In the Matter of

Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service

Sixth Further Notice of Proposed Rule Making

TO: The Commission

COMMENTS OF TELEMUNDO GROUP, INC.


I. Introduction

Telemundo is one of the leading sources of Spanish-language news, information and entertainment for the nation’s Hispanic population. It controls the licensees of seven full-power UHF television stations, one full-power VHF television station, and 14 low power television stations (“LPTVs”) and TV translators. 1/ It

1/ Telemundo controls the licensees of the following full-power television stations:

- KVEA(TV), Channel 52, Corona, California
- KSTS(TV), Channel 48, San Jose, California
- WSNS(TV), Channel 44, Chicago, Illinois
- WSCV(TV), Channel 51, Fort Lauderdale, Florida
- KVDA(TV), Channel 60, San Antonio, Texas
also is the parent of Telemundo Network, Inc., which produces 24 hours of Spanish-language programming per day for distribution to its own stations and to 42 full-power television or LPTV affiliates in 26 markets across the country. By participating in this proceeding, Telemundo seeks to ensure that the table of digital television (“DTV”) allotments and assignments adopted by this Commission does not diminish its ability to reach the Spanish-speaking audiences which depend upon its programming or minimize the diversity of programming available to the public.

Telemundo is a signatory to the Comments that are being filed today by the “Broadcasters,” a wide cross-section of the country’s television stations and networks, and generally supports the basic principles set forth in the Broadcasters’ Comments. Telemundo further supports the Comments of the Association of Federal Communications Consulting Engineers (“AFCCE”) as a means of resolving some of the problems encountered by Telemundo’s stations and identified in these Comments. However, Telemundo submits these Comments separately in order to highlight the following additional limited concerns which merit the Commission’s attention: (1) the FCC’s proposed DTV allotment for KVEA(TV), Corona, California, would destroy Telemundo’s ability to have competitive facilities in the Los Angeles DTV marketplace, since KVEA would be forced to reduce power
substantially in order to eliminate interference to public safety communications services; (2) the FCC’s proposed DTV table for Puerto Rico would fail to extend DTV service to many island residents; (3) the Commission’s proposals do not provide adequate protection for LPTV and TV Translator services; and (4) the Commission should incorporate engineering measures that will improve service to urban populations.

II. The FCC’s DTV Channel Assignment For KVEA Would Conflict With Los Angeles Public Safety Radio Operations And San Diego NTSC Operations, Contrary To The Public Interest.

The Commission’s proposed DTV table includes an allocation for Telemundo’s station in the Los Angeles market which would be extremely detrimental to the public interest. First, this DTV channel assignment would likely result in interference to adjacent-channel public safety radio services. Telemundo’s delivery of digital Spanish-language programming to Los Angeles-area audiences could be delayed indefinitely while it struggles to resolve these interference problems. Second, KVEA’s DTV and NTSC channel assignments may receive interference from co-channel NTSC and DTV channels in San Diego, due to the unusual geography and propagation characteristics of Southern California. Thus, the Commission’s proposed DTV assignment for KVEA would be contrary to the public interest.

The Broadcasters have proposed an alternative DTV table of allotments which would resolve KVEA’s problems. However, in the event that the Commission rejects the Broadcasters’ DTV table and adopts the DTV table proposed
in the Sixth NPRM, Telemundo urges the Commission to adjust the allotments in the Los Angeles market so that KVEA is not adjacent to Channels 14 and 16 or assigned to the same channel as a San Diego NTSC station.
A. KVEA’s DTV Allotment Would Impede Its Ability To
Compete In The DTV Marketplace Because Of The Likely
Interference With Public Safety Radio Operations On
Channels 14 and 16.

The Commission’s DTV table assigns Telemundo Station KVEA,
Channel 52, Corona, California, to DTV Channel 15. 2/ This channel is adjacent to
the channel reserved for the public safety radio operations of Los Angeles-area
police and fire departments (Channel 16) and the channel reserved for a variety of
domestic public, public safety, industrial and land transportation radio services
(Channel 14). 3/ The adjacency of these channels would most likely result in
interference to the land mobile operations assigned to Channels 14 and 16. Such
interference would severely compromise KVEA’s ability to provide DTV service to
the Los Angeles area.

1. The adjacency of KVEA’s DTV channel to two
land mobile channels would result in interference.

First, KVEA would be short-spaced to Channels 14 and 16. In order to
avoid interference, the Commission proposes co-channel and adjacent channel
 spacings of 250 km (155 miles) and 176 km (110 miles), respectively, between DTV
stations and the city-center of land mobile operations. 4/ The Commission
tentatively concluded that this spacing approach is “appropriate for regulating

2/ Sixth NPRM at Appendix B, B-7.

3/ See 47 C.F.R. § 2.106, note NG66; Sixth NPRM at n.77.

4/ Sixth NPRM at ¶ 76.
interference between DTV stations and existing land mobile operations.” 5/ However, KVEA’s Channel 15 allotment is one of nine cases where DTV allotments would be less than 110 miles from adjacent channel land mobile operations. 6/ In fact, there could be no spacing between KVEA and the land mobile operations, since public safety radio services could be used anywhere in the market, including at the site of KVEA’s transmitter. Thus, under the Commission’s own proposed rules, the spacing to KVEA’s DTV channel would not be sufficient to regulate interference.

Second, the experience of NTSC television stations operating on channels adjacent to land mobile operations demonstrates that it is almost impossible to prevent adjacent television stations from interfering with land mobile receivers. The adjacency typically results in signal overloading of nearby land mobile receivers on adjacent channels, even where the television station reduces out-of-channel emissions significantly below the level required by Commission rules.

For example, the government of Fairfax County, Virginia, and the Metropolitan Police Department of the District of Columbia have complained for over five years that operation of WTMW(TV), Channel 14, Arlington, Virginia, would create interference to their public safety radio services. 7/ In 1993, the

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5/ Id.

6/ Id. at n.96.

7/ See id. at 515, n. 39 (referencing clash between parties existing as of August 1991). The potential interference to the Fairfax County, Virginia communications services was resolved in 1993, see Construction Permit File No. BLCT-930406KF.
Commission granted WTMW program test authority to operate at no higher than 50% of the station’s authorized power in order to prevent this interference. 8/ Three years later, WTMW still has not received authority to operate at full power.

Station KTVJ(TV), Channel 14, Boulder, Colorado, has been the subject of complaints concerning interference to adjacent-channel land mobile operations for an even longer period of time. In 1991, the Commission noted that construction of KTVJ(TV) had been delayed “for several years,” because of a high concentration of land mobile stations near its authorized transmitter site. 9/ Five years later, KTVJ is operating at less than 10% of authorized power pending resolution of an intermodulation problem with the City of Denver. 10/ Even this power level is unsatisfactory to a coalition of land mobile operators who have submitted two requests for suspension or revocation of KTVJ’s program test permit.

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authority. 11/

In 1985, the Commission refused to locate public safety communications services on Channel 19 in Los Angeles because of the interference that would be caused to an adjacent-channel television station licensed to San Bernardino, California, on Channel 18 (KSCI-TV). The Commission concluded, “It is clear that interference will occur frequently, particularly when one considers that mobile and portable transmitters will move throughout the county.” 12/

KVEA’s operation on Channel 15, which would be adjacent to two channels reserved for land mobile operations instead of just one like WTMW, KTVJ, and WSCI, would generate similar interference concerns. Furthermore, any complaints of interference to public safety radio services, either actual or perceived, will be taken seriously in light of the potential life and death consequences of any such interference.

2. The interference of KVEA’s DTV channel to adjacent-channel public safety radio services would impede KVEA’s ability to compete in the DTV marketplace and unfairly disadvantage KVEA’s Spanish-language broadcasts.

11/ See Letters of Dudley P. Spiller and Andrew Cohen of Gorsuch Kirgis L.L.C. (Counsel to the Cities of Lakewood, Littleton, Boulder and Glendale; Martin Marietta Astronautics Group; The University of Colorado; St. Anthony’s Hospital; STI Mobile Communications; and Motorola Communications) to Clay Pendarvis, Chief, Television Branch, Mass Media Bureau, Federal Communications Commission, regarding KTVJ(TV), Boulder, Colorado (March 1, 1996 and June 14, 1996).

12/ Amendment of Parts 2, 73, and 90 of the Commission’s Rules and Regulations to Allocate Additional Channels in the Band 470-512 Mhz for Public Safety and Other Land Mobile Services, 1986 W.L. 292573 (1986).
Under the standards currently applicable to NTSC stations, KVEA presumably would not be able to initiate DTV operations until it resolves all potential interference. In order to resolve such interference, the station might be forced to operate well below its authorized power. This would threaten the provision of Telemundo’s Spanish-language DTV service to many viewers in Los Angeles and unfairly handicap KVEA in the DTV marketplace.

Under the present regulatory scheme, new television stations on channels 14 and 69 that are adjacent to land mobile operations must “identify potential cases of interference caused by out-of-band TV emissions, land mobile receiver desensitization or intermodulation. They must install necessary filters, take other necessary precautions and submit evidence that no interference is being caused before they will be permitted to transmit programming on the new facilities.” 13/ Broadcasters must cooperate in the resolution of any problem, even where the source of the interference is beyond the station’s control. 14/

Compliance with this standard can be extraordinarily costly, since it often requires special equipment and years of services from engineering

13/ Resolution of Interference Between UHF Channels 14 and 69 and Adjacent-Channel Land Mobile Operations, 6 FCC Rcd. at 5153; see also 47 C.F.R. 73.687(e)(4)(ii). This standard essentially codified principles that the Commission had applied on a case-by-case basis to earlier instances of interference. Resolution of Interference Between UHF Channels 14 and 69 and Adjacent-Channel Land Mobile Operations, 6 FCC Rcd at 5148.

14/ Id. at 5154.
consultants. More importantly, the standard is unrealistic because interference often cannot be resolved. For instance, filters may not solve interference where the problem is due to receiver overload. In addition, stations can rarely be relocated to resolve a problem, since stations are purposely located at the sites where they will provide required service to their communities. A substantial television station move is particularly unrealistic in the case of digital television, since the Commission’s DTV Table is predicated on a station locating its DTV facilities within three miles of its NTSC facilities. 15/

These unrealistic standards result in substantial delays in service, as evidenced in the WTMW and KTVJ cases. Even worse, after years of delays, stations are often forced to reduce power levels significantly in order to initiate operations. Any such delay or forced reduction in power level would be devastating to Telemundo’s ability to compete in the DTV marketplace. In addition, it would prevent Telemundo from delivering a DTV signal to some or all of the audience that relies upon Telemundo’s Spanish-language broadcasts. Accordingly, the Commission should adjust its DTV table so that KVEA is not assigned to a channel adjacent to public safety radio services.

B. KVEA’s DTV And NTSC Channels May Experience Interference From Co-Channel NTSC And DTV Stations In San Diego.

If the FCC ever resolved the interference problems with public safety 15/ Sixth NPRM at ¶ 56.
radio services so that KVEA could initiate its DTV operations, it may experience unacceptable interference from the NTSC Channel 15 in San Diego (KPBS(TV)) throughout the digital transition period. Moreover, KVEA’s NTSC Channel 52 may receive unacceptable interference from the DTV operations proposed by the FCC on Channel 52 in San Diego (assigned to KUSI-TV). The combination of the high elevation transmission sites of many Southern California television stations and the unique radio propagation characteristics along the coast of Southern California (including temperature inversions and over-the-water ducting) creates interference between Los Angeles and San Diego stations. 16/ The Commission has not allowed co-channel use between NTSC stations in Los Angeles and San Diego because of the potential for interference. Lacking any NTSC to DTV and DTV to NTSC interference data for this region, the Commission should take a cautious approach and avoid making co-channel assignments for DTV and NTSC stations in Los Angeles and San Diego. In particular, the Commission should avoid burdening KVEA twice with such co-channel assignments, while also assigning KVEA a DTV channel adjacent to two land mobile channels. Such setbacks would make it very difficult for Telemundo to compete in the Los Angeles marketplace.

III. The FCC’s Proposed DTV Allotments In Puerto Rico Must Be Modified To Ensure That DTV Service Will Be Available To Most Residents Of Puerto Rico.

The Commission’s proposed DTV allotments for Puerto Rico would be very harmful to the public interest. The DTV channel assignment for Telemundo station WKAQ-TV, Channel 2, San Juan, Puerto Rico, would require an impractically-high power level in order to replicate WKAQ’s existing NTSC service. Since WKAQ would be forced to operate at a lower power level than authorized by the proposed DTV Table, many residents on the outer edges of WKAQ’s NTSC contour would not receive WKAQ’s DTV signal. Moreover, the residents who would be deprived of WKAQ’s service might not receive DTV service from other stations in Puerto Rico either, since some stations will lack the resources to initiate DTV operations.

Unlike the modified DTV allotments for Los Angeles proposed by the Broadcasters, the Broadcasters’ Comments do not include new channel assignments for stations in Puerto Rico. Accordingly, Telemundo urges the Commission to modify its Puerto Rico DTV allotments to take into account Puerto Rico’s unique combination of spectrum scarcity, mountainous terrain, and station failures. Modifications to the DTV Table should include rejection of the core spectrum approach, implementation of channel preferences for stations with the longest record of service to the public, and use of channel sharing arrangements.

A. WKAQ Would Be Forced To Operate Below Authorized Power And Lose Viewers Under The FCC’s Proposed DTV Table.

The FCC’s proposed DTV Table assigns Telemundo station WKAQ to DTV Channel 56. 17/ This channel assignment would be disastrous given WKAQ’s
Signals travel poorly in the upper UHF band, especially over the difficult mountainous terrain present in Puerto Rico. 18/ To compensate for this problem so as to replicate WKAQ’s NTSC signal, the Commission has assigned WKAQ a very high power level, 1,778.3 KW average. However, it would be completely impractical for a station with NTSC facilities in the low VHF band, such as WKAQ, to construct the facilities that are needed to achieve this high power level. Accordingly, WKAQ would be forced to operate at a lower power level, with the result that it would not be able to replicate its NTSC signal. Most of WKAQ’s NTSC viewers who are outside of the station’s DTV contour would have no other way of receiving WKAQ’s DTV signal, since Puerto Rico has a cable penetration rate of only 27.5 percent. 19/ The diversity of programming available to many residents of Puerto Rico would be diminished as a result.

The power level assigned to WKAQ is impractical for a number of reasons. First, the peak power level required to achieve the authorized average power, based on ATSC and manufacturer’s tests, would be over 7,000 KW. Yet, the highest power level allowed for UHF NTSC stations is 5,000 KW. Second, WKAQ would require a transmitter with 12 high-power IOT amplifiers in order to provide

17/ Sixth NPRM at Appendix B, B-43.
omni-directional coverage using a medium gain transmit antenna and circular polarization (as it uses now). Few UHF television stations today use transmitters with more than four high-power amplifier tubes.

Current UHF stations could more easily replicate their service areas with channel assignments in the higher UHF band because the power required to replicate UHF signals is much lower than that required to replicate low VHF signals. However, stations with NTSC operations in the low VHF band should be assigned DTV channels in the lower UHF band. The planning factors used in the Broadcasters’ October 9 Longley-Rice analysis show that a channel 69 DTV station would require 2.9 times (4.6 db) the power that a channel 14 station would need to cover the same area. If balun and antenna lead-in losses were considered, this number would be even higher. Therefore, it is in the public interest to assign those stations which require extremely high UHF powers to replicate their NTSC coverage areas to channels that are as low as possible in the UHF band. This would improve the diversity of programming available to the public by allowing stations to better serve their markets with less power than if they were assigned a higher UHF channel.

B. The History Of Station Failures In Puerto Rico May Further Limit The Diversity of DTV Programming Available To The Public.

The viewers of WKAQ’s NTSC signal who would not receive the station’s DTV signal because of its high UHF DTV channel assignment, also might not receive DTV service from other broadcasters. Although other stations would not
be handicapped by the FCC's proposed DTV Table like WKAQ, Puerto Rico's history of station failures suggests that some stations, unlike WKAQ, would lack the substantial resources required to launch DTV operations.

The Commission has taken note of the “unusual economic circumstances” in Puerto Rico. 20/ Puerto Rico has experienced many television bankruptcies, silent stations, and struggling stations. 21/ Currently, it appears that only 16 of the 34 broadcasters eligible for DTV channel assignments in Puerto Rico are operating as stand-alone television stations. Another 10 stations are operating as satellites of full-power stations. The remaining eight stations do not appear to be on the air. 22/ Given the current struggles of many stations in Puerto Rico and the unprecedented financial demands required to make the transition to digital television, it is likely that history will repeat itself. This could prove

20/ Canal 48, Inc., 8 FCC Rcd. at 2193.

21/ See, e.g., JEM Communications, Inc., 9 FCC Rcd. 4874 (1994) (authorizing the assignment of three television stations in Puerto Rico which had been dark since a 1989 hurricane); Canal 48, Inc., 8 FCC Rcd 2193 (1993) (authorizing satellite operation of a television station that had been dark for more than three years); Three Star Telecast, Inc., 6 FCC Rcd. 4410 (1991) (granting one-to-a-market waiver based on the bankruptcy of the television licensee); Hector Nicolau, 5 FCC Rcd. at 6370 (granting duopoly waiver to permit ownership of television station that had been off air and in bankruptcy for five years); Seglares Iglesia Catolica, Inc., 2 FCC Rcd 7539 (1987) (authorizing satellite operation of television station in bankruptcy that had been silent for two years); United Artists Corp., 70 F.C.C.2d 2018 (1978) (noting that a television station had incurred substantial operating deficits and might be forced to go dark).

disastrous to the public; stations with the DTV channel assignments to cover the outer edges of their NTSC contours may not be able to build their DTV facilities, while a station like WKAQ with the resources to construct DTV facilities could not practically reach the outside edge of its NTSC service area because of its high UHF assignment. As a result, some residents of Puerto Rico may not receive any DTV service. This would violate one of the basic tenets of the Commission’s public interest policy.

C. Puerto Rico’s Unique Predicament Requires A Unique Approach To The DTV Allotment Process.

In order to resolve the above failings of the Commission’s DTV Table in Puerto Rico, the Commission should implement an approach that reflects the unique combination of circumstances existing in Puerto Rico. Puerto Rico alone presents a combination of the mountainous terrain and repeated station failures described above, together with acute spectrum scarcity. Puerto Rico was the only market in which the Commission could not give DTV channel assignments to all

\[23/\] This situation might eventually be remedied as stations that fail to construct DTV facilities lose their construction permits, allowing stations with less desirable channel assignments to move onto those channels. However, the public would suffer until the situation is resolved, which could take many years.

\[24/\] See, e.g., Ballston Spa, N.Y., 37 F.C.C.2d 314 (1972) (public interest would be served by providing community with its first broadcast outlet).

\[25/\] See Siete Grande Television, Inc., 7 FCC Rcd. 5299 (1992) (“We believe that the mountainous terrain of Puerto Rico supports use of alternative methods to extend broadcast television service to as many people as possible”).
eligible broadcasters. There are only 32 open channels in the VHF and UHF bands that are available for DTV channel assignments. Yet there are 34 broadcasters (including licensees and permittees) eligible for these assignments. The resulting DTV table of allotments includes more DTV channel assignments above Channel 51 than in any other market. To provide the best possible DTV service to Puerto Rico in light of this combination of circumstances, the Commission should reject its core spectrum approach, establish channel preferences based on length of service in Puerto Rico, and permit channel sharing arrangements. Except for rejection of the core spectrum approach, these remedies should be applied to Puerto Rico alone.

1. Reject core spectrum approach.

Telemundo does not believe that the core spectrum approach proposed in the Sixth NPRM would serve the public interest. However, it is particularly important that the Commission not designate a core spectrum in Puerto Rico at this time. First, the Commission is likely to need more spectrum for DTV operations in Puerto Rico than in any other market because of the large number of eligible broadcasters. The Commission already needed the entire spectrum to make its DTV channel assignments. Second, the Commission is likely to need more flexibility for making channel assignments in Puerto Rico than in other markets because of the island’s unique terrain conditions. Therefore, it would be premature

26/ Sixth NPRM at n.92.
to establish Channels 7 to 51 as the appropriate channels for DTV operations in Puerto Rico. Any repacking of the spectrum in Puerto Rico should be done after the transition to digital television is complete and the Commission can properly assess the appropriate spectrum required for successful DTV operations in Puerto Rico.

2. **Establish channel preferences based on length of service to the public.**

In order to avoid DTV white areas described in Section III.B., the Commission should consider an alternative channel allocation method for Puerto Rico only. Specifically, the Commission should give DTV channel preferences to the stations with the longest records of service to the public in Puerto Rico. If those stations do not pursue construction on their chosen channels within a specified period of time, then the Commission should give other stations the opportunity to request these channels. Alternatively, the Commission could allow television broadcasters in Puerto Rico to choose DTV channel assignments on a “first come, first served” basis and require construction of DTV facilities for these channels on a strict timetable.

3. **Permit channel sharing arrangements.**

In order to accommodate those stations that would not receive channel assignments under the alternative allocation methods described above, the Commission should consider channel sharing arrangements. In the Sixth NPRM, the Commission suggested that stations at opposite ends of Puerto Rico might be able to share channels “through application of a case-by-case engineering analysis.” 27 Telemundo believes that directional antenna patterns and terrain
shielding could be used in some cases to permit channel sharing without any resulting objectionable interference. Channel sharing also could help accommodate displaced LPTV\textsuperscript{s} and TV translators. Accordingly, the Commission should remain receptive to channel sharing in Puerto Rico.

\textsuperscript{27/} Id. at n.92.
IV. The Protection Of LPTV And TV Translator Services Throughout The Transition To Digital Television Is Critical.

The Commission’s proposed DTV table does not provide sufficient protection to LPTV and TV translator services, which are essential for the provision of programming to underserved rural areas and urban ethnic communities. Therefore, the Commission should take additional steps to protect these services during and after the transition to digital television. The most important step that the Commission could take to preserve these services would be the rejection of the core spectrum approach to DTV assignments. There also are a number of engineering solutions that could be adopted to protect these services.

A. The Commission’s Proposals Will Devastate LPTV And TV Translator Operations.

The Commission estimates that its proposed DTV table will force approximately 35%-45% of existing LPTV stations and 10%-20% of existing TV translators to cease operations on their current channels once the conversion to digital begins. 28/ Additional LPTVs and TV translators will be affected by the proposed recovery of Channels 60-69 for non-broadcast uses. 29/

In Telemundo’s case, adoption of the FCC’s proposed DTV table would result in the displacement of Telemundo-owned or Telemundo-affiliated LPTV stations in Salt Lake City, Denver, and Tampa, and of two Telemundo-owned TV

28/ Id. at ¶ 66.

29/ Id.
translators in Puerto Rico. Several of Telemundo’s other LPTVs would experience serious interference once full-power stations begin using their DTV facilities. Moreover, Telemundo’s LPTV affiliates would experience similar displacements or interference.

B. LPTV And TV Translator Stations Serve The Public Interest And Should Be Preserved.

LPTV stations and TV translator stations provide an important service to the public. As the FCC acknowledges, the existence of the LPTV service has increased the diversity of media ownership. In addition, LPTV stations serve many rural areas and urban ethnic communities which have been traditionally underserved. 30/ TV translators also provide fill-in service to underserved areas. 31/ Any DTV table that decimates the LPTV and TV translator services would be detrimental to the public interest. Accordingly, the Commission should take every possible step to preserve these services during and after the transition to digital television.

C. The Commission Should Reject Its Core Spectrum Approach And Adopt Flexible Modification Standards To Preserve LPTV services.

30/ Id. at ¶ 67; see also An Inquiry into the Future Role of Low-Power Television Broadcasting and Television Translators in the National Telecommunications System, Notice of Inquiry, 68 F.C.C.2d 1525 (1978) (low power television service designed to increase the diversity of programming to rural and urban areas).

31/ Sixth NPRM at ¶ 67; An Inquiry into the Future Role of Low-Power Television Broadcasting and Television Translators in the National Telecommunications System, Notice of Inquiry, 68 F.C.C.2d at 1525.
One of the best means of preserving the LPTV service is to reject the core spectrum approach. The Commission should use the entire VHF and UHF spectrum for DTV allotments and repack the spectrum only after the transition, when it is better able to assess the amount of spectrum needed for both DTV and LPTV services. If the Commission designates a core spectrum, there will not be enough spectrum available for LPTV services.

The Commission has proposed permitting LPTV operations on channels outside the core spectrum until a displacing DTV station or new user is operational, but this is an unacceptable solution. First, as spectrum outside of the core area is recovered for non-broadcast uses, the non-core channels used by LPTV services will become subject to increasing interference. If the Commission adopts the core spectrum approach and assigns non-core spectrum for non-broadcast uses, LPTV services should not be secondary to these new users, as the Commission has proposed. Second, television manufacturers may stop building television sets that include channels outside of the core spectrum. This would render these non-core channel assignments useless to LPTV operators and their communities of license.

Whether or not the Commission adopts the core spectrum approach, it should implement a number of engineering procedures designed to mitigate the

32/ Sixth NPRM at ¶¶ 67-68.

33/ \textit{Id.} at ¶ 68.
interference to and from LPTV services. First, it should permit LPTV stations to co-locate with DTV or NTSC facilities. The Sixth NPRM sets forth allowable interference ratios for NTSC and DTV stations. \footnote{Id. at Appendix A.} Although LPTV stations operate at substantially less power than all but a few full-service stations, LPTV stations located within the protected contour of an NTSC or DTV station may still fail to meet the required interference ratios in areas near the LPTV transmitter site. By allowing displaced LPTV stations to co-locate with existing NTSC or new DTV stations, the necessary interference ratios can be maintained throughout the NTSC or DTV station’s coverage area.

Second, the Commission should permit displaced LPTV stations to increase power in order to serve their previous coverage areas following co-location of their facilities with an NTSC or DTV station. Since co-location will alter the station’s coverage area, the Commission should allow displaced LPTV stations to modify their antenna patterns and increase power levels to maintain service within their former Grade B contours.

Third, the Commission should adopt its proposal to allow displaced LPTV stations to take terrain and other appropriate engineering factors into account in finding replacement channels. \footnote{See id. at ¶ 71.} Fourth, the Commission should adopt its proposal to permit displaced low power stations to file applications for suitable
replacement channels in the same area that are not subject to competing
applications, pursuant to the procedures set forth in Section 73.3572 of the
Commission’s rules. 36/

V. The Commission Should Improve Service To Urban Audiences
By Permitting Broadcasters To Increase Their DTV ERP
Levels Within Their Service Contours.

The Commission could improve service to urban audiences by
permitting UHF broadcasters to calculate maximum ERP levels at their stations’
coverage contour edge. Specifically, UHF stations should be able to calculate their
stations’ ERP at the depression angle to the stations’ DTV coverage contour (43.8
dBu in Appendix B to the Sixth NPRM). If the station uses a directional antenna,
it should calculate the station’s ERP at the radial to the most distant point on the
DTV coverage contour. Stations should be able to use beam tilt to improve coverage
inside their coverage areas, even if it results in higher effective radiated powers
than those listed on the Commission’s proposed DTV table. 37/ Although the use of
beam tilt is not specifically authorized by the Commission’s proposed table, this
approach is not inconsistent with the approach outlined in Appendix B of the Sixth
NPRM.

This methodology would enable UHF broadcasters operating from
mountain transmitter sites located near urban population centers, such Los

36/ Id. at ¶¶ 67 & n.69.

37/ Id. at ¶ 94.
Angeles, to provide a stronger DTV signal within their service areas. Thus, UHF stations could improve the quality of the DTV signal delivered to viewers in such nearby urban areas, where many of Telemundo’s viewers rely upon antennas instead of cable television in order to receive a clear signal. \footnote{For example, in the predominantly-Hispanic urban communities of Los Angeles, Compton and East Los Angeles, cable penetration rates are between 29 and 40 percent. Therefore, 70.1%, 70.3% and 60%, respectively, of the viewers in these communities must rely upon over-the-air broadcast signals for their television viewing. \textit{See Nielsen Cable On-Line Data Exchange, Los Angeles (July 6, 1996).}} Stations could improve their signals to urban viewers without exceeding their permitted service areas. Accordingly, it would serve the public interest. Yet, if this option is not available, UHF stations would be forced to choose between (1) concentrating the majority of their power on the edge of their service contours while accepting a weaker signal closer to their antenna sites, (2) providing a strong DTV signal to the population closest to their antenna sites, but failing to reach the edges of their service contours, or (3) using lower gain, less efficient antennas and higher transmitter powers.

VI. Conclusion

Telemundo urges the Commission to adopt a DTV table of allotments that preserves its ability to provide Spanish-language programming to its current audiences during and after the transition to digital television. Telemundo supports the DTV Table proposed by the Broadcasters, rather than the FCC’s proposed DTV Table, as a means of achieving this goal. However, if the Commission decides to
adopt its proposed table, it should nevertheless change the assignment for KVEA so that Telemundo’s ability to compete in the Los Angeles marketplace is not decimated. Since the Broadcasters’ proposed DTV table does not address the situation in Puerto Rico, the Commission also should make substantial adjustments to its DTV allotments in Puerto Rico reflecting the island’s unique circumstances in order to avoid substantial DTV white areas. In addition to these allotment changes, the Commission also should provide better protection for LPTV and TV Translator services and incorporate engineering measures that will improve service to urban populations. These measures will help facilitate the successful transition of Spanish-language programming to digital television.

Respectfully submitted,

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November 22, 1996

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