

Reply Comments to 12-268

These reply comments are partially in response to the comments of Harris Corporation, and partially in response to various other comments about this proceeding. I am a strong supporter of over-the-air broadcast television, and in the course of this support I operate the broadcast television website RabbitEars.Info and regularly assist users of broadcast television both through e-mail and on message boards.

LPTV

I strongly support the comments of those who have stated their support of the low-power television service. This service provides additional programming choices and often provides local service that full-service stations do not offer. Additionally, LPTV stations do so without cable carriage in many locations due to lack of must-carry for most of these stations, which makes it even more difficult for these stations to make money. The Commission should protect this vital service in the course of its work in repacking and spectrum reclamation, bearing in mind that the LPTV service is secondary only to full-service television stations, not to other services.

Additionally, in a repack, the Commission should compensate LPTV operators who have already converted to digital operation and need to change channels once again. During the original transition to digital operation, LPTV operators were asked to pay for their own conversion, but so were full-service and Class A stations, so at least all were having to spend their own money for such conversions. In this case, full-service and Class A stations, those who are best able to afford their own conversions, would be compensated for this involuntary move, while the LPTV operators, many of which are run on shoestring budgets, would be asked to self-fund yet another set of equipment through no fault of their own nor the fault of the full-service stations to which they are secondary. To deny LPTV operators compensation when full-service and Class A operators receive such compensation would be fundamentally unfair and would likely put many of these valuable operations out of business.

Harris Corporation

I partially support the comments of Harris Corporation. The Commission should use this opportunity to relocate stations from low-VHF to high-VHF, or UHF where no high-VHF channels are available. The low-VHF band has proven to be problematic at best in most locations, and those stations often face struggles being received on outdoor antennas at great distances or on indoor antennas at any distance. Having a robust digital television service will require most or all of the stations on this band to be relocated to other television bands. Since there are fewer than 50 full-service stations operating in this band, such a move should be relatively easy in most cases.

I also support the comments of Harris Corporation in regard to using the freed low-VHF

band for expanded FM service. However, I differ with Harris Corporation's comments asserting that channels 2-4 should be used for LPTV service. Those channels work poorly with full-service stations; there is no reason to believe they will work any better with weaker stations that are more likely to not be co-located with the major stations in the various markets. Instead, I believe the FCC should create an all-digital FM radio band on the entirety of the channels 2-6. Each FM station should have the option of going digital-only on this new band on channels 200 kHz wide, and AM stations should be afforded similar opportunities. Such a conversion could be used to clear up the short-spacing that many FMs experience due to pre-1964 allotments, permit some Class D FM stations to upgrade to Class A status, allow more AM stations to migrate to the FM band where most radio listeners are found, and allow for further expansion of services such as the LPFM service. Additionally, 87-88 MHz could be reserved for use by FM modulators covered by Part 15. While I suspect such a proposal is beyond the scope of this proceeding, it would certainly depend on a favorable outcome from this proceeding in order to be successful and thus does have some place in the discussion.

Comments on the Repack

I believe a repack is a good idea, so long as it maintains or significantly improves population covered by the various stations. The transition to digital operations resulted in a completely unplanned table of allotments, resulting in such quirks as full-service channels 31 appearing in Boston, Hartford, New York, and Philadelphia, while channel 50 is completely clear of full-service stations across that entire area due to various spacing issues. Large populated areas lost television service due to things like this, such as populated areas of Long Island and southwestern Connecticut losing CBS due to the placement of WCBS and WFSB, both CBS stations, on channel 33. Viewers in Cecil County, Maryland likely cannot watch the Maryland PBS network of stations because WMPB-29 is co-channelled with WUVP and WMPT-42 is co-channelled with WTXF, resulting in massive amounts of interference to both stations. These are the types of problems which can be corrected with a properly-managed repack.

There is an effective way to do such a repack while also freeing spectrum and minimizing cost to the government, with two major points. First, stations should be allowed to be flexible. Co-location should be encouraged, so as to make reception easier for viewers who will only need to aim their antennas in a single direction, as is the case in so many other countries, including Canada to our north. State-wide PBS stations should be granted special flexibility to restructure their operations to meet this demand. For example, in New Jersey, NJTV could be allowed to operate from transmitter sites in New York and Philadelphia, thus co-locating with the other broadcasters. Then, given extra flexibility, these statewide PBS networks could operate translators or even full-service transmitters to fill in loss areas or otherwise reach areas of the state that are left out. To return to the NJTV example, the WNJT license could operate from Philadelphia, while the WNJS license could operate from Atlantic City where reception of that theoretical Philadelphia transmitter may be problematic. The

WNJN license could operate from New York, while WNJB could move west to fill in the more rugged and mountainous northwestern part of the state.

Second, instead of spending money to relocate stations using the current ATSC standard, the FCC should use the repack as an opportunity to upgrade to the ATSC 3.0 standard. At last year's National Religious Broadcasters' convention, Mark Aitken of Sinclair gave a presentation about the ATSC 3.0 standard, which would finally put the US on a digital television standard that uses the most modern technologies, including HEVC for video and new modulation schemes that increase the bandwidth available on a given channel. According to Mr. Aitken, it is projected that ATSC 3.0 could allow up to 8 HD video streams on a single transmitter. By moving to ATSC 3.0, the Commission could require spectrum sharing among two licensed stations while still expanding the television service. Each station would be able to run more than one HD channel while also providing expanded services such as Mobile DTV on that bandwidth. This is completely impossible using the current ATSC standard.

Full-service or Class A stations that are commonly owned could easily be combined into a single transmitter, while others could be allowed to negotiate to determine which stations. Those who fail to come up with an agreement could be assigned together. For example, in the Washington, DC metro area, WTTG and WDCA are commonly owned by Fox Television Stations, and could be operated on a single channel with ATSC 3.0. WRC and WZDC-CD could negotiate to share a channel, since Telemundo programming run on WZDC-CD is provided by NBC. This would allow the FCC to shrink the band into the channel 7-36 range that some groups, such as the Mexican government, are encouraging while paying out a minimal amount of spectrum auction funds to broadcasters. It has the added benefit of placing a natural guard band on channel 37. In the crowded Boston-DC corridor and the cluttered Los Angeles-San Diego area, auction participants would still be required, but not nearly as many. In addition, because of the huge increase in efficiency from ATSC 3.0, some stations may volunteer to participate in the auction to share three or more on a channel, not just two, again with limited spectrum auction funds, though stations should not be required to share more than two to a channel in any case. In places where there are an odd number of stations, the empty channel space could be offered for auction to a TV broadcaster, just as if it were a new television allotment. For example, in Harrisburg, PA, if all the stations were paired up as described, the seven area stations would be on four frequencies. The four frequencies, assuming no additional sharing occurred through incentive auctions, would ultimately have room for eight individual licensees. A new license could be created to fill that space and auctioned off to a broadcaster. Another interesting side effect is that the FCC could allow stations that negotiate their sharing partner to choose a partner in a different band, such as a VHF station and a UHF station sharing, and then those partners could choose to operate solely on the UHF frequency. This would help to resolve many of the on-going reception issues in the post-transition world while not increasing the usage of UHF spectrum by broadcasters.

Further, the FCC could consider revisiting its policy of deintermixture from the 1950's. In some markets with particularly rugged terrain, it could make sense to locate all of the local stations on VHF, in a sense forcing surrounding markets to be UHF-only. However, in order for this to work, the Congress would have to repeal Section 307 of the Communications Act, requiring a VHF service in every state. This would be wise policy regardless of how it might impact a repack in this case.

By doing this repack, and doing it sensibly, we can expand and strengthen the broadcast TV service, rather than shrinking and harming it. Because of the reduction in the number of transmitters, we can limit the number of full-service stations that are co-channelled between places like New York and Philadelphia, for example, making those channels available once again to people who may have lost that service during the 2009 transition. The stations in a single location could be placed on a string of adjacent channels, creating blocks of used and unused frequencies in each location. This would create a number of spaces in between the full-service stations to place low-power stations, wireless microphones, and white space devices, particularly in major metro areas like New York and Philadelphia where such spectrum space is particularly difficult to come by in the present environment.

In more rural areas where the television spectrum is not in heavy use, there is no need nor reason to require this proposed upgrade. While these stations could opt to upgrade to ATSC 3.0 and channel share on their own, perhaps to cut transmission costs, such actions should not be required nor compensated. In such a case, television set manufacturers should maintain compatibility with both the current ATSC and eventual ATSC 3.0 standards.

Such an upgrade to the ATSC 3.0 standard would likely delay the proposed auction by at least a few years. However, the Spectrum Act does give the FCC until 2022 to conduct the auction, so the Commission should use its time wisely to ensure all ducks are in a row before dashing headlong into a plan that may not be the wisest way of doing things. In fact, I would argue that the FCC should not rush into such an auction at all, as I feel it would do little to increase availability of broadband services in underserved areas while harming the current broadcast service that is presently available in many of those same areas. Trading a service that exists today for a new service that may or may not be available in the near future would both defy common sense and be harmful to the public interest.

At a bare minimum, even if ATSC 3.0 is too radical a change, the Commission should consider requiring set manufacturers to support the use of MPEG-4 and/or HEVC video on the current ATSC modulation standard to promote bandwidth efficiency over time. While the appropriate sets and boxes would not become available overnight, over the next several years the availability of such equipment would eventually allow broadcasters to begin migrating to newer video compression on their own schedule.

Digital Replacement Translators

The subject of digital replacement translators was brought up by several commenters, who are concerned about the protection of those translators in a repack. I agree with many of those commenters that the coverage of such translators should be protected; however, a sensibly-managed repack may make some of them unnecessary. Should the aforementioned adoption of ATSC 3.0 and channel sharing arrangement occur, some stations that have had reception issues resulting in use of digital replacement translators may find those translators are no longer needed. For example, one commenter in this position is WGAL Hearst Television ("WGAL"). If WGAL were to negotiate a sharing arrangement with WPMT and use its UHF channel while relinquishing the VHF channel, suddenly the reception issues that plague its current channel 8 operation would vanish, and it would likely no longer require the channel 49 digital replacement translator that has been constructed, nor would it need the other translators for which WGAL holds permits or has submitted applications. This would not only make for more efficient spectrum usage, it would also save WGAL significant funds with regard to rent and upkeep on the second transmitter site it has been operating on channel 49 and on the construction and maintenance costs for the additional transmitter locations it would need to fully replicate its analog service.

Conclusion

In conclusion, the proposed repack of television stations must protect LPTV operations, but could otherwise have substantial benefits if done properly. The Commission should not embark on such an expensive and disruptive task unless it uses the opportunity to upgrade broadcast television to a new standard which will make broadcast television stronger and more robust. Broadcast television licensees continue to be among the best at disseminating emergency information and, in this age of cord-cutting to avoid ever-increasing subscription television charges, the continued availability of a strong broadcast television service would continue to help serve as a market-based check on those subscription television charges. I beg the Commission; please, save and strengthen our broadcast service to make it better than it has ever been, rather than shrinking and damaging it. These comments demonstrate that it is possible to repurpose spectrum for broadband use while strengthening the broadcast service, and it is in the best interest of both the Commission and the public to aim for a win-win in this proceeding.

Sincerely,

Mark J. Colombo
Owner of RabbitEars.Info