

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
Amendment of Parts 15, 73 and 74 of the Commission’s Rules to Provide for the Preservation of One Vacant Channel in the UHF Television Band For Use By White Space Devices and Wireless Microphones)	MB Docket No. 15-146
)	
Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions)	GN Docket No. 12-268
)	

COMMENTS OF PEARL TV

Pearl TV (“Pearl”) urges the Commission to ensure that its decision in this and related proceedings support and protect the ability of over-the-air viewers to receive from broadcasters the full array of benefits made possible by ATSC 3.0, the innovative next-generation IP-based television standard. ATSC 3.0 now has moved to candidate standard status, and its physical layer reached that goal on September 29, 2015.¹ The standard is expected to be approved for deployment in the spring of 2016, and ATSC 3.0 equipment will be commercially available in time for repacking. ATSC 3.0 is a near-term reality, and the Commission’s decision in this docket should preserve its significant benefits for the American public.

Pearl is a coalition of nine leading broadcasters promoting next generation TV. Its members include Cox Media Group, Graham Media Group, Hearst Television Inc., Media

¹ This is a watershed event for both the broadcasting and consumer electronics industries. “In perhaps the biggest ATSC 3.0 milestone to date, all the ‘core building-block elements’ of the next-gen broadcast system’s physical transmission layer have been elevated to ‘candidate standard’ status, following ATSC member balloting that began in early September.” *‘Core Elements’ of ATSC 3.0 Physical Transmission Layer Reach ‘Candidate Standard’ Status*, CE Daily, September 29, 2015.

General, Meredith Corporation, Raycom Media, Inc., Schurz Communications Inc., the E.W. Scripps Co. and TEGNA Inc. (formerly Gannett). Pearl, representing a significant number of broadcast stations across the country, has worked actively with the Advanced Television Systems Committee in the development of ATSC 3.0.

This next-generation standard is an IP-based technology that will enable broadcasters to offer over-the-air viewers not only 4K-quality video, immersive audio, mobile broadcasts to handheld devices and interactive features, but also another broadband pipe into the home, all with greater efficiency than is possible under current standards. In order to ensure the American public has widespread access to these benefits, broadcast television stations must not only retain their existing coverage in the repacking but also retain their flexibility to offer expanded and innovative services in the future. Accordingly, the Commission should reject any proposal that would effectively freeze in place television stations' service areas.

Certain possibilities raised in the Commission's June 16, 2015, Notice of Proposed Rulemaking in the above-referenced dockets² conflict with these principles. In particular, the *Vacant Channel NPRM* seeks comment on whether, after the Post-Auction Transition Period, full-power television stations should be required to "make a demonstration that their proposed new, displacement, or modified facility will not eliminate the last available vacant UHF channel in an area for use by white space devices and wireless microphones."³ The Commission subsequently proposed requiring that at least *two* channels within the TV band remain available for unlicensed use in those markets (if any) where a television station is placed

² See *Amendment of Parts 15, 73 and 74 of the Commission's Rules to Provide for the Preservation of One Vacant Channel in the UHF Television Band For Use By White Space Devices and Wireless Microphones*, MB Docket No. 15-146, FCC 15-68 (June 16, 2015) ("*Vacant Channel NPRM*").

³ *Vacant Channel NPRM* at ¶¶ 12, 26.

in the duplex gap of the new 600 MHz Band.⁴ Any such requirement would be inconsistent with the fundamental principle that full-power TV broadcast stations have priority over secondary or unlicensed users in the TV bands, and furthermore would risk denying stations the flexibility they need to bring the benefits of ATSC 3.0 to the public.

As was the case after the DTV transition, Pearl's members expect that changes to stations' service area contours may be necessary post-repacking to address technical issues that are not immediately apparent, and may not become apparent until well after the conclusion of the formal repacking period, once all stations actually have completed their relocations. Moreover, separate from the repacking, the Commission has recognized that "full power television [stations] may need to modify their facilities from time to time in order to continue to serve their viewers."⁵ Full power stations should be permitted to implement such modifications using any of the remaining television channels, so long as those operations do not cause harmful interference to other licensees. The Commission must not hamper stations' future options for expanding and improving their service to the public, which are already likely to be limited by the overall reduction in the amount of available UHF television spectrum, by even further restricting the spectrum available to broadcasters.

Such limitations would be especially damaging to stations, and the public, to the extent they prevent stations from taking full advantage of the anticipated advances that will be available under ATSC 3.0.⁶ ATSC 3.0 is an innovative update to digital television that will

⁴ *Procedures for Competitive Bidding in Auction 1000*, Public Notice, AU Docket No. 14-252 *et al.*, FCC 15-78, at ¶ 32 (Aug. 11, 2015) ("*Procedures PN*").

⁵ *Vacant Channel NPRM* at ¶ 29.

⁶ See Notice of *Ex Parte* Presentation by Pearl TV, Docket Nos. 12-268, 15-137, & 15-146, at 2 (filed July 30, 2015) (noting that "proposals that would freeze in place the service area of a broadcaster ... could significantly impair the ability of broadcasters to offer consumers services (continued...)

especially benefit over the air viewers. This robust upgrade will bring a theatre-like quality experience to every consumer's home, combining 4K ultra-high definition (UHD) quality and high dynamic range video (HDR) quality with high end audio capacity. It will also provide consumers with an alternative broadband pipe to download video without an expensive data plan, and will enable viewers to access TV on the go, from their tablet or smartphone, and thus will provide consumers with access to local news coverage of breaking events and severe weather, wherever they are. Moreover, ATSC 3.0 will include advanced emergency warning capabilities that will provide alerts to consumers even if their televisions are turned off, going beyond the current emergency alert capabilities of mobile phones.

Another key benefit of the standard is that it will allow stations to offer these innovative services while maximizing efficient use of spectrum.⁷ For instance, earlier this month the Commission granted special temporary authority for the operation of an experimental ATSC 3.0 single frequency network ("SFN") in the Washington-Baltimore area that, among other advances, will allow "the transmission of separate program elements using the same channel in two adjacent markets" and thus "permit broadcasters to 'zone' programming and advertising to discrete parts of a station's market using the same channel."⁸ The efficiencies made possible by SFNs are a key advantage of ATSC 3.0, allowing stations to make the best use of their spectrum for the benefit of viewers, and we expect that these efficiencies will be leveraged further by

that may be very appealing as the video distribution business continues to evolve" under ATSC 3.0).

⁷ See "ATSC 3.0 'Physical Layer' Technical Proposals Being Evaluated," ATSC.org, <http://atsc.org/newsletter/detailed-atsc-3-0-physical-layer-technical-proposals-being-evaluated/> (last visited Sept. 16, 2015).

⁸ Mark K. Miller, "ONE Media To Test Next-Gen SFN," TVNewsCheck, <http://www.tvnewscheck.com/article/88176/one-media-to-test-nextgen-sfn-platform> (Sept. 3, 2015).

broadcasters' co-locating transmission facilities and antenna structures. But implementing an SFN using multiple distributed transmitters, or other forms of channel-sharing made feasible by ATSC 3.0's efficiencies, likely will involve some changes to participating stations' service area contours to enable both stations to reach critical parts of their audiences and prevent the emergence of gaps that could cause existing viewers to lose service. Such modifications could become impractical or impossible if licensees must not only prevent harmful interference to other television stations but must also protect channels used only by unlicensed services.

The core of the ATSC 3.0 system was approved as a candidate standard by the broadcast and consumer electronic industries in May 2015 and the final candidate standard will be approved over the next six months. In June 2015, Samsung Electronics and the broadcast companies pioneering the ATSC 3.0 standard signed a Memorandum of Understanding to use their respective resources and expertise to facilitate the rapid conversion to the new standard. ATSC 3.0 transmitters were shown at the IBC 2015 conference in September 2015.⁹ Clearly, the ATSC 3.0 transition is likely to be getting underway at the same time as the repacking and its immediate aftermath. The Commission reaffirmed in the *Incentive Auction Order* that, although the Incentive Auction will reallocate part of the existing UHF television band for broadcasting, fixed, and mobile services, the remaining portion of the UHF band will "remain allocated and assigned only to broadcast services."¹⁰ The Commission should hold to that principle, and should reject any suggestion that one or more channels within the spectrum "allocated and

⁹ See *TeamCast Announces as a Worldwide First: exTra 3.0 Terrestrial TV Exciter Featuring the New ATSC 3.0 Technology*, Sept. 11, 2015, available at http://www.teamcast.com/data/upload/files/pr_teamcast_ibc_2015_worldfirst_with_extra3_0_exciter_final_1ZZJ6v.pdf.

¹⁰ See *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, R&O, 29 FCC Rcd 6567, 6683 (2014) ("*Incentive Auction Order*").

