

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

In the Matter of:)	
)	
)	
Third Periodic Review of the)	
Commission's Rules and Policies)	MB Docket No. 07-91
Affecting the Conversion)	
To Digital Television)	

COMMENTS OF TRIBUNE BROADCASTING COMPANY

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DTV facilities at its stations. Tribune was a so-called early DTV adopter with the build-out of KTLA in Los Angeles, has worked closely with equipment manufacturers over the years to improve the capabilities and functionality of their products and was one of the first commercial broadcasters to build an experimental distributed transmission system (“DTS”) designed to improve DTV service to the viewers of WTTK in and around Indianapolis. With this extensive experience as a backdrop, Tribune submits the following comments.

Although the NPRM contains a number of laudable policies that will undoubtedly assist broadcasters in providing a more seamless transition, there are several temporary proposals that the Commission should adopt to ensure that broadcasters have the necessary flexibility to address the real world issues that will arise as the analog shutdown approaches. Some of these proposals are already in the NPRM but should be modified slightly to make them more effective in ensuring a smooth transition. As discussed more fully below, the Commission should:

- (i) slightly modify the proposed interference protection standard by allowing stations to cause a one-time total of 0.5 percent new, incremental interference to surrounding stations regardless of the level of interference caused by the station’s allotment in the DTV table (pp. 4-6);
- (ii) accept and act upon applications from stations to increase service areas well before the analog shutdown to give these stations sufficient time to purchase and install post-transition equipment dependent on the configuration of the service area (i.e., antennas, etc.). Service area increases that comply with the interference rules are in the public interest because they increase/improve service to the public (pp. 6-8);
- (iii) even if the Commission decides not to accept and/or act upon all applications to increase service areas well before the analog shut-down, it must act on these applications from stations returning to their analog channels for post-transition DTV operations. Many of these stations plan to use their analog antennas post-transition but face the prospect of significant service losses because the unbuildable, “theoretical” pattern in the DTV Table Appendix B does not match their analog antenna pattern (pp. 8-10);
- (iv) if it decides to postpone accepting and/or acting on applications to increase service area before the analog shut-down, the Commission should waive the post-transition build-out requirements for any station filing a service area increase application for a period of one year from the date it acts on the application. Stations cannot finalize

DTV equipment purchases without Commission action providing post-transition service area certainty (pp. 10-12);

(v) allow stations operating with side-mounted digital antennas and top-mount post-transition DTV allotments to operate temporarily with their side-mounted, pre-transition DTV facilities up to one year provided that acceptable replication is provided (although sometimes less than 100 percent). This policy will allow these stations to remove and replace their top-mounted analog antennas without severely compromising pre-transition analog coverage (pp. 13-17) ;

(vi) allow stations the flexibility to reduce analog power temporarily by as much as 50 percent in the year leading up to February 17, 2009 in order to facilitate the build-out and start-up of post-transition DTV facilities on a timely basis. Authority up to 50 percent is needed in at least some instances because several Tribune stations will have to remove and retune one of their analog transmitter cabinets in order to be ready by February 17, 2009.

(vii) market forces provide powerful incentives for stations not to abuse any discretion provided by the Commission to reduce their analog power levels more than absolutely necessary given that analog service will be the primary revenue generating programming stream until the analog shut-down (pp. 20-22);

(viii) adopt the latest ATSC DTV transmission standard A/53 Revision E with Amendments No. 1 and 2 and the updated A/65-C Program System and Information Protocol (“PSIP”) standard (pp. 22-24);

(ix) require that MVPDs using downconverting equipment at the headend deploy the necessary decoding equipment to respond to any Active Format Description (“AFD”) information included in a broadcaster’s transport stream and then pass that information on to their customers. This will avoid problems such as the postage stamp picture and ensure that their subscribers continuously see widescreen programming in an optimized format (i.e., center cut or letter box) for their 4x3 sets (pp. 23-26);

(x) eliminate the required 1 dB power reduction in the rules for stations proposing to use beam-tilting in excess of 1 degree. *See* 47 C.F.R. §73.622(f)(4). This provision was adopted by the Commission at the time when UHF DTV stations could only maximize up to 200 kW and became unnecessary when the Commission subsequently allowed maximizations up to 1 MW. This rule change is important at this stage of the transition because beam-tilting can be used to enhance the likelihood of indoor DTV reception without increasing interference to nearby stations (pp. 27-30);

(xi) remove the power limitation imposed on VHF stations in Zone 1. The power limit is a relic of a bygone era where the Commission relied on spacing rules to limit interference between markets and stations (pp. 31-32);

(xii) correct an acknowledged error in the OET 69 processing code that erroneously predicts interference by assuming that a station’s main transmitted signal is aimed at the ground approximately one kilometer from the station’s transmitter site (pp. 32-33);

(xiii) allow stations to retain the benefit of any pre-transition interference agreements by allowing post-transition service area increases causing more than the 0.5 interference protection standard would otherwise allow provided it complies with the agreement sent (pp. 33-35);

(xiv) allow stations to enter into new interference agreements, provided no station agrees to accept interference in aggregate to more than 10 percent of the population predicted to be served by its authorized/assigned DTV facilities. Interference agreements can allow stations to resolve many issues complicating the build-out with minimal staff involvement (pp. 35-37).

II. THE COMMISSION SHOULD MODIFY THE PROPOSED 0.5 PERCENT INTERFERENCE PROTECTION STANDARD.

Tribune supports the Commission's decision to adopt a 0.5 percent interference protection standard that provides more flexibility than the 0.1 percent new interference standard that was applied during the channel election process. However, Tribune urges the Commission to modify the proposed interference protection standard to permit stations to cause a one-time total of 0.5 percent new, incremental interference to nearby stations regardless of the interference already caused by the station's allotment in the post-transition DTV table.

This minor change to the standard is necessary for several reasons. First, it will enhance the ability of stations to maximize their service areas, thereby increasing service to the public, without unduly increasing the level of interference to nearby stations. This increase in service will not only include viewers at the edge of the station's service area, but also those viewers who will be able to receive the station's stronger signal indoors. Increasing the likelihood of indoor service is critically important at this stage of the transition because many consumers who rely solely on over-the-air television for video programming currently use indoor antennas to receive analog signals.

It is commonly understood in the industry that the signal strength needed to provide reliable, indoor DTV service is significantly higher than the signal strengths used by the Commission to define outdoor DTV service. On UHF channels, for example, the minimum

signal strength needed for outdoor reception in the FCC's rules is 41 dBu. By contrast, one of the lowest estimates of the signal strength needed to provide reliable indoor DTV service is 80 dBu. This difference of approximately 40 dB in signal strength reflects a power difference on the order of 10,000 – that is, it requires 10,000 times as much power to produce an 80 dBu signal as compared to a 40 dBu signal. Given the need for much stronger DTV signals to provide reliable indoor service, the Commission should take every opportunity it can to give broadcasters the flexibility to increase their power levels without unduly increasing the overall level of interference.¹

Second, the change will help a number of the 517 stations returning to their analog channels that must modify their post-transition service areas because the facilities authorized in the DTV Table and Appendix B cannot be built. Many of the stations moving to new channels post-transition have discovered that the program used by the Commission to develop the DTV table produced theoretical service areas/antennas patterns that cannot be built or do not match the pattern of the antennas they plan to use for post-transition DTV operations. The Commission essentially recognized this phenomenon when it noted that stations “may be unable to build precisely the facilities specified in the new DTV Table Appendix B (for example, if an antenna producing the exact antenna pattern described in Appendix B is not available).”²

Without the flexibility to normalize their post-transition antenna patterns/service areas, many of these stations will be forced to cut back power significantly to keep their actual

¹ Another important change the Commission should make to increase indoor DTV reception is to remove the 1 dB power reduction penalty currently in the rules for stations proposing to use beam-tilting in excess of 1 degree. By increasing the downward angle of its signal, a broadcaster can significantly increase signal strength to its core market and enhance the likelihood of indoor reception. *See infra* at 21-25 for a more detailed discussion of beam-tilting and the 1 dB penalty.

² NPRM ¶ 93.

antenna pattern/service areas inside the service pattern produced by the theoretical antenna. At these reduced power levels, these stations will be unable to ensure that viewers currently receiving pre-transition service (either analog or digital) continue to receive service post-transition. This result flies in the face of the Commission's recognition that "it is critically important that analog over-the-air viewers who obtain the necessary digital receivers (whether TV sets or D-to-A converters) are able to receive DTV service over-the-air upon expiration of the deadline for the transition on February 17, 2009."³

For this reason, Tribune urges the Commission to exclude interference already caused in the DTV Table when applying the proposed 0.5 interference protection standard to give these hypothetical service-area challenged stations an added measure of flexibility to normalize their service areas.⁴ This change will also allow stations to maximize their service areas and, at the same time, increase the likelihood that some closer-in viewers who currently have indoor reception of over-the-air analog signals also have indoor reception of DTV signals.

III. THE COMMISSION SHOULD ACCEPT AND THEN ACT ON APPLICATIONS FOR INCREASED DTV SERVICE AREAS WELL BEFORE THE ANALOG CUT-OFF DATE.

Regardless of whether the Commission's goal is to encourage the build-out of final post-transition DTV facilities or to ensure that all analog viewers receive DTV service by February 17, 2009, the Commission should accept and then act on applications to increase DTV service areas well before the analog shutdown. Stations need certainty and time is of the essence. The Commission must act on service area increase applications as early as possible so that stations have the time to order equipment and then build-out their post-transition facilities by

³ See NPRM ¶ 46.

⁴ For an example of the problems faced by stations with unbuildable, theoretical antenna patterns, see the KCPQ discussion *infra* at 8-9.

February 17, 2009.⁵ To accomplish this, the Commission should rearrange its priorities and allocate fewer staff resources to reviewing virtually every proposed analog power reduction (see proposal at Sec. V, *infra*) and redeploy those resources to reviewing applications to increase post-transition service areas. Indeed, one of the biggest contributions the Commission can make to a successful transition is to act on these applications quickly so that stations can move forward with their post-transition build-outs.

When considering this Tribune proposal, the Commission should keep in mind *that post-transition DTV service area increases serve the public interest* because, by definition, more people will receive DTV service and others may receive better DTV service (i.e., stronger, more robust signals). As such, the FCC should do everything it can to encourage service area increases. Unfortunately, the FCC's proposal not to accept any applications proposing to increase service areas at this time has precisely the opposite effect.

Stations that can increase their service areas must have sufficient time to order the appropriate post-transition equipment, then wait for it to be manufactured, delivered and then installed. Until a broadcaster has FCC approval of a post-transition service area/technical configuration, it cannot be expected to order equipment capable of serving a larger service area. The vagaries of interference modeling and the possibility of any number of unpredicted intervening events make the risk of purchasing equipment on "spec" unacceptably high.

This risk is especially unacceptable when ordering antennas, because antenna selection is critically dependent on the size and configuration of the service area plus approved power. Indeed, the Commission touched on these variables when discussing the factors to be

⁵ The need for prompt action on applications to increase service area applies regardless of the interference protection standard adopted by the Commission.

considered when determining if a station could reuse its digital or analog antenna for post-transition operations: “the design, condition and channel of their current antennas, as well as the stations’ directional antenna characteristics established in the new DTV Table Appendix B, as adopted, must be considered when these stations evaluate the suitability of their antennas for post-transition DTV operation.”⁶ Because the costs of antennas can vary significantly depending on these different characteristics, none of the stations proposing to increase their service areas can reasonably order an antenna until the FCC acts on their applications. If the Commission is indeed serious about meeting the February 17, 2009 deadline, it will need act on these service area increase applications well in advance of that date to allow sufficient time for antennas to be ordered, built and then installed.

A. Even if the Commission Does Not Consider All Applications to Increase Service Area, it Must Consider Applications from Stations Moving to New DTV Channels.

The need for early Commission action on service area increase applications goes well beyond stations interested in maximizing. As the Commission has recognized, many of the 517 stations returning to their analog channels are interested in using their existing analog antennas for post-transition DTV operations. Unfortunately, many of these stations have discovered that the antenna pattern for the facilities described in Appendix B either cannot be built or does not match the station’s analog antenna pattern. Unless the Commission accepts and acts on applications from these stations to increase their service areas, the actual DTV service provided post-transition by these stations may not replicate either the station’s existing analog service or its pre-transition digital service – two developments directly at odds with one of the Commission’s goals in this proceeding.

⁶ See NPRM ¶ 26.

KCPQ, a Tribune station licensed to Tacoma, Washington, is a case in point.

KCPQ operates on analog channel 13 using a top-mounted, non-directional antenna. KCPQ built a 660 kW DTV facility on channel 18 and certified it would operate with that service area post-transition. KCPQ subsequently elected to return to its analog channel 13 during the repacking process and received a channel 13 assignment with an ERP of 22.7 kW using a directional antenna in the recently released post-transition DTV Table of Allotments. Unfortunately, the directional antenna pattern KCPQ received in the Table does not match the non-Directional pattern of the channel 13 analog antenna that KCPQ intends to use post-transition.

This mismatch creates a significant problem. To use its analog, non-D antenna post-transition, KCPQ will have to operate with a 0.6 kW ERP to keep its service area entirely within the DA service area assigned to it in the Table. At this extremely low power level, KCPQ's post-transition DTV service will result in a loss of over 220,000 viewers currently receiving analog service from KCPQ. To remedy this problem, Tribune's consulting engineer determined that KCPQ could increase its post-transition power to 30 kW and bump out its service area to a non-D pattern without violating the Commission's currently proposed 0.5 percent standard. If the Commission decided to accept and act on KCPQ's application to increase its allotted service area before February 17, 2009, KCPQ would be able to provide post-transition DTV service to approximately 10,000 more people than it currently provides analog service to.

KCPQ's situation appears to be the problem the Commission had in mind when it asked "[i]f such stations are prohibited from expanding beyond their DTV Table Appendix B facilities (as proposed *infra* in Section V.E.), will they instead be required to reduce their

facilities so significantly that they will be unable to provide adequate service?”⁷ In KCPQ’s situation, the answer is clearly yes. KCPQ will not be able to provide post-transition DTV service to all the viewers currently receiving analog service or pre-transition DTV service.

For this reason, Tribune urges the Commission to “allow the stations that fall into this situation to expand beyond their DTV Table Appendix B facilities to the extent necessary to address the differences between the theoretical facilities specified in the new DTV Table Appendix B and the actual facilities they are able to build.”⁸ To allow stations like KCPQ to expand their service areas, the FCC must accept and act on applications to increase their post-transition service areas as early as possible. This change is especially necessary here given the Commission’s recognition that “it is critically important that analog over-the-air viewers who obtain the necessary digital receivers (whether TV sets or D-to-A converters) are able to receive DTV service over-the-air upon expiration of the deadline for the transition on February 17, 2009.”⁹

- B. If the Commission postpones acting on service area increase applications, the Commission should waive the post-transition DTV build-out deadline for stations filing those applications until one year from the date it acts on those applications.

As demonstrated above, stations interested in increasing their post-transition service areas will be unable to order the necessary equipment without advance action on their service area increase applications. If the Commission postpones accepting and/or acting on these applications, the Commission should adjust/waive the February 17, 2009 build-out deadline for these stations for a period extending one full year from the date the Commission acts on the station’s service area increase application. Tribune has proposed a one year build-out period

⁷ See NPRM ¶ 93.

⁸ *Id.*

⁹ See NPRM ¶ 46.

because, on average, it will take approximately one year from the time a station orders equipment to the time the equipment is installed, tested and operational.¹⁰ As a matter of basic fairness, Commission inaction on an application should not be held against a station when evaluating its compliance with a Commission imposed deadline. The Commission has consistently recognized this principle in acting on extension requests and/or waiver requests throughout the DTV transition and there is no reason to deviate from that approach at the end of the transition.

Once the Commission approves a station's application to increase its post-transition service area, Tribune does not object to the application of the tolling standard proposed by the Commission for post-transition requests for additional time to construct DTV facilities.¹¹ Until the Commission acts, however, the application of the tolling standard is inappropriate because there is nothing to toll. The station involved does not have the basic technical details of the facilities it can build. Relying on the facilities authorized in Appendix B of the Table to apply the tolling standard to stations in these circumstances is a fiction. As illustrated above, these authorized facilities cannot be built.

Moreover, any delay by the Commission in acting on the service area increase applications is clearly beyond the control of the station. To the extent this position conflicts with a part of the tolling standard proposed by the Commission in the NPRM, Tribune opposes this aspect of the standard. Until the Commission decides on a station's **initial** post-transition

¹⁰ This one year build-out period would need to be extended for stations in northern states due to given weather limitations. Consistent with Commission practice to this point in the transition, Tribune would not object to waivers in these circumstances lasting for 6 month periods with the Media Bureau authorized to approve only the first two waiver requests from any station.

¹¹ See NPRM ¶ 86.

operating parameters that can actually be constructed, the Commission should not start the clock ticking on a station's build-out requirements.

C. The Commission Should Establish Cut-Off Procedures for Applications to Increase Service Area as well as the Procedures to Address Mutual Exclusive Applications Now.

Regardless of when the Commission decides to accept and/or act on applications to increase service area, it should establish the cut-off procedures for these applications now. Tribune submits they should be similar, if not identical, to the procedures ultimately adopted during the transition. By taking this step now, the Commission will avoid a repeat of the situation that existed during the early phases of the transition, where stations filed applications to increase service area that complied with interference rules and the FCC's database at the time, only to have to monitor later filed applications to avoid/address subsequent interference conflicts. Because stations obviously could not protect against or design around facilities that they did not know about, this situation created considerable uncertainty and discouraged applicants from planning much less proposing their actual build-out plans. Neither the industry nor the Commission has time for a lull in the planning or building of post-transition DTV facilities. For this reason, the Commission should establish cut-off procedures for applications to increase service area now.

For these same reasons, the Commission should also establish the procedures for identifying mutually exclusive applications and resolving those situations. Tribune does not have a vested interest in one procedure or another. As before, the procedures adopted by the FCC to resolve mutually exclusive applications during the transition would be acceptable post-transition as well. Tribune's primary interest is that the Commission give the industry certainty by establishing the ground rules for identifying and resolving mutually exclusive applications

right from the start. Uncertainty about the ground rules will breed inaction, and inaction is a result that cannot be accepted at this stage in the transition.

IV. THE COMMISSION SHOULD NOT IMPOSE THE FEBRUARY 17, 2009 BUILD-OUT DEADLINE ON STATIONS USING SIDE-MOUNTED DTV ANTENNAS WITH TOP-MOUNT ALLOTMENTS THAT PROVIDE A MINIMUM LEVEL OF ANALOG COVERAGE OR THAT DEMONSTRATE SIGNIFICANT TECHNICAL DIFFICULTIES RESTRICTED PRE-TRANSITION CONSTRUCTION.

Although Tribune recognizes the flexible policies proposed by the Commission to allow stations operating with side-mounted DTV antennas to meet the proposed February 17, 2009 post-transition build-out deadline, Tribune submits that the Commission's focus on meeting the post-transition deadline is misplaced.¹² The Commission's insistence on compliance with this deadline will likely result in thousands of disenfranchised analog viewers that lose service unnecessarily when top-mounted analog antennas are removed and replaced with side-mounted analog antennas likely operating at reduced power. As demonstrated below, the Commission should allow stations with side-mounted DTV antennas to postpone building-out their post-transition facilities until after the analog cut-off if the stations provide a minimum level of analog population coverage or demonstrate that significant technical problems restricted the construction of the pre-transition, side-mount DTV facilities.¹³

¹² In using the phrase "stations with side-mounted DTV antennas," Tribune is referring to stations currently operating with side-mounted DTV antennas and top-mounted analog antennas that also have top-mount, post-transition DTV allotments.

¹³ The Commission proposed to set the February 17, 2009 deadline for all stations facing "unique technical challenges." These challenges included not only stations with side-mounted DTV antennas and top-mounted analog antennas but also stations whose local power company cannot provide the electricity to power both the digital and analog operations and stations that do not have space at their antenna sites for both digital and analog equipment. NPRM ¶ 73.

- A. The Commission should abandon its focus on compliance with the February 17, 2009 deadline for stations with side-mounted digital antennas.

A station with a side-mounted DTV antenna, a top-mounted analog antenna and a top-mount DTV allotment risks significant analog coverage losses if it attempts to build-out its post-transition allotment before the analog shutdown. Because top-mounted analog antennas cannot simply be side-mounted lower on the tower once they are removed, the station will have to find a temporary analog antenna. Because analog equipment will soon be a relic of a bygone era, no broadcaster should be expected to buy a new analog antenna. Thus, the station will need to search for a used or rental antenna with a pattern close to the one it had and then install it.

In these circumstances, the station faces a serious loss of analog coverage for a number of reasons. First, the side-mounted antenna will be installed lower on the tower, resulting in a loss of coverage. Second, the pattern of the side-mounted antenna will be distorted by the tower, a factor the station avoided earlier by using a top-mounted antenna. These pattern distortions again can result in a loss of coverage. Third, if the coverage of the side-mounted analog antenna does not match the pattern of the top-mount antenna, the station will be forced to reduce power to keep its footprint entirely within the authorized footprint of the facility using the top-mounted antenna. Depending on the extent of the antenna mismatch, the station could suffer another sizeable reduction in analog coverage. In sum, as illustrated here, the replacement of the top-mounted analog antenna before the transition ends runs a material risk that a significant loss of analog service will occur.

Even if the analog antenna coverage problems are somehow resolved, the station could also encounter tower wind load problems. During the construction of the post-transition digital facility, the station's tower will need to support three different antennas once the top-mounted analog antenna is removed: (i) the temporary, side-mounted analog antenna; (ii) the

side-mounted digital antenna and (iii) the top-mounted digital antenna as it is installed and then tested. The combination of three antennas for even a short period of time could easily exceed the wind load capacity of a tower. Each appurtenance added (or removed) to a broadcast tower requires structural analysis and generally some amount of attendant structural work. Requiring the addition of a temporary analog antenna with the top-mounted digital antenna may necessitate the addition of new reinforcing cross members that will in turn need to be removed post transition. Any added steel work could exacerbate the analog coverage loss from the side-mounted, temporary antenna as well as the current DTV antenna.

By contrast, if construction is started after the transition, the entire process is far less complicated. After the transition, no more than two antennas will have to be installed on the tower at the same time – the existing side-mounted DTV antenna and the new top-mounted DTV antenna. In addition, no second hand or loaner analog antennas will be needed because the station will no longer need to operate with both analog and digital facilities. When there are already concerns about manufacturing resources and the availability of tower crews leading up to February 17, 2009, the Commission should allow stations to begin removing top-mounted analog antennas until after the transition to allow for a more efficient utilization of scarce infrastructure support resources.

For these reasons, the Commission's focus should instead be on maintaining existing analog and pre-transition DTV service to the greatest extent possible. To accomplish this goal, Tribune urges the Commission to adopt more flexible policies that will allow broadcasters with side-mounted DTV antennas to contribute to a smooth transition rather than subtracting from it.

- B. The Commission should allow stations with side-mounted DTV antennas to postpone post-transition construction if they provide minimum analog coverage or demonstrate significant technical problems restricted pre-transition coverage.

Tribune applauds the Commission for recognizing that stations with side-mounted DTV antennas need more build-out flexibility. In particular, Tribune is encouraged by the Commission's indication that a delay in the start of construction of the top-mounted post-transition facilities until after the analog shutdown may be acceptable.¹⁴ Tribune is concerned, however, that the Commission's rigid insistence that any station requesting this relief provide "DTV service to 100 percent of their replication area"¹⁵ fails to recognize the numerous circumstances in which a station's side-mounted DTV operation cannot provide coverage to 100 percent of their replication area due to technical or legal reasons beyond their control.

Tribune owns several stations with side-mounted DTV antennas and top-mounted post-transition DTV allotments. As demonstrated below, a review of the operating status of these stations collectively illustrates the need for the Commission to be flexible in establishing the minimum analog population coverage requirements needed to secure an extension of the February 17, 2009 post-transition build-out deadline.

Tribune indirectly owns WTTV(TV), NTSC 4, DTV 48, Bloomington, Indiana. WTTV has a top-mount, post-transition DTV allotment. WTTV currently uses a top-mounted, non-directional analog channel 4 antenna (58.9 kW ERP; HAAT 357 meters) and a side-mounted DTV licensed facility (870 kW DA; 318 meters) that covers approximately 89.7 percent of the population currently receiving service from the analog facility. In evaluating WTTV's coverage compliance, the Commission should recognize that it imposed 1 MW power limits on the DTV allotments during the transition, a power limit that prevented WTTV from serving 100 percent of

¹⁴ See NPRM ¶ 46.

¹⁵ *Id.*

its analog population due to the superior analog propagation characteristics on channel 4. In these circumstances, Tribune submits that the Commission should allow WTTV to commence construction of its top-mounted DTV facility after the transition ends because it is providing as much analog replication coverage as the rules would allow.

KWGN is another Tribune station that demonstrates the need for Commission flexibility in addressing requests for build-out relief from stations with side-mounted DTV antennas. KWGN is licensed to Denver and operates on analog channel 2 from its main tower located on Lookout Mountain. It has a digital channel 34 construction permit and a post-transition allotment to replace its top-mounted analog antenna with a top-mounted digital antenna. KWGN has been unable to complete construction of the facilities specified in its DTV construction permit due to longstanding local zoning problems in Jefferson County caused by a local citizens group. In the interim, KWGN managed to construct a DTV STA facility on its shorter auxiliary tower with a direction antenna (450 kW; 248 meters) that covers approximately 89 percent of KWGN's analog population.

While recent federal legislation preempting the Jefferson County's zoning authority may finally allow KWGN to begin construction of its authorized construction permit/post-transition DTV allotment, it will then face the analog coverage loss problems described above. Tribune submits that in these circumstances KWGN deserves an extension of its post-transition build-out deadline because (i) the longstanding zoning problems prevented the construction of a larger DTV STA facility and (ii) it covers a substantial percentage of its replication population with the DTV STA facility.

WTIC, one of Tribune's stations in Hartford, Connecticut, provides another example of the need for flexibility in the Commission's policies addressing post-transition

construction extension requests from stations with side-mounted DTV operations. WTIC operates on analog channel 61 and digital channel 31 from a 1340-foot tower located on Rattlesnake Mountain in Hartford. After experiencing numerous DTV construction delays due to its landlord's lengthy zoning problems in siting a new tower (ultimately abandoned) and then in securing Canadian coordination, WTIC cannot commence full power operations with a top-mounted DTV allotment facility due to wind load capacity limitations imposed on its recently-installed transmission lines.

After abandoning its proposed new tower several years ago, WTIC's landlord ultimately designed and completed a two-year, multi-million dollar strengthening and addition project in which it removed the top two segments of its existing tower and replaced them with a candelabra to accommodate the analog and digital antennas of a number of stations, including WTIC, WTXN and WEDH. The tower work was completed on or around April 2007. To limit the windload strain on the modified tower, Tribune installed a single transmission line to be shared temporarily by the WTIC analog and digital operations. Once WTIC orders and then installs its new, top-mounted DTV 31 antenna, it will be not be able to run it at full power because it will require a significant decrease in analog power (down to approximately 20-30 percent of authorized power) due to the overall capacity limit of the new transmission line¹⁶

WTIC-DT is operating pursuant to an STA with a side-mounted, directional antenna (470 kW; 287 meters) that covers approximately 68 percent of its analog population but over 90 percent of the analog population inside its DMA. In these circumstances, Tribune submits that WTIC should be entitled to a post-transition extension because it is unable to

¹⁶ WTIC has been able to order its new top-mounted channel 31 antenna since July 19, 2007 when the Commission granted its construction permit application.

complete construction and testing of its recently authorized DTV facilities at full power until the transition ends. Because it cannot operate at full power due to the tower loading constraints on its transmission lines, Tribune submits that WTIC is entitled to a waiver because the windloading constraints were beyond its control and it serves over 90 percent of the viewers in the Hartford-New Haven DMA.

Tribune's other station in the Hartford market, WTXX, recently had its request for a use-or-lose waiver denied despite underlying facts similar to WTIC. WTXX operates on analog channel 20 and digital channel 12. WTXX has a DTV construction permit to operate on channel 12 using a DTV antenna mounted on one of the recently installed candelabra arms on the WTIC tower on Rattlesnake Mountain. Until the two-year tower addition/strengthening project was recently completed, WTXX was unable to construct its authorized top-mounted DTV facility.

In the interim, WTXX constructed a side-mounted DTV STA facility significantly lower on the tower that nonetheless satisfied the FCC's so-called use-or-lose population coverage requirement. Unfortunately, WTXX was unable to amend its DTV construction permit to specify the STA facilities because the FCC's interference program predicted the facilities would cause impermissible, excess interference to a nearby station despite the fact that WTXX had been operating those facilities pursuant to the STA rules with no interference complaints from the "impacted" stations. The FCC denied the WTXX use-or-lose waiver because it was unable to convert its interim facilities from an STA into a construction requirements. In these circumstances, Tribune submits that the denial of WTXX's use-or-lose waiver should be reconsidered because its inability to build the top-mount facility was beyond its control and it built an interim facility that met the interim population service requirements. Even if the

Commission decides not to reconsider the denial of the waiver, Tribune submits that WTXX is one of the stations that should not lose interference protection for its maximized post-transition allotment facility since it built a STA facility that provided service to the required number of viewers under the FCC's policies. Finally, these facts also provide another example demonstrating that the FCC needs a flexible policy in addressing post-transition construction extension requests from stations with top-mount DTV allotment facilities that do not meet the benchmark coverage requirements.

As demonstrated in these examples, Tribune submits that the Commission should have a very flexible approach in determining what level of analog coverage is sufficient to justify an extension of the post-transition DTV build-out requirement. Although the Commission may need to adopt some general benchmarks that would automatically entitle stations to relief, Tribune urges it to recognize that one size does not fit all in these situations, and to acknowledge that stations can qualify for extensions if they demonstrate that significant technical difficulties interfered with the construction of their interim facilities.

C. The Commission should rely on its previous decisions approving DTV construction extensions or use-or-lose waivers in acting on requests for post-transition construction extensions.

Recognizing that the Commission will have limited resources stretched very thin for the remainder of the transition, Tribune urges the Commission to rely on its earlier determinations approving DTV build-out extensions or use-or-lose waivers to short-circuit the case-by-case review of the showings submitted by stations that do not meet the analog coverage benchmark. Specifically, if the Commission previously approved a use-or-lose waiver or a construction extension for a station now seeking a waiver to use its side-mount DTV facilities post-transition with less than 100 percent analog population coverage, the Commission should grant the post-construction waiver and excuse the smaller analog population coverage by relying

on the same circumstances that it previously accepted in approving the extension or waiver. This approach would conserve Commission resources but nonetheless afford relief to stations that previously demonstrated that their DTV construction delays were due to circumstances beyond their control.

V. THE COMMISSION SHOULD ALLOW STATIONS TO REDUCE THEIR ANALOG POWER LEVELS BY AS MUCH AS 50 PERCENT UPON NOTICE TO THE COMMISSION BUT WITHOUT PRIOR APPROVAL IN THE YEAR LEADING UP TO FEBRUARY 17, 2009.

In order to facilitate the build-out and testing of post-transition DTV facilities by February 17, 2009, the Commission should give broadcasters maximum flexibility in the year leading up to the analog shutdown. Specifically, the Commission should allow stations to reduce their analog power levels up to 50 percent upon prior notice to the Commission but without prior approval to facilitate the installation and testing of post-transition DTV equipment so that full power operations can commence on February 18, 2009. Prior Commission approval should not be required because (i) economic reality will ensure that no station reduces its analog power more than absolutely necessary or for longer than absolutely necessary and (ii) the Commission does not have the resources to review and approve every necessary analog power reduction in time to allow installation and testing of DTV equipment prior to February 18, 2009.

Tribune has proposed this streamlined procedure for analog power reductions in the year leading up to February 17, 2009 following the Commission's recognition that:

[i]n view of the statutory change from a soft to a hard transition deadline, the Commission's focus has moved beyond simply ensuring that stations are operating in digital. Our focus is now on overseeing broadcasters' construction of their final, post-transition channel with facilities that will reach viewers in their authorized service areas by the time they must cease broadcasting in analog.¹⁷

¹⁷ See NPRM ¶ 34.

Tribune has proposed streamlined procedures for analog power reductions up to 50 percent because power reductions of this magnitude will likely be needed by many stations if they are to make their post-transition power levels in time for February 17, 2009. For example, in several instances Tribune will need to remove and retune one of the two analog transmitter cabinets at a station so that it can be ready to meet its post-transition DTV power levels by February 17, 2009. Tribune has proposed this flexibility for the entire year leading up to the analog shutdown because weather conditions in many markets will make the last few months leading up to February 17, 2009 unworkable and many of these projects will take longer than six months.

Tribune recognizes that a 50 percent reduction in analog power exceeds the proposals in the NPRM. However, in many instances, the Commission will need to make an either/or choice – maintaining higher pre-transition analog power levels or ensuring full power DTV operations by February 17, 2009. Similarly, Tribune recognizes that its proposal to require prior Commission notice but not approval exceeds any proposal in the rules. However, the Commission need not worry about the substantial discretion this proposal gives broadcasters because market forces will serve as more than an effective check on the exercise of this discretion. Simply put, no broadcaster will intentionally disrupt their analog operations any more than is necessary because analog service will remain the broadcaster's primary source of revenue right up until the clock strikes midnight on February 17, 2009.

In lieu of requiring prior Commission approval of power reductions up to 50 percent, the Commission should require stations to file a letter notification in this docket with separate delivery to the Media Bureau no less than 14 days before commencing the plan. The letter notification should: (i) specify the anticipated power level reduction; (ii) briefly describe

the actions requiring the power level reduction and (iii) specify the station's network affiliation (if any) and the percentage of analog viewers no longer receiving service in the market. The Commission staff would then have 14 days to review or reject the proposal or order it deferred for further consideration. If the Commission staff rejects the proposal or defers action on it, the proposing station will be entitled to rely on this action to support any required post-transition construction extension request.

VI. THE COMMISSION SHOULD ADOPT THE UPDATED ATSC DTV TRANSMISSION AND PSIP STANDARDS.

Tribune strongly supports the Commission's proposal to amend its rules by adopting the updated ATSC DTV transmission standard. As noted by the Commission, the new standard, A/53 Revision B with Amendment 1 and Amendment 2, offers several important improvements to the current DTV transmission standard, including the Enhanced 8-VSB specifications. Most importantly, the new ATSC DTV transmission standard includes the updated Active Format Description ("AFD") specifications. As described in the next section, Tribune urges the Commission to take several important steps to ensure that any AFD information provided by broadcasters is accepted by cable head ends and passed on to cable subscribers to minimize the problems that sometimes arise when 16x9 programming is viewed on 4x3 sets.

Tribune also supports the adoption of the updated A/65-C Program System and Information Protocol ("PSIP") standard. Tribune understands that in a digital world it is essential that broadcasters utilize PSIP data to generate their own robust, up-to-the minute program guides to ensure that viewers have unencumbered access to their program offerings. Accordingly, Tribune and its affiliated company, Tribune Media Services, support the requirement in A/65-C that broadcasters populate the Event Information Tables ("EITs") with

more accurate and updated program event information with one exception. The Commission should excuse broadcasters from compliance with these PSIP requirements in the event equipment failures and other events beyond their control prevent it from supplying updated (or sometimes any) program information.

At this time, Tribune does not support required, real time PSIP updates. Tribune has done some limited research and experimentation on the use of real time PSIP updates using ATSC's PMCP protocol and determined that the interfacing architecture between a television station's traffic and automation system and the station's PSIP generator is not ready yet. Tribune anticipates that it could be as many as 2 to 3 years before a comprehensive real time PSIP system is ready for widescale deployment at its stations.

Lastly, if the Commission does adopt the latest PSIP standard, Tribune urges the Commission to require that MVPDs pass a broadcaster's PSIP information to their subscribers. Without this requirement, most television households in the country will not receive the benefit of updated programming information. This information is especially significant for DVRs set to record programs so that they do not cut off recording early in the event a program runs late or on a delayed schedule. Of greater importance is that any updated program rating information generated by the station be passed directly to the viewer. The latter area has been the focus of Tribune's aforementioned research on ATSC's PMCP protocol and may well be the first time updates that television stations are able to provide. Failure of MVPDs to pass such updated program rating information would render the public interest benefits of that effort moot.

VII. THE COMMISSION SHOULD REQUIRE THAT MVPDs HAVE THE NECESSARY EQUIPMENT AT THE HEAD END TO ACCEPT ANY ACTIVE FORMAT DESCRIPTION INFORMATION TRANSMITTED BY BROADCASTERS AND PASS THAT AFD DATA ON TO THEIR SUBSCRIBERS.

Tribune applauds the Commission for raising the profile of the AFD standard after recognizing early on in this proceeding the problems that can occur when consumers attempt to watch widescreen 16x9 programming on 4x3 sets. Tribune urges the Commission to take a number of steps to ensure that any program format/television set problems, including the so-called postage stamp picture, are minimized at and after the transition.

As explained more fully below, Tribune urges the Commission, in response to the question posed in paragraph 124 of the NPRM, to require that MVPDs employing down conversion technology at the head end to have the necessary equipment to respond to any AFD data in a station's DTV transport stream. The Commission should also insist that any AFD data also be passed on with the station's video programming to the MVPD's subscribers. Requiring MVPDs to respond to any available AFD data at the head-end and pass that data on to their customers will go a long way to enhancing customer satisfaction with the television pictures they receive from their MVPD providers on their 4x3 sets. And, as everyone appreciates, increasing the likelihood of customer satisfaction decreases the chances that the switchboards at the U.S. Capitol and the FCC will be inundated with complaints in the weeks and months following the analog shutdown.

At this stage of the transition, Tribune does not support a Commission mandate requiring broadcasters to provide AFD and bar data. Unlike MVPD providers, who have little incentive to enhance the appearance of video programming from broadcasters as compared to basic MVPD-only networks and premium channels, market forces will drive broadcasters to ensure that their widescreen programming is displayed as attractively as possible on the 4x3 sets

of their viewers.¹⁸ With a dizzying number of competitors that deliver video programming to the consumer in the market today, broadcasters will need, *inter alia*, to maintain and develop their superior picture quality as a competitive advantage. In fact, due to the large variety of widescreen content that must be converted for 4x3 display, Tribune fully expects broadcasters to include dynamic AFD information in the DTV broadcast signal to ensure that viewers are continuously watching the any widescreen video programming in an optimal presentation format for reproduction on 4x3 displays.

For some relatively small period of time after February 17, 2009, however, DTV receivers and the set top boxes of most MVPDs will not have the capabilities needed to decode dynamic AFD information included in the broadcaster's program screen. During this window, Tribune expects that many MVPDs will support their legacy set top boxes and their customers' legacy 4x3 sets by downconverting HD 16x9 programming from broadcasters at the headend and then passing that programming on to their subscribers in a format compatible with those legacy 4x3 displays.

Unfortunately, most MVPDs do not have the technology at their headends to accept dynamic AFD instructions. What this means is that MVPD providers might select one static setting to control how widescreen programming is formatted for display on their subscribers' 4x3 television sets. Problems like "postage stamp" picture (black bars surrounding all four sides of the video picture) will arise at this stage when the MVPD's static format setting is not optimized for the broadcaster's actual programming content.¹⁹

¹⁸ As noted in the NPRM, the Commission in the *Second DTV Periodic Review Report & Order* believed that "broadcasters would want to make their programming attractive to viewers as they begin to adopt HD." *Id.*

¹⁹ There are several 4x3 display formats for 16x9 widescreen programming. The most common

Given that somewhere between 75 and 80 percent of television viewers in the country subscribe to some MVPD service, the Commission should take action now to ensure that MVPD subscribers with 4x3 legacy television sets receive their video digital video programming in an optimized display for their sets. As noted above, addressing the AFD issue is extremely important at this stage of the transition because the Commission has quite correctly recognized that it is of paramount importance that television viewers wake up on February 18, 2009 and see as much of the same programming as possible. While part of the equation is providing replicated, over-the-air coverage, another part is ensuring that consumers see the pictures they are used to seeing on the 4x3 sets.

Once the initial transition is completed, Tribune foresees the rapid development and distribution of DTV receivers and set top boxes with the capabilities to decode dynamic AFD information included in the broadcaster's program stream. For this reason, Tribune also urges the Commission to require that MVPDs make available any AFD data in a broadcaster's DTV programming stream to the home receiving devices of their subscribers. A simple glance at the postage stamp pictures that can occur when cable subscribers view widescreen programming on their 4x3 sets demonstrates that AFD must be considered program-related information and

are letterbox (16x9 aspect ratio on 4x3 display resulting in programming across the width of the screen and black bars at the top and bottom of the screen) and center cut (display of only the information in the center portion of the widescreen picture cutting off all video outside the 4 x 3 safe area).

The postage stamp picture will occur whenever the MVPD's static setting is downconverting the programming to letter box (black bars at the top and bottom) and the broadcaster transmits a 4x3 image. Because the subscriber's 4x3 set is expecting widescreen programming that will fill the width of the screen, the arrival of a 4x3 picture results in what appear to be black bars on both the left and right hand sides of the screen, thus producing the postage stamp picture with black bars both left and right in addition to top and bottom.

that an MVPD's failure to pass that information on to its subscribers constitutes material degradation.

VIII. THE COMMISSION SHOULD MODIFY SEVERAL TECHNICAL RULES TO ALLOW STATIONS TO IMPROVE DTV SERVICE.

Scattered throughout the Commission's DTV technical rules are several provisions that prevent or inhibit stations from improving their DTV service to the public. At this stage of the transition, the Commission has properly recognized that broadcasters should ensure that their current over-the-air analog viewers receive digital over-the-air service after the transition. With this overriding goal, the Commission should eliminate a number of technical rules that are no longer necessary that prevent or inhibit stations from improving their DTV service in important ways.

- A. The Commission should eliminate the so-called 1 dB penalty on stations proposing to use beam-tilting in excess of one percent.

Section 73.622(f)(4) requires television stations proposing to use beam-tilting in excess of 1 degree to reduce their operating power by assuming that the gain of the proposed antenna is 1 dB higher than it actually is. For stations that would otherwise have been allowed to run an ERP of 1 MW, the 1 dB penalty meant they could only operate with an ERP of 794 kW. With a modulation system critically dependent on signal strength to deliver reliable service, the 1 dB penalty presents a significant deterrent to a station otherwise interested in beam-tilting.

This subsection was added to the rules in February 1998 as part of a compromise between ALTV, Fox, Sinclair and MSTV to address a power gap problem between so-called UHF-UHF stations (i.e., UHF analog stations with UHF digital assignments) a chance to increase signal levels in their core market areas to approximate the signal levels produced by VHF-UHF

stations (i.e., VHF analog stations with UHF digital assignments).²⁰ At the time the subsection was put in place, the Commission limited power increases of UHF-UHF stations to 200 kW ERP. By contrast, the power levels already assigned to VHF-UHF stations greatly exceeded the 200 kW cap because considerable power was required to replicate the propagation of the VHF analog station's signal on a UHF channel.

This disparity was a cause for concern to UHF station owners for a number of reasons, including the fact that the large power levels assigned to VHF-UHF stations increased the likelihood that these stations could provide reliable indoor DTV service. The compromise that was codified in Section 73.622(f) allowed the UHF stations to increase their power levels up to a maximum of 1 MW (thereby greatly exceeding the 200 kW cap) provided, among other things, that they used appropriate beam-tilting techniques to keep their signal levels at the edge of their service areas equal to the signal level they would have if they were operating at their assigned power levels.

To allay some of the concerns raised about unleashing a large number of stations pointing 1 MW signals at city centers as well as concerns that stations would use extra beam-tilting as pretext to evade the power cap, the Commission added an extra precaution. In so doing, the Commission did not cite any studies demonstrating the need for extra action nor did it refer to any specific problems that had arisen in the past. Instead, the Commission adopted a power cap that reduced the overall power levels these stations could run and, at the same time, reduced the attractiveness of using beam-tilting for a simple power increase. For a station proposing to use beam-tilting in excess of 1 degree, the Commission required that the calculated

²⁰ See *Advanced Television Systems and Their Impact Upon the Existing Broadcast Service, Memorandum Opinion & Order Upon Reconsideration of the Sixth Report & Order*, FCC 98-24, MM Docket No. 87-268, ¶ 81, released February 23, 1998 (“*Sixth MO&O*”).

field strength at the edge of the station's service area assume that the gain of its proposed antenna was 1 dB higher than it actually was, a requirement that effectively reduced the power level that these stations could run.²¹

The concerns about the widespread exploitation of the extra beam-tilting exception to the Commission's 200 kW power cap were vitiated later that year when the Commission decided to allow UHF stations to increase their operating power levels up to 1 MW, provided they complied with the de minimis interference rules and made certain adjustments in the assumed operating power of underpowered nearby stations.²² Once the 200 kW power cap was effectively eliminated, the principal concern about interference to nearby stations was greatly reduced. It was no longer a concern if a UHF station operating at 1 MW with beam-tilting in excess of 1 degree produced a signal in excess of the 200 kW power cap at the edge of its service contour because that station was now allowed to have a 1 MW signal at the edge of its service contour.²³ Thus, there was also no need for the 1 dB penalty to discourage stations from using the beam-tilting exception to evade the 200 kW power cap.

Similarly, the 1 dB penalty was no longer necessary. Stations could now operate with a 1 MW to the horizon. The concerns about a station reflecting some or all of the 1 MW of beam-tilted power to expand the reach of its service an adjacent market in excess of its

²¹ The Commission observed 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." *Id.* ¶

²² See *Advanced Televisions Systems and Their Impact upon the Existing Television Broadcast Service*, FCC 98-15, MB Docket No. 87-268, ¶¶48-49, released December 18, 1998.

²³ While it was obviously possible for a station to operate at 1 MW with extra beam-tilting because it could not satisfy the de minimis standard with a more typical antenna, the number of these instances was significantly smaller than the number of applications expected when the 200 kW cap was in place.

authorized signal strength largely vanished when the Commission reversed itself and allowed UHF stations to maximize.

The lack of any specific evidence justifying the 1 dB penalty has been illustrated in the nine plus years since the Commission first allowed stations to increase their power levels using extra beam-tilting. A number of stations across the country have built higher-powered facilities using more than 1 degree of beam-tilting. Tribune has successfully built two of them. Given all the dire predictions that surfaced when the Commission adopted the beam-tilting compromise, one would expect that these stations wrecked havoc in their markets. This has hardly been the case. To Tribune's knowledge, there have been no complaints resulting from a station using beam-tilting in excess of one degree.

Because this subsection is unnecessary and irrelevant, the time has come to delete it. Eliminating the 1 dB penalty would encourage more stations to use beam-tilting in excess of 1 degree to increase their signal strength in the core portions of the markets. This, in turn, could increase the number of viewers that will have indoor DTV service after the analog shutdown. Given that the Commission has properly recognized that one of its top priorities is ensuring that all viewers who get analog service now get digital service after February 17, 2009, any increase in the number of viewers that can receive indoor DTV service is no small thing.

As noted earlier, the widespread consensus in the industry is that the signal strength needed to provide reliable indoor reception is significantly higher than anything specified in the rules. On UHF channels, for example, the minimum signal strength needed for outdoor reception in the FCC's rules is 41 dBu. By contrast, one of the lowest estimates of the signal strength needed to provide reliable indoor DTV service is 80 dBu. This difference of approximately 40 dB in signal strength reflects a power difference on the order of 10,000 – that

is, it requires 10,000 times as much power to produce an 80 dBu signal as compared to a 40 dBu signal. Given the enormous power difference required to produce the signal strength needed for indoor DTV reception, the Commission should remove any disincentive for stations to employ beam-tilting in excess of 1 degree because it is one of the ways a station can increase the likelihood of indoor reception in its core market without causing excess interference.

B. The Commission should eliminate the artificial power cap on VHF stations in Zone 1.

Section 73.622(f)(7) limits the effective radiated power of DTV stations operating on high-band VHF channels 7-13 in Zone 1 to 30 kW while the comparable limit on stations using these channels in zones 2 and 3 is 160 kW. The Commission should eliminate this disparity and adopt a single, nationwide power cap for DTV stations operating on high-band VHF channels of 160 kW. Under this approach, Zone 1 stations on channels 7-13 would be permitted to increase power up to 160 kW provided their proposed facilities complied with the Commission's interference rule. As demonstrated below, there is no need to retain the cap today.

The VHF power cap in Zone 1 was adopted in the early 1950s. At that time, UHF stations were only a theoretical possibility and the FCC wanted to increase the number of VHF television station allotments it could create in the heavily congested northeast corridor. Because the FCC relied on spacing rules to limit interference in and between markets, the Commission's decision to limit the height and power levels for VHF stations allowed it to reduce the required spacings between allotments. The cap also served as an extra precaution against excess interference.

The cap is unnecessary today because the FCC no longer relies on spacing rules to limit interference between authorized stations. Instead, the advent of the DTV transition and

the prospect of doubling the number of stations in a reduced amount of spectrum caused the Commission to develop a highly sophisticated, precise model to predict interference between stations. Because the FCC uses OET-69 to analyze the RF environment before acting on a proposed power increase or other technical change by a station, there is no need for a prophylactic power limit on high-band VHF stations in Zone 1 to reduce the level of interference between stations. The Commission's model is designed to provide this very protection. For this reason, the Commission should eliminate the artificially low limit on operating power for stations on channel 7-13 in Zone 1. Like stations operating on those same channels in Zones 2 and 3, stations in Zone 1 should be permitted to increase their operating power up to 160 kW provided that their proposed operations satisfy the FCC's interference protection rules.

- C. The Commission should correct an error in the OET 69 processing software code that is acknowledged as an error in the processing code comments.

Tribune urges the Commission to correct a flaw in the OET 69 processing software code that comments to the code explicitly acknowledge is an error. As explained in the attached Technical Statement from du Treil, Lundin & Rackley, the flaw in the OET processing software code assumes that the elevation pattern of a station's antenna directs the main lobe of the transmitted signal toward the ground in the area within 1 kilometer of the transmitter site.²⁴ This is an absurd assumption that would obviously never happen in the real world. In fact, the FCC's OET 69 software code programmers have not only recognized the error, they have also prepared a correction for the problem that was never implemented into the code itself.²⁵

²⁴ See du Treil, Lundin & Rackley, *Technical Statement Concerning Special Circumstances Regarding Interference Analysis for WINO-DT and WOOL-DT, New Orleans, Louisiana*, at 3-6 (June 22, 2007) (attached hereto).

²⁵ *Id.* at 4.

Although this processing software code error may seem trivial at first blush, it is anything but trivial. This error has erroneously predicted impermissible levels of interference to three different Class A stations from various DTV build-outs proposed by Tribune stations. In each instance, the DTV project was delayed by several weeks as Technical Statements explaining the processing software code flaw along with maps and interference calculations were prepared and shared with the legal and technical representatives of the Class A stations before a sign-off from the licensees/permittees was received. In fact, the attached Technical Statement was prepared to illustrate the software processing code error to a Class A licensee and a permittee in the greater New Orleans area.

At this stage of the transition, neither the Commission nor its licensees have the resources or the time for delays like these. There are plenty of real challenges ahead for both the Commission and its licensees as the analog shutdown approaches. For these reasons, the Commission should prevent this processing software code flaw from causing any additional delays. Obviously, the preferred solution is for the Commission to recompile OET 69 with the correction properly implemented.

Tribune recognizes the Commission's demonstrated reluctance to make changes to its OET 69 software. As an alternative to recompiling OET 69, Tribune urges the Commission to include language in the Report & Order it issues in this proceeding indicating that it expects good faith cooperation among licensees in quickly resolving interference issues that arise as a result of flaws in the OET 69 processing software or the Commission's underlying database. This language should create a rebuttable presumption that interference showings using the actual parameters of a proposed DTV operation will be relied upon by the Commission in any interference disputes. Tribune's objective in proposing this alternative is to crimp a station's

discretion to object to a proposed DTV operation when presented with a reliable technical showing demonstrating compliance with the interference rules using a station's proposed or actual operating parameters.

IX. THE COMMISSION SHOULD ALLOW STATIONS TO USE BOTH EXISTING AND NEW INTERFERENCE AGREEMENTS TO EXPAND THEIR SERVICE AREAS.

At this stage of the transition, all parties agree that time is of the essence. To increase the likelihood of a successful transition, the Commission should allow stations to rely on existing interference agreements and to enter into new agreements to expand their service areas in excess of what the 0.5 percent interference protection standard would otherwise allow.

- A. The Commission should allow new, incremental interference in excess of the 0.5 percent interference protection standard if the stations are parties to pre-transition interference agreements and the new interference does not exceed 10 percent.

During the transition and repacking process, the Commission allowed stations to expand their DTV service areas by entering into interference agreements in which an impacted station agreed to accept new, incremental interference in excess of the Commission's interference protection standard. The Media Bureau staff informally reviewed some of these agreements during the transition when considering proposed DTV minor modification applications that, when implemented, would result in overall incremental interference to a station in excess of ten percent. The Media Bureau staff also reviewed interference agreements that were part of negotiated channel arrangements during the repacking process.²⁶

These agreements typically involved the payment of money or provision of other valuable consideration to the station agreeing to accept the additional interference. In 1998, the Commission specifically allowed payments of valuable consideration in DTV interference

²⁶ See e.g., *Negotiated Channel Election Arrangements*, DA 05-1619, MB Docket No. 03-15, released June 8, 2005 (approving 24 and rejecting 12 negotiated channel arrangements).

agreements to provide stations with additional flexibility to secure acceptable pre-transition DTV allotments.²⁷ Tribune has two of these agreements. Both agreements include language that does not specify a particular level of interference from a particular FCC application or allotment request but instead refer to operations from a specific location. The Tribune stations bargained for this language to have the flexibility they needed to adjust to unexpected developments in the construction or operation of their DTV facilities.

In these circumstances, the Commission should allow stations with interference agreements that remain in effect today to enjoy the benefit of their legally-secured bargains. Specifically, the Commission should grant applications filed by these stations pursuant to their interference agreements even if the proposed facilities are predicted to cause excess interference to the other station in the agreement, provided that the total interference to the receiving station does not exceed ten percent. Given that the Commission allowed these agreements to be created and specifically permitted valuable consideration to be exchanged, it should not retroactively void these agreements by prohibiting incremental interference that the stations have already agreed to accept. Both as a matter of sound regulatory policy and elemental fairness, stations with interference agreements that remain in effect today should be given the benefit of their bargains in their post-transition operations.

- B. The Commission should also allow stations to negotiate interference agreements to expand their post-transition coverage areas and resolve any problems created by a mis-match between allotment and actual antenna patterns.

Tribune also urges the Commission to allow stations to negotiate new interference agreements to expand their service areas. This policy would give broadcasters additional flexibility to resolve their post-transition DTV coverage problems as expeditiously as possible.

²⁷ See *infra* at 32-34.

This policy could go a long way to solving a number of the coverage problems confronting various stations in a short period of time without tying up the Commission staff.

Given the extensive experience with these agreements to date, the Commission could rely on its earlier decisions to announce the requirements that must be satisfied to create a valid agreement, including an interference cap to prevent any station from accepting more than a specified level of overall interference, and require both stations to certify the agreement complies with these requirements. To ensure compliance, the Commission should authorize the Media Bureau staff to audit these agreements as necessary and articulate strict penalties to both parties for non-compliance. The Commission should also require these agreements to be filed electronically so that it can enlist the public's assistance in ensuring compliance.²⁸

As noted above, negotiated interference agreements were authorized by the Commission as far back as 1998 shortly after the Commission released the Sixth Report & Order with the initial pre-transition table of DTV allotments and was besieged by complaints, comments and suggestions. It received 231 Petitions for Reconsideration of at least some parts of the decisions it made in the Sixth Report & Order plus "a substantial number of oppositions/comments, replies, supplemental filing and related filings."²⁹

While the Commission methodically worked through the petitions and assorted other filings in a mammoth 205 page order, it also recognized that it needed to allow stations

²⁸ There are other steps the Commission can take to minimize the drain on its resources from these Agreements. If the Commission is concerned that coverage areas will be changing too frequently during the period leading up to the analog shutdown, the Commission should permit stations to enter into interference agreements to expand coverage areas and resolve allotment problems through July 1, 2008 so that any changes can be reviewed and processed and implemented prior to the analog shutdown.

²⁹ See *Advanced Television Systems and Their Impact upon the Existing Television Service, Memorandum Opinion & Order on Reconsideration of the Sixth Report & Order*, FCC 98-24, MM Docket No. 87-268, ¶ 1 & n.4, released February 23, 1998.

more flexibility to resolve their own problems with the Table and their resulting coverage areas. The Commission noted that “[t]hroughout this proceeding we have recognized that the implementation of DTV service will be a dynamic process.”³⁰ In recognition of this dynamic process, the Commission confirmed that 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.”³¹ To effectuate this intent, the Commission modified Sections 73.622(c) and 73.623(f) to allow licensees to file applications to implement negotiated agreements to change allotment channels as well agreements to change the technical parameters of an allotment. The Commission also clarified that the negotiated agreements could include the exchange of money or other consideration from one channel to another.

Although the current situation facing the Commission is not identical to the situation the Commission faced on Reconsideration of the Sixth Report & Order, they are certainly similar. Like the Commission in 1996, the Commission is likely to receive hundreds of requests from stations to change and/or otherwise improve their service areas. While the 1996 Commission faced the daunting problem of doubling the number of television licensees in a smaller amount of spectrum, today’s FCC faces a hard deadline to resolve the many problems raised and ensure that the DTV service as of 12:01 a.m. on February 18, 2009 is good enough to ensure a successful transition. Then, as now, it made sense to give stations the ability to fix the problems themselves.

³⁰ *Id.* ¶ 141.

³¹ *Id.* ¶ 146..

For these reasons, Tribune urges the Commission to permit stations to enter into negotiated agreements to modify their coverage areas either at the allotment stage or through maximized applications. With the Commission's limited resources and the many different allotment/coverage problems that will need to be resolved, negotiated interference agreements by and among stations can close this gap quickly. Given the dwindling amount of time until the analog shutdown, Tribune again urges the Commission to adopt a policy that gives broadcasters the flexibility they need to solve any remaining coverage problems in time for February 17, 2009.

X. CONCLUSION

The Commission and the broadcast industry find themselves ever closer to what will be one of the most remarkable events in U.S. history. A nation with over 110 million television households will transition from analog to digital television on a single day. Enormous amounts of blood, sweat and tears have been expended by both the broadcast industry and the FCC to reach the point we are at today. Even more work will be needed before the Commission and the industry reach that fateful day in February 2009

To enhance the likelihood that the industry is ready and that most of the viewing public receives television service on February 18, 2009 like it did the day before, the Commission should give broadcasters the flexibility they need to solve any remaining technical, build-out or coverage problems quickly. As noted above, this needed flexibility ranges from analog power reductions, STAs to continue side-mounted DTV operations and negotiated interference consent agreements. In considering this request for additional flexibility, Tribune urges the Commission to remember that broadcasters have every incentive to make this transition go as smoothly as possible to ensure they remain competitive in the market for delivering video content to consumers.

Respectfully submitted,

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