03
WV Huntington	54		38-30-21	082-12-33
WV Lewisburg	48		37-46-22	080-42-25
WV Martinsburg	12		39-27-27	078-03-53
WV Morgantown	33		39-41-45	079-45-45
WV Oak Hill	50		37-57-30	081-09-03
WV Parkersburg	49		39-20-59	081-33-56
WV Weston	58		39-04-27	080-25-28
WV Wheeling	32		40-03-41	080-45-08
WY Casper	15		42-44-26	106-21-34
WY Casper	17		42-44-03	106-20-00
WY Casper	18		42-44-37	106-18-31
WY Cheyenne	11		41-08-55	104-57-22
WY Cheyenne	28		41-02-55	104-53-28
WY Cheyenne	30		41-06-01	105-00-23
WY Jackson	14		43-27-42	110-45-10
WY Lander	7		42-53-43	108-43-34
WY Lander	8		42-34-59	108-42-36
WY Rawlins	9		41-46-15	107-14-25
WY Riverton	16		43-27-26	108-12-02
WY Rock Springs	21		41-26-21	109-06-42
WY Sheridan	21		44-37-20	107-06-57
GU Agana	2		13-25-53	144-42-36(E)
GU Agana	4		13-25-53	144-42-36(E)
GU Agana	5		13-26-13	144-48-17(E)
GU Tamuning	17		13-30-09	144-48-17(E)
PR Aguada	62		18-19-06	067-10-49
PR Aguadilla	17		18-19-06	067-10-42
PR Aguadilla	34		18-18-46	067-11-09
PR Aguadilla	69		18-09-00	066-59-00
PR Arecibo	53		18-14-06	066-45-36
PR Arecibo	61		18-27-21	066-52-59
PR Bayamon	59		18-16-40	066-06-38
PR Caguas	56		18-16-54	066-06-46
PR Caguas	57		18-16-40	066-06-38
PR Carolina	51		18-16-44	065-51-12
PR Fajardo	16		18-18-36	065-47-41
PR Fajardo	33		18-18-36	065-47-41
PR Guayama	45		18-16-48	065-51-08
PR Humacao	49		18-16-44	065-51-12
PR Mayaguez	23		18-09-05	066-59-20
PR Mayaguez	29		18-09-03	066-59-21
PR Mayaguez	35		18-09-00	066-59-00
PR Mayaguez	63		18-19-06	067-10-42
PR Naranjito	65		18-17-34	066-16-02
PR Ponce	15		18-10-11	066-34-38
PR Ponce	19		18-04-50	066-44-50
PR Ponce	25		18-04-50	066-44-54
PR Ponce	43		18-10-09	066-34-36
PR Ponce	47		18-04-50	066-44-50
PR Ponce	66		18-09-17	066-33-16
PR San Juan	21		18-16-47	065-51-14
PR San Juan	27		18-06-42	066-03-05
PR San Juan	28		18-06-54	066-03-10
PR San Juan	31		18-16-30	066-05-36
PR San Juan	32		18-18-36	065-47-41
PR San Juan	55		18-06-42	066-03-05
PR SanSebastian	39		18-19-06	067-10-42
PR Yauco	41		18-10-10	066-34-36
VI Charlotte Amalie	44		18-21-26	064-56-50
VI Charlotte Amalie	48		18-21-24	064-56-47
VI Charlotte Amalie	50		18-21-23	064-56-43
VI Christiansted	5		17-44-53	064-43-40

State and City	DTV		N. Latitude	W. Longitude
	Channel			
VI Christiansted	20		17-45-21	064-47-56

**APPENDIX C**  
**DTV ALLOTMENT CHANGES TO AVOID ADJACENT CHANNEL INTERFERENCE**

<u>Community</u>	<u>State</u>	<u>NTSC Chan.</u>	<u>6<sup>th</sup> R&amp;O DTV Chan.</u>	<u>New DTV Chan.</u>
Mobile	AL	15	26	47
Mobile	AL	42	18	41
Fort Smith	AR	24	17	27
Flagstaff	AZ	9	28	32
Phoenix	AZ	10	23	31
Tucson	AZ	4	31	23
San Francisco	CA	5	28	29
San Francisco	CA	9	34	30
San Francisco	CA	14	29	51
Vallejo	CA	66	30	34
Grand Junction	CO	18	16	17
Hartford	CT	3	11	33
Miami	FL	35	21	26
Atlanta	GA	57	38	41
Richmond	IN	43	30	39
Garden City	KS	11	17	16
Wichita	KS	33	34	31
Owensboro	KY	31	29	30
Springfield	MA	22	33	11
Lewiston	ME	35	39	28
Biloxi	MS	19	35	16
Hardin MT		4	19	22
Charlotte	NC	18	21	27
Greensboro	NC	61	32	43
Winston-Salem	NC	26	43	32
Fargo	ND	13	39	23
Las Cruces	NM	48	28	36
Akron	OH	49	32	50
Dayton	OH	45	39	30
Lima	OH	44	57	47
Eugene	OR	34	26	31
Greenville	SC	16	52	35
Sioux Falls	SD	36	48	40
Denton	TX	2	31	43
Kerrville	TX	35	17	32
Lake Dallas	TX	55	43	54

M <sup>c</sup> Allen	TX	48	30	46
Manassas	VA	66	36	43
Tacoma	WA	28	26	27
Eagle River	WI	34	17	28
Charleston	WV	8	55	41
Wheeling	WV	7	56	32

## **APPENDIX D**

### **SUPPLEMENTAL FINAL REGULATORY FLEXIBILITY ANALYSIS**

As required by the Regulatory Flexibility Act (RFA),<sup>1</sup> an Initial Regulatory Flexibility Analysis was incorporated into the Sixth Further Notice of Proposed Rule Making in this proceeding,<sup>2</sup> and a Final Regulatory Flexibility Analysis (FRFA) was incorporated into the subsequent Sixth Report and Order.<sup>3</sup> As described below, one Petition for Reconsideration of the Sixth Report and Order raised an issue concerning the FRFA. The present Sixth Memorandum Opinion and Order addresses that reconsideration petition, among others. This associated Supplemental Final Regulatory Flexibility Analysis (Supplemental FRFA) also addresses that petition, and conforms to the RFA.<sup>4</sup>

#### **A. Need for, and Objectives of, this Memorandum Opinion and Order**

In the Sixth Report and Order, the Commission adopted policies, procedures and technical criteria for use in conjunction with broadcast digital television (DTV), adopted a DTV Table of Allotments, adopted a plan for the recovery of a portion of the spectrum currently allocated to TV broadcasting, and provided procedures for assigning DTV frequencies. In the present Memorandum Opinion and Order, the Commission addresses petitions for reconsideration of the Sixth Report and Order. Throughout this proceeding, we have sought to allot DTV channels in a manner that is most efficient for broadcasters and the public and least disruptive to broadcast television service during the period of transition from NTSC to DTV service. We wish to ensure that the spectrum is used efficiently and effectively through reliance on market forces, and ensure that the introduction of digital TV fully serves the public interest.

#### **B. Summary of Significant Issues Raised by the Public In Response to the FRFA**

One petition for reconsideration, that of Skinner Broadcasting, Inc. (Skinner),<sup>5</sup> raises various issues, one of which is in direct response to the FRFA contained in the Sixth Report and Order. Skinner states that the Commission conceded in the Sixth Report and Order that, as a result of its actions, many low power television (LPTV) and TV translator stations would be displaced. Nonetheless, argues Skinner, the Commission "made no proffer ... of alternative digital channel

---

<sup>1</sup> See 5 U.S.C. §§ 603, 604. The RFA, see 5 U.S.C. § 601 et seq., has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 1045-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

<sup>2</sup> 11 FCC Rcd 10968, 11060 (1996).

<sup>3</sup> 12 FCC Rcd 14588, 14768 (1997).

<sup>4</sup> See 5 U.S.C. § 604.

<sup>5</sup> Skinner Broadcasting, Inc., Petition for Reconsideration, filed June 13, 1997. The Skinner petition is also discussed in this context in the present Memorandum Opinion and Order, in Section III(F).

allotment configurations" that might have reduced the number of such displacements.<sup>6</sup> Skinner notes that an ex parte presentation by Community Broadcasters Association (CBA) offered an alternative allotment table, and that that alternative was not discussed in the Sixth Report and Order or its FRFA. Skinner states that the Commission was apparently satisfied that the interests of LPTV and TV translator stations deserved no further consideration, given that such operations are "secondary" under current licensing.<sup>7</sup> Skinner argues that "alternatives obviously exist[ed]" that might have avoided subsequent displacements, and requests that the Commission reconsider the allotment table adopted in the Sixth Report and Order.<sup>8</sup>

We disagree with the contention that the Commission failed to consider alternatives that could have further assisted LPTV stations, TV translator stations, and other possible small entities in the DTV transition process. As quoted by Skinner in a footnote in its reconsideration petition,<sup>9</sup> the previous FRFA specifically described the displacement issue, with reference to the text of the Sixth Report and Order, and noted that "[o]ne alternative to this approach would have been to permit existing LPTV and TV translator stations to remain on their incumbent channels; this approach was not chosen because it would have resulted in providing allotments for fewer than all full service licensees." Elsewhere in the FRFA, we stated that, in addition to the "secondary status" reason for the Commission's allotment decision, the decision was consistent with "the primary allotment objective ... to develop a DTV Table of Allotments that provides a channel for all eligible broadcasters, consistent with the provisions of the 1996 Telecommunications Act regarding initial eligibility for DTV licenses."<sup>10</sup> Discussion at that point cross-referenced the lengthier discussions in the primary text of the Sixth Report and Order concerning LPTV and TV translator stations and the "secondary status" issue, including reference to case law.<sup>11</sup> In addition, both the Sixth Report and Order and its FRFA discussed alternative approaches,<sup>12</sup> although not the specific approach of CBA cited by Skinner. Last, as noted by Skinner, the FRFA discussed various policies adopted to mitigate the effects of displacement.

We note that the CBA ex parte presentation cited by Skinner was dated March 26, 1997, which would have been eight days prior to adoption of the Sixth Report and Order. In a proceeding as lengthy as this, that timing was unfortunate, but the Commission did consider other CBA positions submitted earlier. Also, we note that CBA has currently submitted another allocation proposal,

---

<sup>6</sup> Id. at 7.

<sup>7</sup> Id. at 7-8.

<sup>8</sup> Id. at 8.

<sup>9</sup> Id. at 8 n.5.

<sup>10</sup> FRFA, 12 FCC Rcd at 14769.

<sup>11</sup> Id. at 14769 n.8 (citing paragraphs 11 and 113-147 of the Sixth Report and Order).

<sup>12</sup> Sixth Report and Order, 12 FCC Rcd at 14593-95; FRFA, 12 FCC Rcd at 14768-69.



which, in the present Memorandum Opinion and Order, we have adopted in part. This other proposal is also discussed later in this Supplemental FRFA, in Section E ("Steps Taken to Minimize Significant Economic Burdens on Small Entities, and Significant Alternatives Considered").

**C. Description and Estimate Of The Number Of Small Entities To Which The Rules Will Apply**

As noted, a Final Regulatory Flexibility Analysis was incorporated into the Sixth Report and Order.<sup>13</sup> In that analysis, we described in detail the small entities that might be significantly affected by the rules adopted in the Sixth Report and Order.<sup>14</sup> Those entities included full service television stations, TV translator facilities, and LPTV stations. In addition, while we did not believe that television equipment manufacturers, manufacturers of television equipment used by consumers, and computer manufacturers constituted regulated entities for the purpose of that previous FRFA, we included them in the analysis of the FRFA because we thought that some rule changes and textual discussions in the Sixth Report and Order might ultimately have some affect on equipment compliance. In the present Memorandum Opinion and Order we address reconsideration petitions filed in response to the Sixth Report and Order. In this present Supplemental FRFA, we hereby incorporate by reference the description and estimate of the number of small entities from the previous FRFA in this proceeding.<sup>15</sup>

**D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements**

The rules adopted will result in one change in current reporting, recordkeeping, or other compliance requirements: an application will be required to be filed for those entities wishing to increase station power within their service area through the use of beam tilting techniques.

**E. Steps Taken to Minimize Significant Economic Burdens on Small Entities, and Significant Alternatives Considered**

As noted in the previous FRFA, the DTV Table of Allotments will affect all of the commercial and noncommercial broadcast television stations eligible for a DTV channel in the transition period and a significant number of the LPTV and TV translator stations.<sup>16</sup> LPTV and TV translator stations, especially, are likely to be small entities. It is expected that the allotments will constitute the population of channels on which broadcasters will operate DTV service in the future. Affected

---

<sup>13</sup> 12 FCC Rcd 14588, 14768 (1997).

<sup>14</sup> See Section C of the previous Final Regulatory Flexibility Analysis, "Description and Estimate of the Number of Small Entities to Which the Rules Will Apply," at 12 FCC Rcd at 14770-76.

<sup>15</sup> Id.

<sup>16</sup> 12 FCC Rcd at 14776.

stations will need to modify or obtain new transmission facilities and, to a varying extent, production equipment to operate on the new DTV channels. The actual cost of equipment is expected to vary in accordance with the degree to which the station becomes involved in DTV programming and origination.

As described in the present Memorandum Opinion and Order,<sup>17</sup> we continue to believe that the general principles and priorities used for the development of the DTV allotments/assignments remain appropriate. We reaffirm our approach to provide all eligible broadcasters with the temporary use of a second channel that, to the extent possible, will allow them to replicate the service areas of their existing NTSC operations. We continue to find that such an approach will promote the orderly transition of DTV by broadcasters and foster the provision of service to the public. Our actions represent a balancing of various factors.

In this regard, certain petitioners have suggested that certain “targeted and limited adjustments” to the DTV Table of Allotments are needed. Considering this and other information, we have determined to make a number of limited changes in the Table in order to prevent the loss of DTV service and to minimize the impact of DTV operations on existing NTSC service.<sup>18</sup> In this regard, for example, we have reviewed certain DTV-to-DTV adjacent channel situations and are modifying the DTV allotments to eliminate these situations in a number of instances. Specifically, we are making changes to 42 DTV allotments, to resolve cases where use of adjacent channels is no longer acceptable and would impact our service replication and interference goals. We also are making a number of modifications to our technical rules for DTV operation to further reduce the potential for interference between DTV stations that operate on adjacent channels in the same area. In addition, we are making 29 allotment changes to address requests by individual petitioners, for a total of 71 changes.

A number of parties representing low power interests argue that the plan for early recovery of channels 60-69 will adversely impact LPTV and TV translator stations.<sup>19</sup> Again balancing various interests, we have affirmed our basic plan to recover a portion of the existing television spectrum and our earlier decision to permit low power stations to continue to operate on channels 60-69 on a secondary basis through the transition process.<sup>20</sup> As set forth in the Report and Order in ET Docket No. 97-157, released January 6, 1998,<sup>21</sup> we have reallocated channels 60-69 for public safety and a broad range of other services, including broadcasting, in accordance with the requirements of the Balanced Budget Act of 1997. However, in that decision, we stated that low power stations will be

---

<sup>17</sup> Memorandum Opinion and Order at Sections III(A) and (F).

<sup>18</sup> Id. at Section III(E).

<sup>19</sup> Id. at Section III(A).

<sup>20</sup> Id.

<sup>21</sup> Document No. FCC 97-421.

allowed to operate on these channels, provided no interference is caused to primary users. We also encouraged, wherever possible, private negotiations between low power and new service providers to resolve interference problems in a manner which is acceptable and beneficial to both parties.

A number of petitioners have requested that we reconsider our decision to defer the determination of the final core spectrum, pending information on the suitability of channels 2-6 for DTV service. Some also request that we expand or amend the DTV core spectrum to include channels 2-6. In reconsidering this matter, we now believe that the most desirable course of action is to expand the core to include all channels 2-51.<sup>22</sup> While we recognize that this change will reduce the amount of spectrum to be recovered by 30 MHz, we believe that the benefits of expanding the core spectrum outweigh the need for recovery of either channels 2-6 or 47-51. In particular, the change will eliminate certain planning uncertainties, reduce the number of stations required to make second channel moves, increase the availability of channels and thereby promote competition and diversity, and help eliminate DTV-to-DTV adjacent channel interference situations. Importantly for small entities, this expansion of the core will reduce the impact of the transition on low power operations. In this regard, channels 2-6 and 47-51 now support a significant number of LPTV and TV translator stations. The low VHF channels, for example, have some of the highest concentration of low power stations. Expanding the core to include channels 2-6 may eliminate the eventual displacement of most of these stations. In addition, expanding the core will also provide low power stations with more channels and greater opportunities to start new stations and relocate existing stations.

Some licensees, including noncommercial stations, express concern regarding the additional burden that might be placed on stations that are provided transitional DTV channels outside the core spectrum. These parties generally state that because they will have to relocate their DTV operations to channels within the core spectrum they will have to endure additional costs and be placed at a disadvantage with respect to their competitors. They state that the necessity of a "double move" (building facilities twice), if it comes to that, represents disparate treatment of similarly situated broadcasters. Recognizing these concerns, and as explained more fully in the Memorandum Opinion and Order,<sup>23</sup> we have attempted to minimize to the extent possible the number of out-of-core DTV allotments in developing the DTV Table. By expanding the core of channels, there will be only 189 stations with out-of-core DTV allotments. All but 12 of these stations have existing NTSC channels within the core spectrum to which they may relocate at the end of the transition period. In addition, to the extent that in-core channels become available during the transition, we will attempt to further reduce the number of out-of-core allotments in any future amendments to the Table of Allotments. We have not, however, determined to modify our "no interference criteria," because most out-of-core allotments occur in the most congested areas of the country where we have already permitted some interference in order to achieve our goal of full accommodation and to maximize the number of in-core allotments. We also do not find it practicable to require stations to choose now the channel they intend to keep following the transition. Regarding the special burdens perhaps placed on certain

---

<sup>22</sup> Memorandum Opinion and Order at Section III(B).

<sup>23</sup> Id. at Section III(C).

noncommercial public television licensees because of their reliance on federal, state and private contributions to raise funds, we are initiating a separate proceeding to seek comment on the ability of the licensees to use the DTV channel capacity for commercial purposes. In the interim, we are not adopting special provisions or priorities for PTV stations, but will consider their concerns on a case-by-case basis. Also on a case-by-case basis, we will consider requests by stations with both NTSC and DTV channels outside the core area to defer the construction of their DTV station beyond the current construction deadline, or to convert their operations directly to DTV at the end of the transition, where such stations can show that implementing DTV in accordance with our schedule will cause undue hardship to their operations.

In the Sixth Report and Order,<sup>24</sup> we allotted DTV channels using a "service replication/maximization" concept that was suggested by a variety of broadcast industry interests and representatives. Under this approach, we specified for each DTV allotment a maximum permissible effective radiated power (ERP) and antenna height above average terrain (HAAT) that will, to the extent possible, provide for replication of the station's existing Grade B service area. Our actions were intended in part to reduce the disparity between existing UHF and VHF stations. We also provided rules and procedures for stations to "maximize," or increase, their service areas provided they do not cause interference to other stations. In response, some petitioners have raised concerns regarding difficulties that UHF stations may face under the service replication plan in providing DTV service within their core market or Grade A service areas and in competing with the higher-powered DTV service of existing VHF stations. Accordingly, to allow UHF stations to better serve their core market areas and to reduce the disparities that are inherent in the current service replication process, we have modified our rules to provide additional opportunities for stations to maximize their DTV coverage and service through increasing their power and/or making other changes in their facilities.<sup>25</sup> We are replacing the current standard that specifies that changes in DTV operations may not cause any new interference with a new *de minimis* standard along the lines suggested by certain petitioners. Under this new *de minimis* standard, stations will be permitted to increase power or make other changes in their operation, such as modification of their antenna height or transmitter location, where the requested change would not result in more than a 2 percent increase in interference to the population served by another station; 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. In addition, we have adopted an approach that will allow stations to increase their power within their existing DTV service areas using beam tilting techniques.

In the Memorandum Opinion and Order, we have made a series of decisions concerning LPTV and TV translator stations, which stations, as we noted earlier, are especially likely to be small entities.<sup>26</sup> As we have stated before, we wish to ensure the viability and survivability of LPTV and

---

<sup>24</sup> Sixth Report and Order, 12 FCC Rcd at 14605-07; FRFA, 12 FCC Rcd at 1478.

<sup>25</sup> Memorandum Opinion and Order at Section III(D).

<sup>26</sup> Id. at Section III(F).

TV translator stations in a digital world. At this juncture, some petitioners again raise displacement concerns, and one petitioner noted earlier in this present Supplemental FRFA, Community Broadcasters Association (CBA), offers an alternative allotment table. CBA has also proposed that we recognize a presumption favoring potentially displaced LPTV stations that file a request to amend the DTV Table of Allotments. Recognizing these concerns, we have utilized the software algorithm and approach recommended by CBA, and have been able to identify a limited number of cases in certain areas of the country where it is possible to avoid using a channel occupied by low power stations by providing full service stations with an equivalent alternative DTV channel.<sup>27</sup> In particular, we have found 66 instances in which a channel change can be made that would not affect the operations of full service stations, and we are therefore modifying the Table to reflect these 66 DTV channel changes. We are not granting requests by low power licensees to change the channels of individual full service DTV allotments in order to avoid displacement of low power stations, because to do so would adversely affect the ability of full service stations to replicate their existing service and would also lead to increased interference. We will, however, consider changing DTV allotments to protect low power stations where the affected full service station agrees to the change. In this regard, we encourage low power and full service licensees to work together to develop modifications to the DTV Table that will preserve the service of low power stations.

In response to petitions requesting clarification of our displacement relief policies, and to assist in making such relief available in an equitable manner to all affected low power stations, we will consider an LPTV or TV translator station eligible for such relief where interference is predicted either to or from any allotted DTV facility.<sup>28</sup> Stations eligible under this criterion may apply for relief as of the effective date of this Memorandum Opinion and Order. All LPTV and TV translator licensees on channels 60 to 69 are also eligible to file such displacement relief applications at any time. In addition, and as suggested by CBA, we are affording displacement relief applications priority over new station applications or other requests for modification by low power stations, including any such applications and requests that may be pending at the time the displacement relief application is filed. We will also permit displaced stations to seek modifications other than channel changes, including, where necessary, increases in effective radiated power up to the maximum allowed values. We are not, however, providing any additional priority for urban LPTV stations or PTV low power and TV translator stations in the displacement relief process, as requested by some petitioners. We believe that treating all potentially displaced low power stations in a fair and equitable manner is the most appropriate course of action.

In this regard, we wish to note: low power licensees are advised that the channels considered as candidates for assignment to land mobile services in eight major markets under GEN Docket No. 85-172 are available at this time for low power use and may be requested in displacement relief applications.

---

<sup>27</sup> Id. at Section III(F)(1).

<sup>28</sup> Id. at Section III(F)(2).

Some petitioners request that we eliminate or modify the new DTV protection requirement in Section 73.623 of our rules, which requires that co-channel NTSC operations provide an additional 19 dB of protection to DTV service at the edge of a DTV station's noise-limited service area. It is argued that the rule is not needed to avoid interference and will greatly complicate the task of finding new channels for displaced LPTV stations. They also request that we require DTV stations that are co-located with a lower adjacent channel LPTV station to match the frequency offset of the LPTV station as a method of reducing interference, and require the DTV station in such cases to cooperate in making the necessary arrangements for maintaining an offset between the two signals, including cost arrangements. We have rejected these requests, because the protection standard is required to ensure protection of DTV service.<sup>29</sup> We are, however, amending the low power television rules to specify the D/U values as a function of S/N values to provide a transition from 21 dB to 2 dB D/U for NTSC-into-DTV, and from 15 dB to 23 dB D/U for DTV-into-DTV. These values are based on measurement data presented to our advisory committee. With regard to adjacent channel operation where a DTV station is immediately above an NTSC station, we agree that DTV stations that are co-located with a lower adjacent channel low power NTSC station should be required to cooperate and maintain the necessary offset to eliminate interference to the low power station. We note that the equipment necessary to lock to a common reference frequency is relatively inexpensive and should not be burdensome for a full power station. We believe that on balance the benefits of maintaining service from low power stations in such cases outweigh the relatively small incremental costs for full service stations. We therefore have amended the rules in this regard, which should benefit small entity stations.

Some petitioners have requested that low power stations be permitted to utilize digital operation immediately. While we recognize the desire of some low power operators to begin providing DTV service at the same time as full service stations, there are a number of issues in this context that still need to be addressed through a notice-and-comment rulemaking proceeding. We intend to initiate a separate proceeding on this, in the near future. As noted in the Sixth Report and Order,<sup>30</sup> for the time being we will consider requests by low power operators to operate DTV service on replacement channels on a case-by-case basis under our displacement relief policy.

Some petitioners request that we take steps to establish a permanent class of LPTV stations with primary allocation status. At this time, we are deferring consideration of this and similar issues. We will address these issues in a future action, when we address a similar petition for rulemaking submitted by CBA.<sup>31</sup>

Last, some petitioners request that we reconsider our previously stated intention to consider reimbursement for displaced low power stations in a separate proceeding. They argue that the issue of whether and how LPTV stations should be compensated is an integral part of the DTV allotment

---

<sup>29</sup> Id. at Section III(F)(3).

<sup>30</sup> 12 FCC Rcd at 14653 n.263.

<sup>31</sup> CBA Petition for Rule Making, submitted Sept. 30, 1997.

process and should not be deferred to a future proceeding. At this juncture, we do not believe that it is appropriate to require broadcasters to implement DTV and at the same time compensate secondary low power stations that are affected by this required implementation.<sup>32</sup> We also continue to believe that compensation with regard to reclaimed spectrum is best addressed in proceedings that specifically consider the reallocation of spectrum and rules for new services. We note that this is consistent with our recent decision in our Report and Order in the channel 60-69 reallocation proceeding. In that proceeding we stated, however, that we will consider whether there are other steps that may be of benefit to LPTV and TV translator stations as we develop service rules for the new commercial spectrum.

**Report to Congress:** The Commission will send a copy of the Memorandum Opinion and Order, including this Supplemental FRFA, in a report to be sent to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996, see 5 U.S.C. § 801(a)(1)(A). In addition, the Commission will send a copy of the Memorandum Opinion and Order, including the Supplemental FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the Memorandum Opinion and Order and Supplemental FRFA (or summaries thereof) will also be published in the Federal Register. See 5 U.S.C. § 604(b).

---

<sup>32</sup> Memorandum Opinion and Order at Section III(F)(6).

**APPENDIX E**

**AMENDMENTS TO THE RULES**

Parts 73 and 74 of the Commission's Rules and Regulations (Chapter I of title 47 of the Code of Federal Regulations) are amended as follows:

**PART 73 -- RADIO BROADCAST SERVICES**

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

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

2. Section 73.622 is amended by revising paragraphs (b), (c), (d), (e), (f), (g) and (h) to read as follows:

§ 73.622 Digital television table of allotments.

\* \* \* \* \*

(b) DTV Table of Allotments.

ALABAMA

))

Community Channel No.

))

Anniston	58				
Bessemer	18c				
Birmingham	30,	36,	50,	52,	*53
Demopolis	*19				
Dothan	21,	36			
Dozier	*59				
Florence	14,	20,	*22		
Gadsden	26,	45c			
Homewood	28				
Huntsville	*24,	32c,	41,	49c,	59
Louisville	*44c				
Mobile	9,	20,	27,	*41,	47
Montgomery	*14,	16,	46c,	51,	57
Mount Cheaha	*56				
Opelika	31				
Ozark	33				



Selma	55
Troy	48
Tuscaloosa	34c
Tuskegee	24

ALASKA

))  
Community Channel No.  
))  
Anchorage 18, 20, 22, \*24, \*26, 28,  
30, 32  
Bethel \*3  
Dillingham \*9  
Fairbanks 18, 22, \*24, 26, 28  
Juneau \*6, 11  
Ketchikan \*8, 13  
North Pole 20  
Sitka 2

ARIZONA

))  
Community Channel No.  
))  
Flagstaff 18, 22, 27, 32  
Green Valley 47c  
Kingman 19  
Lake Havasu City 32  
Mesa 36  
Phoenix 17, 20, 24, 26, \*29, 31,  
34c, 49, 56  
Prescott 25  
Sierra Vista 44  
Tolleson 52c  
Tucson 19c, 23, 25, \*28c, \*30, 32,  
35, 42  
Yuma 16, 41

ARKANSAS

))  
Community Channel No.  
))  
Arkadelphia \*46  
El Dorado 27

Fayetteville	15,	*45				
Fort Smith	18,	21,	27			
Hot Springs	14					
Jonesboro	9c,	*20c,	49c			
Little Rock	12c,	22,	30,	32,	43c,	*47
Mountain View	*35					
Newark	*27					
Pine Bluff	24,	39c				
Rogers	50					
Springdale	39					

CALIFORNIA  
 )))))))

Community	Channel No.					
Anaheim	32					
Arcata	22					
Bakersfield	10,	25,	33,	55		
Barstow	44					
Calipatria	50					
Ceres	*15c					
Chico	36,	43				
Clovis	44c					
Concord	63c					
Corona	39c					
Cotati	*23c					
El Centro	22,	48				
Eureka	*11,	16,	17,	28		
Fort Bragg	15					
Fresno	7,	9,	14,	16,	*40	
Hanford	20					
Huntington Beach	*48					
Los Angeles	31c,	35c,	36,	*41c,	42,	43,
	53c,	*59c,	60,	65c,	66	
Merced	38					
Modesto	18					
Monterey	31,	32				
Novato	47					
Oakland	56					
Ontario	47c					
Oxnard	24					
Palm Springs	46,	52				
Paradise	20					

Porterville	48c					
Rancho Palos Verdes	51c					
Redding	14,	*18				
Riverside	68					
Sacramento	21c,	35c,	48,	*53c,	55c,	61
Salinas	13,	43c				
San Bernardino	*26,	38,	61c			
San Diego	18,	19,	25,	*30,	40c,	55
San Francisco	19,	24,	27c,	29,	*30,	*33c,
	39c,	45c,	51,	57		
San Jose	12c,	41c,	49c,	*50,	52	
San Luis Obisp	15,	34c				
San Mateo	*59					
Sanger	36					
Santa Ana	23c					
Santa Barbara	21,	27				
Santa Maria	19					
Santa Rosa	54					
Stockton	25,	46,	62			
Twentynine Palms	23					
Vallejo	34					
Ventura	49					
Visalia	28,	*50c				
Watsonville	*58					

COLORADO

))

Community	Channel No.					
Boulder	15c					
Broomfield	*38					
Castle Rock	46					
Colorado Springs	10,	22c,	24			
Denver	16,	17,	*18,	19,	32c,	34,
	35,	*40,	43,	51c		
Durango	15					
Fort Collins	21					
Glenwood Springs	23					
Grand Junction	2,	7,	12c,	15,	*17	
Longmont	29					
Montrose	13					
Pueblo	*26,	42				
Steamboat Springs	10					

Sterling 23

CONNECTICUT

))

Community	Channel No.
Bridgeport	42, *52c
Hartford	5, *32, 33, 46
New Britain	35
New Haven	6, 10, *39
New London	34
Norwich	*45
Waterbury	12

DELAWARE

))

Community	Channel No.
Seaford	*44
Wilmington	31, *55

DISTRICT OF COLUMBIA

))

Community	Channel No.
Washington	*27c, *33c, 34, 35, 36, 39, 48, 51c

FLORIDA

))

Community	Channel No.
Boca Raton	*44c
Bradenton	42
Cape Coral	35
Clearwater	21
Clermont	17
Cocoa	*30, 51
Daytona Beach	11, 49
Fort Lauderdale	52c
Fort Myers	15, *31c, 53
Fort Pierce	*38, 50
Fort Walton Beach	25, 40, 49

Gainesville	16,	*36				
High Springs	28					
Hollywood	47					
Jacksonville	13c,	19,	32,	34,	*38,	42,
	*44					
Key West	3,	12				
Lake Worth	36					
Lakeland	19					
Leesburg	40,	*46c				
Live Oak	48					
Melbourne	20,	48				
Miami	8c,	9,	*18c,	19,	*20,	22c,
	24c,	26,	30,	32,	46c	
Naples	41,	45				
New Smyrna Beach	*33					
Ocala	31					
Orange Park	10					
Orlando	14,	22,	*23,	39,	41,	58
Palm Beach	49					
Panama City	19,	29c,	*38,	42		
Panama City Beach	47c					
Pensacola	17,	*31,	34c,	45c		
Sarasota	52					
St. Petersburg	24,	57,	59			
Tallahassee	2,	22,	*32			
Tampa	7,	12,	29c,	*34,	47,	*54
Tequesta	16					
Tice	33					
Venice	25					
West Palm Beach	13c,	*27,	28,	55		

GEORGIA

))

Community	Channel No.					
))						
Albany	17,	30				
Athens	*22,	48				
Atlanta	10,	19,	20,	*21,	25,	27,
	39,	*41,	43			
Augusta	30,	31,	42,	51		
Bainbridge	50c					
Baxley	35c					
Brunswick	24					

Chatsworth	*33				
Cochran	*7				
Columbus	15,	*23,	35,	47,	9
Cordele	51				
Dalton	16				
Dawson	*26c				
Macon	16,	40,	45,	50	
Monroe	44				
Pelham	*20				
Perry	32				
Rome	51				
Savannah	15,	23c,	39,	*46	
Thomasville	52				
Toccoa	24				
Valdosta	43				
Waycross	*18				
Wrens	*36				

HAWAII

))  
Community Channel No.  
))

Hilo	8,	18,	*19,	21,	22,	23,
	*31,	*39c				
Honolulu	8,	*18,	19,	22,	23,	27c,
	31c,	33c,	35,	*39c,	40,	*43
Kailua Kona	25					
Kaneohe	41					
Lihue	*7c,	*12,	*28c,	*45		
Wailuku	16c,	20,	24,	*28c,	29,	*30,
	*34c,	36				

IDAHO

))  
Community Channel No.  
))

Boise	*21,	26,	28			
Caldwell	10c					
Coeur D'alene	*45					
Filer	*18					
Idaho Falls	9c,	36				
Lewiston	32					
Moscow	*35					

Nampa	24,	44		
Pocaello	*17,	23		
Twin Falls	16,	*22,	34	

ILLINOIS

))  
Community Channel No.  
))  
Aurora 59  
Bloomington 28  
Carbondale \*40  
Champaign 41, 48  
Charleston \*50  
Chicago 3c, 19c, \*21c, 27c, 29, 31,  
43c, 45c, \*47, 52  
Decatur 18c, 22  
East St. Louis 47c  
Freeport 41  
Harrisburg 34  
Jacksonville \*15c  
Joliet 53  
Lasalle 10  
Macomb \*21  
Marion 17  
Moline \*23, 38  
Mount Vernon 21  
Olney \*19  
Peoria 30, 39, 40, \*46, 57  
Quincy 32, \*34, 54  
Rock Island 58  
Rockford 16c, 42, 54  
Springfield 42, 44, 53  
Urbana 26, \*33

INDIANA

))  
Community Channel No.  
))  
Angola 12  
Bloomington \*14, 27, 53, 56  
Elkhart 58  
Evansville 28, 45c, \*54, 58, 59  
Fort Wayne 4, 19, 24, 36, \*40c

Gary	*17,	51c			
Hammond	36				
Indianapolis	9c,	16,	*21c,	25,	*44, 45,
	46				
Kokomo	54				
Lafayette	11				
Marion	32				
Muncie	52				
Richmond	39				
Salem	51c				
South Bend	30,	*35c,	42,	48	
Terre Haute	24,	36,	39c		
Vincennes	*52				

IOWA

))

Community Channel No.

))

Ames	59				
Burlington	41				
Cedar Rapids	27,	47,	51,	52	
Council Bluffs	*33c				
Davenport	*34,	49,	56		
Des Moines	16,	19,	26,	31,	*50
Dubuque	43				
Fort Dodge	*25				
Iowa City	25,	*45			
Mason City	*18,	42			
Ottumwa	14				
Red Oak	*35				
Sioux City	*28c,	30,	39,	41,	49
Waterloo	*35,	55			

KANSAS

))

Community Channel No.

))

Colby	17				
Ensign	5				
Fort Scott	40				
Garden City	16,	18			
Goodland	14				
Great Bend	22				



Hays	*16,	20		
Hutchinson	19,	*29,	35	
Lakin	*23			
Lawrence	36			
Pittsburg	30			
Salina	17			
Topeka	*23,	28c,	44,	48
Wichita	21,	26,	31,	45

KENTUCKY

))

Community Channel No.

))

Ashland	*26c,	44			
Beattyville	7				
Bowling Green	16,	*18,	33,	*48	
Campbellsville	19				
Covington	*24				
Danville	4				
Elizabethtown	*43				
Harlan	51				
Hazard	12,	*16			
Lexington	22,	40,	*42,	59	
Louisville	8,	*17,	26,	*38,	47,
	55				49,
Madisonville	20c,	*42			
Morehead	*15,	21			
Murray	*36				
Newport	29				
Owensboro	30				
Owenton	*44				
Paducah	32,	41,	50c		
Pikeville	*24				
Somerset	*14				

LOUISIANA

))

Community Channel No.

))

Alexandria	*26c,	32c,	35		
Baton Rouge	*25,	34c,	42,	45c,	46
Columbia	57				
Lafayette	16c,	*23,	28,	56	

Lake Charles	8c,	*20,	30c			
Monroe	*19,	55				
New Orleans	*11,	14,	15,	29,	30,	*31,
	40,	43,	50c			
Shreveport	17,	*25c,	28,	34c,	44	
Slidell	24					
West Monroe	36,	38				

MAINE

))

Community	Channel No.					
Augusta	*17					
Bangor	14,	19,	25			
Biddeford	*45					
Calais	*15					
Lewiston	28					
Orono	*22					
Poland Spring	46					
Portland	4,	38,	44			
Presque Isle	16,	*20				

MARYLAND

))

Community	Channel No.					
Annapolis	*42					
Baltimore	*29,	38,	40,	41,	46c,	52,
	59					
Frederick	*28					
Hagerstown	16,	*44,	55			
Oakland	*54					
Salisbury	21,	53,	*56			

MASSACHUSETTS

))

Community	Channel No.					
Adams	36					
Boston	*19,	20,	30,	31,	32,	39c,
	42,	*43				
Cambridge	41					
Lawrence	18					

Marlborough           23  
 New Bedford        22,  49  
 Norwell              52  
 Springfield        11,  55,  \*58c  
 Vineyard Haven    40  
 Worcester          29c,  \*47

MICHIGAN

))

Community	Channel No.
Alpena	13,  *57
Ann Arbor	33
Bad Axe	*15
Battle Creek	20,  44c
Bay City	22
Cadillac	40,  47,  *58
Calumet	18
Cheboygan	14
Detroit	14,  21c,  41,  *43,  44,  45,  58
East Lansing	*55c
Escanaba	48
Flint	16,  36,  *52
Grand Rapids	7,  *11,  19,  39
Iron Mountain	22
Jackson	34
Kalamazoo	2,  *5,  45
Lansing	38,  51c,  59
Manistee	*17
Marquette	*33,  3
Mount Clemens	39c
Mount Pleasant	*56
Muskegon	24
Onondaga	57
Saginaw	30,  48
Sault Ste. Marie	49,  56
Traverse City	31,  50
University Center	*18
Vanderbilt	59

MINNESOTA

))

Community	Channel No.					
Alexandria	14,	24				
Appleton	*31					
Austin	*20,	33				
Bemidji	*18					
Brainerd	*28					
Crookston	*16					
Duluth	17,	33,	*38,	43		
Hibbing	36					
Mankato	38					
Minneapolis	21,	22,	*26,	32,	35,	*44
Redwood Falls	27					
Rochester	36,	46				
St. Cloud	40					
St. Paul	*16,	*34,	50			
Thief River Falls	57					
Walker	20					
Worthington	*15					

MISSISSIPPI

Community	Channel No.					
Biloxi	*16,	39				
Booneville	*55					
Bude	*18c					
Columbus	35					
Greenville	17					
Greenwood	*25,	54				
Gulfport	48					
Hattiesburg	58					
Holly Springs	41c					
Jackson	*20,	21,	41c,	51,	52	
Laurel	28					
Meridian	26,	31c,	*44,	49		
Mississippi State	*38					
Natchez	49c					
Oxford	*36					
Tupelo	57					
West Point	16					

MISSOURI

))

Community	Channel No.						
Cape Girardeau	22,	57					
Columbia	22,	36					
Hannibal	29						
Jefferson City	12,	20					
Joplin	*25,	43,	46				
Kansas City	14,	*18,	24,	31,	34,	42c,	
	47,	51c					
Kirksville	33						
Poplar Bluff	18						
Sedalia	15						
Springfield	19,	*23,	28c,	44,	52		
St. Joseph	21,	53					
St. Louis	14,	26,	31c,	35,	*39,	43,	
	56						

MONTANA

))

Community	Channel No.			
Billings	11,	17,	18	
Bozeman	16,	*20		
Butte	2,	15,	19c	
Glendive	15			
Great Falls	39,	44,	45	
Hardin	22			
Helena	14,	29		
Kalispell	38			
Miles City	13			
Missoula	*27,	35,	36,	40

NEBRASKA

))

Community	Channel No.	
Albion	23	
Alliance	*24	
Bassett	*15	
Grand Island	19,	32
Hastings	*14,	21
Hayes Center	18	

Kearney	36					
Lexington	*26					
Lincoln	25,	31,	*40			
Mccook	12					
Merriman	*17					
Norfolk	*16					
North Platte	*16,	22				
Omaha	*17,	20,	22,	38,	43c,	45
Scottsbluff	20,	29				
Superior	34					

NEVADA

))

Community	Channel No.					
Elko	8					
Henderson	24					
Las Vegas	2,	7,	*11c,	16c,	17,	22c,
	29					
Paradise	40c					
Reno	*15,	22c,	23,	26,	32,	34,
	44					
Winnemucca	12					

NEW HAMPSHIRE

))

Community	Channel No.					
Berlin	*15					
Concord	33					
Derry	35					
Durham	*57					
Keene	*49c					
Littleton	*48					
Manchester	59c					
Merrimack	34					

NEW JERSEY

))

Community	Channel No.					
Atlantic City	46,	49				
Burlington	27					

Camden	*22
Linden	36
Montclair	*51c
New Brunswick	*18c
Newark	53c, 61
Newton	8c
Paterson	40
Secaucus	38
Trenton	*43
Vineland	66c
West Milford	*29
Wildwood	36

NEW MEXICO

))

Community	Channel No.
Albuquerque	16, *17, 21, 24c, *25, 26, 42c, 51c
Carlsbad	19
Clovis	20
Farmington	8, 17
Hobbs	16
Las Cruces	*23c, 36
Portales	*32
Roswell	28c, 35, 41
Santa Fe	10, 27, 29
Silver City	12

NEW YORK

))

Community	Channel No.
Albany	4, 15, 26
Amsterdam	50
Batavia	53
Binghamton	4, 7, 8, *42c
Buffalo	14, *32, 33, 34, 38, 39, *43
Carthage	35
Corning	50
Elmira	2, 55
Garden City	*22c

Jamestown	27c					
Kingston	21					
New York	*24,	28,	30,	33,	44,	45,
	56c					
North Pole	14					
Norwood	*23					
Plattsburgh	*38					
Poughkeepsie	27					
Riverhead	57					
Rochester	*16,	28,	45,	58,	59	
Schenectady	*34,	39,	43			
Smithtown	23					
Springville	46					
Syracuse	17,	19c,	*25c,	44c,	47,	54
Utica	27,	29,	30			
Watertown	21c,	*41				

NORTH CAROLINA

))

Community	Channel No.					
Asheville	*25,	45,	56,	57		
Belmont	47c					
Burlington	14					
Chapel Hill	*59					
Charlotte	22,	23,	*24,	27,	34	
Columbia	*20					
Concord	*44					
Durham	27,	52				
Fayetteville	36,	38				
Goldsboro	55					
Greensboro	33,	43,	51			
Greenville	10c,	21,	*23			
Hickory	40					
High Point	35					
Jacksonville	34,	*44				
Kannapolis	50					
Lexington	19					
Linville	*54					
Lumberton	*25					
Morehead City	24					
New Bern	48					
Raleigh	49,	53,	57			



Roanoke Rapids	*39			
Rocky Mount	15			
Washington	32			
Wilmington	*29,	30,	46,	54
Wilson	42			
Winston-Salem	29,	31,	*32	

NORTH DAKOTA

))

Community	Channel No.			
Bismarck	16,	*22,	23,	31
Devils Lake	*25,	59		
Dickinson	18,	19,	*20	
Ellendale	*20c			
Fargo	19,	21,	*23,	58
Grand Forks	*56			
Jamestown	14			
Minot	15c,	45,	*57,	58
Pembina	15			
Valley City	38			
Williston	14,	*51,	52	

OHIO

))

Community	Channel No.				
Akron	30,	*50c,	59		
Alliance	*46c				
Athens	*27				
Bowling Green	*56				
Cambridge	*35				
Canton	39,	47			
Chillicothe	46				
Cincinnati	10c,	31,	33,	*34,	35
Cleveland	2,	15,	*26c,	31,	34
Columbus	13,	14,	21,	36,	*38
Dayton	30,	41,	50,	51,	*58
Lima	20,	47			
Lorain	28				
Mansfield	12				
Newark	24				
Oxford	*28				

Portsmouth	17,	*43c				
Sandusky	42c					
Shaker Heights	10					
Springfield	18					
Steubenville	57					
Toledo	5,	17,	19c,	*29,	46,	49c
Youngstown	20c,	36,	41			
Zanesville	40					

OKLAHOMA

))

Community	Channel No.					
Ada	26					
Bartlesville	15					
Cheyenne	*8					
Claremore	*36c					
Enid	18					
Eufaula	*31					
Lawton	23					
Oklahoma City	15c,	16,	24,	27,	*32,	33,
	39,	42,	50,	51		
Okmulgee	28					
Shawnee	29					
Tulsa	22,	*38,	42c,	48c,	49,	55,
	56,	58				

OREGON

))

Community	Channel No.					
Bend	*11,	18				
Coos Bay	21,	22				
Corvallis	*39					
Eugene	14,	17c,	25,	*29c,	31	
Klamath Falls	29,	*33,	40			
La Grande	*5					
Medford	15,	27c,	35,	38,	*42	
Pendleton	8					
Portland	*27,	30,	40,	43,	45,	6
Roseburg	18,	19,	45			
Salem	20,	33c				

PENNSYLVANIA

))

Community	Channel No.					
Allentown	46,	*62c				
Altoona	24c,	32,	46			
Bethlehem	59c					
Clearfield	*15					
Erie	16,	22,	*50,	52,	58	
Greensburg	50					
Harrisburg	4,	*36,	57			
Hazleton	9					
Johnstown	29,	30,	34			
Lancaster	23, 58					
Philadelphia	26,	32,	*34,	42,	54,	64c,
	67					
Pittsburgh	25c,	*26c,	*38,	42,	43,	48,
	51					
Reading	25					
Red Lion	30					
Scranton	13,	31,	32,	*41,	49	
Wilkes-Barre	11					
Williamsport	29					
York	47					

RHODE ISLAND

))

Community	Channel No.			
Block Island	17c			
Providence	13c,	*21,	51,	54c

SOUTH CAROLINA

))

Community	Channel No.					
Allendale	*33					
Anderson	14					
Beaufort	*44					
Charleston	35,	40,	*49,	52,	53,	59
Columbia	8,	17,	*32,	41,	48	
Conway	*58					
Florence	16c,	20,	*45,	56		

Greenville	*9,	35,	59
Greenwood	*18		
Hardeeville	27		
Myrtle Beach	18		
Rock Hill	15,	39	
Spartanburg	43,	53	
Sumter	*28c,	38	

SOUTH DAKOTA

))

Community	Channel No.
Aberdeen	*17c, 28
Brookings	*18
Eagle Butte	*25
Florence	25
Huron	22
Lead	29, 30
Lowry	*15
Martin	*23
Mitchell	26
Pierre	19, *21
Rapid City	16c, 18, 22, *26
Reliance	14
Sioux Falls	7, *24c, 29, 32, 40, 47c
Vermillion	*34

TENNESSEE

))

Community	Channel No.
Chattanooga	*29, 35, 40, 47, 55
Cleveland	42
Cookeville	36, *52
Crossville	50
Greeneville	38
Hendersonville	51c
Jackson	39, 43
Jellico	23
Johnson City	58
Kingsport	27
Knoxville	*17, 26, 30, 31, 34
Lebanon	44

Lexington	*47					
Memphis	25c, 53	28,	*29c,	31c,	51c,	52,
Murfreesboro	38					
Nashville	10, 56	15,	21,	23,	27,	*46,
Sneedville	*41					

TEXAS

))

Community Channel No.  
))

Abilene	24,	29				
Alvin	36					
Amarillo	9,	15c,	19,	*21,	23	
Arlington	42					
Austin	21,	*22,	33,	43c,	49,	56
Baytown	41					
Beaumont	21,	*33,	50			
Belton	47c					
Big Spring	33					
Brownsville	24c					
Bryan	29c,	59				
College Station	*12					
Conroe	5,	42				
Corpus Christi	18,	*23,	27,	47,	50	
Dallas	9c, 45	*14,	32,	35,	36,	40c,
Decatur	30c					
Del Rio	28					
Denton	*43					
Eagle Pass	18					
El Paso	15c, *39c,	16, 51	17,	18,	25,	*30,
Fort Worth	18,	19,	41,	51		
Galveston	*23c,	47				
Garland	24c					
Greenville	46					
Harlingen	31,	*34,	38			
Houston	*9c, 35,	19, 38,	*24, 44c	27c,	31,	32,
Irving	48					
Jacksonville	22					

Katy	52c					
Kerrville	32					
Killeen	23					
Lake Dallas	54					
Laredo	14,	15,	19			
Llano	27					
Longview	52c					
Lubbock	25,	27,	35c,	38,	*39,	43
Lufkin	43					
Mcallen	46					
Midland	26					
Nacogdoches	18					
Odessa	15,	*22,	23,	31,	43c	
Port Arthur	40					
Rio Grande City	20					
Rosenberg	46c					
San Angelo	11,	16,	19			
San Antonio	*16,	*20,	30c,	38,	39,	48,
	55,	58				
Sherman	20					
Snyder	10					
Sweetwater	20					
Temple	50					
Texarkana	15					
Tyler	38					
Victoria	15,	34				
Waco	*20,	26c,	53,	57		
Weslaco	13					
Wichita Falls	15,	22,	28			

UTAH

))

Community	Channel No.					
Cedar City	14					
Ogden	29,	*34				
Provo	17c,	*39				
Salt Lake City	27,	28,	35,	38,	40,	*42
St. George	9					

VERMONT

))

Community	Channel No.					
-----------	-------------	--	--	--	--	--

))

Burlington	16, *32, 43, 53
Hartford	25
Rutland	*56
St. Johnsbury	*18
Windsor	*24

VIRGINIA

))

Community	Channel No.
Arlington	15c
Ashland	47
Bristol	28
Charlottesville	*14, 32
Danville	41
Fairfax	*57c
Front Royal	*21
Goldvein	*30
Grundy	49
Hampton	41
Hampton-Norfolk	*16c
Harrisonburg	49
Lynchburg	20, 56
Manassas	43c
Marion	*42
Norfolk	38, 46, 58
Norton	*32
Petersburg	22c
Portsmouth	19, 31
Richmond	*24c, 25, 26, *44, 54
Roanoke	*3, 17, 18, 30, 36
Staunton	*11
Virginia Beach	29

WASHINGTON

))

Community	Channel No.
Bellevue	32, 50
Bellingham	19, 35
Centralia	*19
Everett	31

Kennewick	44					
Pasco	18					
Pullman	*17					
Richland	26c,	*38				
Seattle	25,	38,	39,	*41,	44,	48
Spokane	13,	15,	20,	30,	36,	*39
Tacoma	14,	18,	*27,	36,	*42	
Vancouver	48					
Wenatchee	46c					
Yakima	14,	16,	*21,	33		

WEST VIRGINIA

))

Community	Channel No.					
Bluefield	14,	46				
Charleston	19,	39,	41			
Clarksburg	28,	52				
Grandview	*53					
Huntington	23,	*34c,	54			
Lewisburg	48					
Martinsburg	12					
Morgantown	*33					
Oak Hill	50					
Parkersburg	49					
Weston	58					
Wheeling	32					

WISCONSIN

))

Community	Channel No.					
Appleton	59					
Chippewa Falls	49c					
Eagle River	28					
Eau Claire	15,	39				
Fond Du Lac	44					
Green Bay	23,	41,	*42,	51,	56	
Janesville	32					
Kenosha	40					
La Crosse	14,	17,	*30,	53		
Madison	11,	19,	*20,	26,	50	
Manitowoc	19					



Mayville	43					
Menomonie	*27					
Milwaukee	*8,	22,	25c,	28,	33,	34,
	*35,	46,	61			
Park Falls	*47					
Racine	48					
Rhineland	16					
Superior	19					
Suring	21					
Wausau	*24,	29,	40			

WYOMING

))

Community	Channel No.
Casper	15c, 17, 18
Cheyenne	11, 28c, 30
Jackson	14
Lander	7, *8
Rawlins	9
Riverton	16
Rock Springs	21
Sheridan	21

GUAM

))

Community	Channel No.
Agana	2, 4, 5
Tamuning	17

PUERTO RICO

))

Community	Channel No.
Aguada	62
Aguadilla	17c, *34, 69
Arecibo	53, 61c
Bayamon	59c
Caguas	56, *57
Carolina	51
Fajardo	*16c, 33
Guayama	45

Humacao	49					
Mayaguez	23c,	29c,	35c,	63		
Naranjito	65c					
Ponce	15c,	19,	*25,	43c,	47,	66
San Juan	21,	27c,	28,	31c,	32,	*55c
San Sebastian	39c					
Yauco	41c					

VIRGIN ISLANDS

))

Community	Channel No.					
))						
Charlotte Amalie	*44,	48,	50			
Christiansted	5,	20				

(c) Availability of channels. Applications may be filed to construct DTV broadcast stations only on the channels designated in the DTV Table of Allotments set forth in paragraph (b) 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 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, 1919 M St., N.W., Dockets Branch (Room 239), Washington, DC, 20554. 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 of section 73.623 are met with respect to each such application.

(d) Reference points and distance computations.

(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(c).

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(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 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 section 73.623(d) and from subsequent DTV applications filed pursuant to section 73.623(c).

(2) The reference coordinates of a DTV allotment not included in the initial DTV Table of Allotments 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 modifying the DTV Table of Allotments.

(e) DTV Service Areas.

(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 stations's signal, in dB above 1 microvolt per meter (dBu) as determined using the method in section 73.625(d), 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 14-69	41

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 OET Bulletin No. 69 may be inspected during normal business hours at the: Federal Communications Commission, 1919 M St., N.W., Dockets Branch (Room 239), Washington, DC, 20554. This document is also available through the Internet on the FCC Home Page at <http://www.fcc.gov>.

Note to paragraph (e)(1): 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.

(2) 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) DTV maximum power and antenna heights.

(1) The maximum, or reference, effective radiated power (ERP) and antenna height above average terrain (antenna HAAT) for an allotment included in the initial DTV Table of Allotments are set forth in Appendix B of the Memorandum Opinion and Order (referenced above). In each azimuthal direction, the reference ERP value is based on the antenna HAAT of the corresponding analog TV station and achieving predicted coverage equal to that analog TV station's predicted Grade B contour, as defined in section 73.683.

(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:

(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 (i) above 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) 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:

$$\text{ERP adjustment in dB} = 20\log(H_1/H_2)$$

where  $H_1$  = Reference antenna HAAT specified in the DTV Table, and  
 $H_2$  = Actual antenna HAAT

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 above formula 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.

(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 through use of antenna beam tilting in excess of 1 degree, as follows:

(i) Field strengths at the outer edge of the station's service area shall be no greater than the levels that would exist if the station were operating at its assigned DTV power.

(ii) Where a station operates at higher power under the provisions of this paragraph, its field strengths at the edge of its service area are to be calculated assuming 1 dB of additional antenna gain over the antenna gain pattern specified by the manufacturer.

(iii) Where a first adjacent channel DTV station or allotment is located closer than 110 km or a first

adjacent channel analog TV station is located closer than 106 km from the proposed transmitter site, the application must be accompanied by a technical showing the proposed operation complies with the technical criteria in section 73.623(c) and thereby will not result in new interference exceeding the *de minimis* standard for new interference set forth in that section, or statements from affected stations agreeing to the proposed operation in accordance with section 73.623(f).

(iv) A licensee desiring to operate at higher power under these provisions shall submit, with its initial application for a DTV construction permit or subsequent application to modify its DTV facilities, an engineering analysis demonstrating that the predicted field strengths and predicted interference within its service area would comport with the requirements of this paragraph. The licensee also must notify, by certified mail, all stations that could potentially be affected by such operation at the time the station files its application for a construction permit or modification of facilities. Potentially affected stations to be notified include stations on co-channel and first- adjacent channel allotments that are located at distances less than the minimum geographic spacing requirements in section 73.623(d)(2). For example, in Zone I a co-channel DTV station within 196.3 km or a first adjacent channel DTV station within 110 km must be notified. A station that believes that its service is being affected beyond the *de minimis* standard set forth in section 73.623(c) may file an informal objection with the Commission. Such an informal objection shall include an engineering analysis demonstrating that additional impermissible interference would occur. The Commission may condition grant of authority to operate at increased power pursuant to this provision on validation of actual performance through field measurements.

(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 above), up to the maximum permissible limits on DTV power and antenna height set forth in paragraphs (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 section 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 section 73.623(f). In the case where a DTV station has been granted authority to construct pursuant to section 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 section 73.623(d) and from subsequent DTV applications filed pursuant to section 73.623(c). 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.

(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.

(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:

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

(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:

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

(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.

(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:

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

(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:

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

(8) A DTV station that operates on a channel 14-59 allotment created subsequent to the initial DTV Table will be allowed a maximum ERP of 1000 kW if their antenna HAAT is at or below 365 meters. A DTV station that operate 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.

(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 On Channels 14-59, 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 14-59 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:

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

(g) DTV stations operating on channels above an analog TV station.

(1) DTV stations operating on a channel allotment designated with a "c" in paragraph (b) of this section must maintain the pilot carrier frequency of the DTV signal 5.082138 MHz above the visual carrier frequency of any analog TV broadcast station that operates on the lower adjacent channel and is located within 88 kilometers. This frequency difference must be maintained within a tolerance of  $\pm 3$  Hz.

(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) 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:

$$\text{Attenuation in dB} = -11.5(\Delta f + 3.6);$$

where:  $\Delta f$  = frequency difference in MHz from the edge of the channel.

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.

3. Section 73.623 is amended by revising paragraphs (c), (d), (e) and (f) to read as follows:

§ 73.623 DTV applications and changes to DTV allotments.

\* \* \* \* \*

(c) Minimum technical criteria for modification of DTV allotments included in the initial DTV Table of Allotments and for applications filed pursuant to this section. No petition to modify a channel allotment included in the initial DTV Table of Allotments or application for authority to construct or modify a DTV station assigned to such an allotment, filed pursuant to this section, 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 73.625(a).

(2) Requests filed pursuant to this paragraph 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 98-23, adopted February 17, 1998, 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 section 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, 1919 M St., N.W., Dockets Branch (Room 239), Washington, DC, 20554. 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:

	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 (2) 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 values are 21 dB and 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:

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)

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 (2) shall not be applicable to these pairs of channels (see section 73.603(a)).

(d) Minimum geographic spacing requirements for DTV allotments not included in the initial DTV Table of Allotments. No petition to add a new channel to the DTV Table of 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.

(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:

Channel Relationship	Separation Requirement
<b>VHF Channels 2-13</b>	
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
<b>UHF Channels</b>	
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 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

(2) Zones are defined in section 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.

(3) 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 above shall not be applicable to these pairs of channels (see section 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:

City	Channels	Latitude	Longitude
Boston, MA	14, 16	42° 21' 24"	71° 03' 25"
Chicago, IL	14, 15	41° 52' 28"	87° 38' 22"
Dallas, TX	16	32° 47' 09"	96° 47' 37"
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	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, D.C.	17, 18	38° 53' 51"	77° 00' 33"

(f) Negotiated agreements on interference. Notwithstanding the minimum technical criteria for DTV allotments specified above, DTV stations operating on allotments that are included in the initial DTV Table may: 1) operate with increased ERP and/or antenna HAAT that would result in additional interference to another DTV station or an analog TV station if that station agrees, in writing, to accept the additional interference; and/or 2) implement an exchange of channel allotments between two or more licensees or permittees of TV stations in the same community, the same market, or in adjacent markets provided, however, that the other requirements of this section and of section 73.622 are met with respect to each such application. Such agreements must be submitted with the application for authority to construct or modify the affected DTV station or stations. The larger service area resulting from a negotiated change in ERP and/or antenna HAAT will be protected in accordance with the provisions of paragraph (c) of this section. 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 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.

4. Section 73.625 is amended by adding paragraph (c)(5) to read as follows:

§ 73.625 DTV coverage of principal community and antenna system.

\* \* \* \* \*

(c) \* \* \*

\* \* \* \* \*

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

(i) Complete description of the proposed antenna system, including the manufacturer and model number. Vertical plane radiation patterns conforming with paragraphs (c)(3)(iv), (c)(3)(v) and (c)(3)(vi) of this section.

(ii) For at least 36 evenly spaced radials, including 0 degrees corresponding to true North, a determination of the depression angle between the transmitting antenna center of radiation and the radio horizon using the formula in paragraph (b)(2) of this section.

(iii) For each such radial direction, the ERP at the depression angle, taking into account the effect of the electrical beam tilt, mechanical beam tilt, if used, and directional antenna pattern if a directional antenna is specified.

(iv) The maximum ERP toward the radio horizon determined by this process must be clearly indicated. In addition, a tabulation of the relative fields representing the effective radiation pattern toward the radio horizon in the 36 radial directions must be submitted. A value of 1.0 should be used for the maximum radiation.

5. Section 73.3572 is amended by revising paragraph (a) to read as follows:

§ 73.3572 Processing of TV broadcast, low power TV, TV translator and TV booster applications.

(a) \* \* \*

\* \* \* \* \*

(2) However, if the proposed modification of facilities, other than a change in frequency, will not increase the signal range of the low power TV, TV translator or TV booster station in any horizontal direction, the modification will not be considered a major change.

(i) Provided that in the case of an authorized low power TV, TV translator or TV booster which is predicted to cause or receive interference to or from an authorized TV broadcast station pursuant to section 74.705 or interference with broadcast or other services under section 74.703 or section 74.709, that 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 16.1 km), will not be considered as an application for a major change in those facilities.

(ii) Provided further, that a low power TV, TV translator or TV booster station: (a) authorized on a channel from channel 60 to 69, or (b) 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, or (c) which is located within the distances specified below in paragraph (c) 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, TV translator or TV booster stations, or with other nondisplacement relief applications for facilities modifications, priority will be afforded to the displacement application(s) to the exclusion of the other applications.

(iii) The geographic separations to co-channel DTV facilities or allotment reference coordinates, as applicable, within which to qualify for displacement relief are the following:

- (a) Stations on UHF channels: 265 km (162 miles)
- (b) Stations on VHF channels 2 - 6: 280 km (171 miles)
- (c) Stations on VHF channels 7 - 13: 260 km (159 miles)

Engineering showings of predicted interference may also be submitted to justify the need for displacement relief.

(iv) 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 section 73.3580 of this section and section 1.1111 of this chapter pertaining to major changes.

## **PART 74 -- EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTION SERVICES**

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

Authority: Secs. 4, 303, 48 Stat. 1066, as amended, 1082, as amended; 47 U.S.C.154, 303, 336, and 554.

6. Section 74.706 is amended by revising paragraph (d) to read as follows:

§ 74.706 Digital TV (DTV) station protection.

\* \* \* \* \*

(d) A low power TV, TV translator or TV booster station application will not be accepted if the ratio in dB of its field strength to that of the DTV station (L/D ratio) fails to meet the following:

(1) - 2 dB or less for co-channel operations. This maximum L/D ratio for co-channel interference to DTV service is only valid at locations where the signal-to-noise (S/N) ratio is 25 dB or greater. At

the edge of the noise-limited service area, where the S/N ratio is 16 dB, the maximum L/D ratio for co-channel interference from analog low power TV, TV translator or TV booster service into DTV service is -21 dB. At locations where the S/N ratio is greater than 16 dB but less than 25 dB, the maximum L/D field strength ratios are found from the following Table (for values between measured values, linear interpolation can be used):

Signal-to-Noise Ratio(dB)	Low Power-to-DTV 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

(2) + 48 dB for adjacent channel operations at:

(i) The DTV noise-limited perimeter if a low power TV, TV translator or TV booster station is located outside that perimeter.

(ii) At all points within the DTV noise-limited area if a low power TV or TV translator is located within the DTV noise-limited perimeter, as demonstrated by the applicant.