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

In the Matter of	)	
	)	
Joint Petition for Rulemaking of America's	)	GN Docket No. 16-142
Public Television Stations, the AWARN	)	
Alliance, the Consumer Technology	)	
Association, and the National Association	)	
Of Broadcasters	)	

COMMENTS OF THE
NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION

The National Cable & Telecommunications Association ("NCTA")[1] responds to the Public Notice ("Notice")[2] in the above-captioned proceeding soliciting comments on a Joint Petition for Rulemaking ("Joint Petition").[3] The Joint Petition seeks Federal Communications Commission approval of a new standard for broadcast transmission, and asks the Commission to adopt the physical layer standard of ATSC 3.0 as an "optional" standard for television broadcasting and to make several rule changes to accommodate this new optional standard.

The Joint Petition explains that broadcasters that choose to transition to this new standard will continue to send an ATSC 1.0 signal over-the-air while simultaneously transmitting a different signal using the new ATSC 3.0 standard.[4] Due to the different characteristics of the

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1 NCTA is the principal trade association for the U.S. cable industry, representing cable operators serving more than 80 percent of the nation's cable television households and more than 200 cable program networks. The cable industry is the nation's largest provider of broadband service after investing over $230 billion since 1996 to build two-way interactive networks with fiber optic technology. Cable companies also provide state-of-the-art competitive voice service to approximately 30 million customers.

2 *See* FCC, Public Notice, Media Bureau Seeks Comment on Joint Petition for Rulemaking of America's Public Television Stations, The AWARN Alliance, The Consumer Technology Association, and The National Association of Broadcasters Seeking to Authorize Permissive Use of the "Next Generation TV" Broadcast Television Standard, GN Docket No. 16-142, DA 16-451 (rel. Apr. 26, 2016).

3 America's Public Television Stations, The AWARN Alliance, The Consumer Technology Association, and the National Association of Broadcasters Joint Petition for Rulemaking ("Joint Petition").

4 *Id.* at iii.

two different ATSC transmission standards, broadcasters choosing to use ATSC 3.0 will send these two different signals from different transmitters – one from their licensed facility and one from a different "host" transmitter. Meanwhile, broadcasters that opt not to transition to the new standard will continue to transmit only an ATSC 1.0 signal.

Broadcasters should be allowed to innovate and improve their over-the-air signals. However, these changes occur within a broader ecosystem in which viewers across the country watch broadcast television programming. The proposal raises numerous questions for cable operators that the Joint Petition fails to address. Cable operators today use a different transmission technology throughout their networks and are not currently equipped at their headends to retransmit an ATSC 3.0 broadcast signal to their customers. Similarly, hundreds of millions of set-top boxes in cable customers' homes today enable them to view ATSC 1.0 television programming on their digital and analog television sets but, like the reception devices in the homes of over-the-air viewers, this equipment is not compatible with ATSC 3.0 signals.

Allowing the transmission of ATSC 3.0, therefore, cannot occur in a vacuum. If the Commission were to issue a Notice of Proposed Rulemaking in response to the Joint Petition, it must seek input on ways to avoid or minimize any burdensome effects on cable operators or their subscribers. In particular, any Notice should make clear that the Commission intends to adopt the following principles:

- Cable operators have no legal obligation to carry the ATSC 3.0 signal during the transition. Carriage of an ATSC 1.0 signal will continue to fulfill cable operators' obligations during the transition and broadcasters must continue to provide a good quality ATSC 1.0 signal to the cable headend during the transition period.

- Cable operators and their customers should not be burdened with new carriage obligations or costs on account of the ATSC 3.0 transition. Consumers should not lose access to HD programming on the ATSC 1.0 broadcasts during the transition.
- Cable operators should be protected against reopening retransmission consent agreements when an ATSC 1.0 signal is moved to a different "host" station in order to launch an ATSC 3.0 signal on the original station.
- In addressing the analog to digital transition, Congress and the Commission provided a lengthy transition period in recognition of the complicated nature of the change in the broadcast transmission standard. Broadcasters that opt to transmit in ATSC 3.0 should not be permitted to unilaterally decide to no longer broadcast an ATSC 1.0 signal. Instead, the Commission should conduct further proceedings at a later date to determine how and when broadcasters can cease providing an ATSC 1.0 signal to over-the-air viewers and to cable systems.

DISCUSSION

A. Broadcasters Must Transmit an ATSC 1.0 Signal Until The Commission Determines that the Transition Period Should End

Any Petition for Rulemaking in the instant proceeding should start from the proposition that cable operators have no obligation to carry any station broadcasting in ATSC 3.0 during this broadcaster transition. Cable operators would need to make significant changes in operations and equipment to accommodate broadcasters that opt to use this new standard. At this stage, the costs of such a transition are largely unknown, but can be expected to be considerable. To minimize unnecessary costs and disruptions to its customers, cable operators should be able to make this transition on a timetable that takes into account customer demand and technological

developments. Any NPRM issued in response to the Joint Petition should embody these principles.

First, cable operators should *only* be required to carry the ATSC 1.0 signal from any broadcaster during this transition period. The Joint Petition is unclear on this important point. On one hand, it appears to suggest that there will be no increased carriage or operational burden on cable operators during the transition "because broadcasters voluntarily electing to move to the new standard will continue to deliver programming streams to MVPDs in the current standard, or under alternative arrangements such as fiber optic feeds…."[5] But the Joint Petition's proposed rule does not reflect that approach.

Instead, the Joint Petition proposes to revise section 76.56(g) so that "a cable system shall not be obligated to carry a new A/321 [ATSC 3.0] transmission of a station such cable system retransmits pursuant to such station's mandatory carriage rights *until sixty days after such station gives notice* of initiation of A/321 transmissions."[6] This language suggests not merely a *notice* obligation on the broadcaster's part but also a *carriage* obligation on the operator's part. Such a requirement would be contrary to the must carry provisions of the Cable Act, which require cable operators to carry only a station's single "primary video" signal.[7] The rules should make clear that carriage of the ATSC 1.0 signal satisfies a cable operator's carriage obligations with respect

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5 *Id.* at 18.

6 *Id.*, Appendix C (emphasis supplied).

7 47 U.S.C. § 534 ("Content to be carried") ("A cable operator shall carry, in its entirety,… the primary video, accompanying audio, and line 21 closed captioning transmission of each of the local commercial television stations carried on the cable system and, to the extent technically feasible, program-related material carried in the vertical blanking interval or on subcarriers.") *See* In re Carriage of Digital Television Broadcast Signals: Amendments to Part 76 of the Commission's Rules, First Report and Order and Further Notice of Proposed Rulemaking, 16 FCC Rcd 2598, 2620-21 (2001) ("First Report and Order"); In re Carriage of Digital Television Broadcast Signals: Amendments to Part 76 of the Commission's Rules, Second Report and Order and First Order on Reconsideration, 20 FCC Rcd 4516, 4531-38 (2005).

to that station and that the separately-transmitted ATSC 3.0 signal has no separate carriage rights.

Relatedly, the Joint Petition seeks Commission "confirmation" that "a station deploying Next Generation TV should be considered a 'television station' for purposes of Section 76.5(b) of the Commission's Rules and for purposes of Part 76 generally."[8] But any Notice must explore the broader implications of this redefinition for purposes of its cable rules.

Under the proposal, one station would transmit two or more separate ATSC 3.0 signals and another would transmit multiple ATSC 1.0 signals. The Joint Petition is not clear about whether it is requesting the Commission to redefine each separate transmission as a "television station" for purposes of the Commission's rules.[9] Such an approach would conflict with its meaning which, as NCTA has previously showed, limits one television station to each 6 MHz channel.[10]

Second, the Notice should also seek comment on ways to ensure that broadcasters do not shift the costs and burdens of their voluntary "market based" transition to cable operators and their customers. For example, the transition scheme contemplates participating broadcasters transmitting an ATSC 3.0 signal from their licensed transmitter and entering into an arrangement with a separate station to transmit their ATSC 1.0 signal from a "host" transmitter. Any Notice should make clear that cable operators are to be held harmless in such situations by requiring any

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8 Joint Petition at 18.

9 *Id.* at 18 (seeking "confirm[ation]" that a station deploying Next Generation TV should be considered a 'television station' for purposes of Section 76.5(b) of the Commission's Rules and for purposes of Part 76 generally.")

10 For example, NCTA has shown that channel sharing, by which two stations can share a single 6 MHz slot and maintain carriage rights for each stream, was intended by Congress to apply only in the context of the spectrum auction. NCTA demonstrated that "separated from the special rights granted in connection with the spectrum auction, a broadcaster that gives up its spectrum to transmit television programming using another broadcaster's 6 MHz channel would have no greater carriage rights than those of the other broadcaster's multicast streams or the streams provided by a lessee of the broadcaster's multicast capacity." Comments of the National Cable & Telecommunications Association, GN Docket No. 12-268 at 5 (filed Aug. 13, 2015).

station transmitting an ATSC 3.0 signal over its transmitter to arrange for the delivery of a good quality ATSC 1.0 over-the-air signal to the cable headend.[11] Otherwise, cable operators would unfairly be burdened with the costs of converting the new signal to one compatible with their existing equipment.

Further, if a broadcaster is transmitting an ATSC 1.0 HD signal prior to the transition to ATSC 3.0, it should be required to transmit an HD over-the-air signal on its 1.0 signal in the same or comparable quality after it launches an ATSC 3.0 signal. Cable customers will have become accustomed to receiving an HD version of television programming, and launch of the ATSC 3.0 signal should not be used as a means for broadcasters to leverage their over-the-air properties at the expense of cable operators. Maintaining the same or comparable HD quality on the simulcast ATSC 1.0 signal as is provided today will help ensure that cable operators and their customers are not forced to shoulder new costs or burdens to continue to receive the same HD content.

Third, while the Joint Petition states that a broadcaster will arrange "for the simulcast of that signal in the current DTV standard on another broadcast facility serving a *substantially similar* community of license,"[12] nothing in the filing commits the broadcaster to continuing to provide service to its existing audience. To avoid disruption to cable operators and their customers, as well as to over-the-air viewers, any Notice should explore how to ensure that broadcasters cannot move their ATSC 1.0 signal to a transmitter outside the community they are currently licensed to serve or to a station with inferior over-the-air coverage.[13] Such a

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[11] In many cases where cable operators receive a fiber feed from the broadcaster, they still rely on the ATSC 1.0 over-the-air signal for backup purposes.

[12] Joint Petition at 17 (emphasis supplied).

[13] The Joint Petition suggest that broadcasters would simply notify MVPDs of any move of their ATSC 1.0 signal to another facility, and explains that "*generally*, must-carry obligations will not require MVPDs to purchase new

prohibition would help ensure that cable operators are not saddled with new costs to obtain broadcast stations they carry today.[14]

Fourth, any Notice should explore how to protect cable operators from being subject to retransmission consent obligations regarding the carriage of an ATSC 3.0 signal during the "voluntary" transition period. At an absolute minimum, the Commission should protect cable operators against reopening retransmission consent agreements when an ATSC 1.0 signal is moved to a different station in order to launch an ATSC 3.0 signal on the original station.[15] It would be manifestly unfair to allow broadcasters to expand their retransmission consent rights by moving signals around from station to station. Cable operators that have entered into agreements for the retransmission of an ATSC 1.0 signal when transmitted by one broadcaster should be deemed to have consent to continue that retransmission when that signal is moved to a different host transmitter. By the same token, if a cable operator has negotiated a retransmission consent agreement to carry a station's ATSC 1.0 signal, that same agreement should be deemed to provide authority for the operator, at the operator's election, to retransmit an ATSC 3.0 signal freely available over-the-air.

Finally, the Joint Petition requests a transition of indeterminate length solely within the control of each individual broadcaster, who could turn off their ATSC 1.0 signal when "market conditions" allow,[16] and who could require cable carriage of their ATSC 3.0 signal upon 60

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equipment at this time, as they will continue to receive signals in the current digital standard via the simulcasting agreements …." *Id*. at 19.

[14] For example, moving a station to a new host transmitter could result in new equipment costs, receive antenna changes and other accommodations.

[15] The retransmission consent provisions of the Cable Act prohibit a cable operator or other MVPD from "retransmit[ting] the signal of a broadcasting station, or any part thereof, except (a) with the express authority of the originating station…" 47 U.S.C. § 325(b)(1).

[16] Joint Petition at Attachment C, proposed rule Sec. 73.682(g) (proposing to send a simulcast ATSC 1.0 signal "for a period of time consistent with market conditions").

days' notice to the operator.[17] The Commission, rather than individual broadcasters based on their own determinations, should establish when this transition will be complete and the ATSC 1.0 signal turned off.

Congress and the Commission provided for a lengthy transition from analog to digital television. Cable operators knew well in advance when broadcasters were required to turn off their analog transmitters, and Congress established a program to help analog television viewers continue to obtain over-the-air television through a converter box program. Providing cable operators 60 days' notice[18] would be a wholly inadequate timeframe for making a similar transition, and it is surely premature to suggest rules that would determine how this new, complicated transition will end. Instead, the Commission should conduct a further proceeding at the appropriate time to establish how to determine when to allow broadcasters to cease providing an ATSC 1.0 signal and to address a variety of post-transition issues.

B. A "Good Quality" ATSC 3.0 Signal Cannot be Defined as the Same as an ATSC 1.0 Signal

For purposes of the must carry rules, a cable operator is not required to carry a television broadcast station that fails to deliver a "good quality signal" to the cable headend.[19] A "good quality" signal requires that the station's signal level for a digital signal equal -61dBm at the input terminals of the signal processing equipment at the headend.[20] The Joint Petition suggests that the Commission should adopt the identical definition of good quality signal for both ATSC 1.0 and 3.0.[21] However, that ignores the significant differences between the two transmissions

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[17] *Id.* at 19.

[18] *See* Joint Petition, proposed rule Section 76.56(g).

[19] 47 U.S.C. § 534(h)(1)(B)(iii) (definition of "local commercial television station").

[20] First Report and Order at ¶¶ 45 and 46.

[21] Joint Petition at 19.

for these purposes. The digital signal level for ATSC 1.0 was based on a single "operating point"[22]— 8 VSB modulation, a data rate of approximately 19.4 Mbps and a carrier-to-noise threshold of approximately 15 dB.[23] But ATSC 3.0 allows broadcasters "to make individualized tradeoffs between signal to noise threshold, data rate and coverage area."[24] Therefore, a television station could select an operating point that achieves a higher data rate but smaller coverage area, which might mean that off-air reception of the signal is no longer possible at the cable headend.[25]

All these issues would need to be explored in a Notice of Proposed Rulemaking to determine what would constitute a "good quality signal" once a broadcaster has turned off its ATSC 1.0 signal and transmits only an ATSC 3.0 signal that would be entitled to mandatory carriage. But it is entirely premature to address those questions at this stage, particularly when serious consideration of technical issues regarding cable carriage of the ATSC 3.0 signal are still on-going at the ATSC committee level.[26] So long as a broadcaster continues to deliver a good quality signal using ATSC 1.0 transmission to the headend, the FCC need not define a good quality signal for ATSC 3.0 at this time.

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[22] *See* CED Magazine, Capital Current: What is a "Good Quality" ATSC 3.0 Television Signal, http://www.cedmagazine.com/article/2015/10/capital-currents-what-good-quality-atsc-30-television-signal.

[23] First Report and Order at ¶¶ 45 and 46.

[24] *Id.* *See also* Joint Petition, Attachment B, at 2.

[25] *Id.*

[26] Most elements of ATSC 3.0 are still being defined and exist only as "candidate standards" subject to modifications and enhancements within ATSC standards committees. *See* ATSC Candidate Standards, at http://atsc.org/standards/candidate-standards/ (listing of the uncompleted ATSC 3.0 candidate standards). ATSC Ad Hoc Group TG3-8 is responsible for discussing and describing "how MVPD's may successfully redistribute ATSC 3.0 content to their subscribers."

CONCLUSION

For the foregoing reason, any Notice of Proposed Rulemaking issued in response to the Joint Petition must ensure that introduction of a new, voluntary broadcast transmission standard does not harm cable operators or their customers.

Respectfully submitted,

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