

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

In the Matter of

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

**COMMENTS OF  
THE NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION**

NCTA is the principal trade association for the U.S. cable industry, representing cable operators serving more than 90 percent of the nation's cable television households and more than 200 cable program networks. The cable industry is the nation's largest broadband provider of high speed Internet access after investing \$110 billion over ten years to build a two-way interactive network with fiber optic technology. Cable companies also provide state-of-the-art digital telephone service to millions of American consumers.

**DISCUSSION**

The Commission's Notice of Proposed Rulemaking in its Third Periodic Review of the rules and policies affecting the broadcast industry's conversion to digital television ("Notice") addresses a host of transition issues related to the introduction of DTV broadcast service and the recovery of spectrum at the end of the transition, February 17, 2009. The Notice seeks to gather information on, among other things, the status of DTV operations, the reduction and termination of analog service, the return of pre-transition DTV channels, the construction of DTV facilities, and changes in DTV interference criteria and transition standards.

The Commission also asks about broadcast stations' coordination with cable operators and other multichannel video programming distributors ("MVPDs") and other "issues

specifically related to MVPD readiness to receive and transmit digital signals to their subscribers when analog service ends.”<sup>1</sup> It seeks comment, for example, on whether MVPDs will “be able to handle the numerous channel changes and other modifications that will be necessary, many of which will occur at midnight on February 17, 2009.”<sup>2</sup>

As the Commission recognizes throughout the Notice, “the transition to DTV is a complex undertaking, affecting virtually every segment of the television industry and every American who watches television.”<sup>3</sup> Regarding cable’s role in the broadcast digital transition, the cable industry has a demonstrated track record of working constructively to facilitate a seamless transition for its customers who receive broadcast signals via cable. For example, the cable industry stepped forward many months ago to work with a variety of industry and consumer organizations, including broadcasters, consumer electronics and grassroots groups, to ensure that American consumers are as informed and prepared as possible for the coming transition to digital broadcasting.<sup>4</sup>

But the process of moving from an analog to all-digital broadcast environment creates challenges for cable operators seeking to ensure continued carriage of broadcast signals with no disruption in service. While the majority of local broadcasters (approximately 60%) will continue to transmit on the transitional DTV channel allocated by the Commission, over 600 broadcast stations will move facilities and/or change their digital broadcast channel or

---

<sup>1</sup> *In the Matter of Third Periodic Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television*, MB Docket No. 07-91, Notice of Proposed Rulemaking, rel. May 18, 2007, ¶ 124 (“Notice”).

<sup>2</sup> Notice at ¶ 125.

<sup>3</sup> Notice at ¶ 7. See also Notice at ¶ 18 (“the process of transitioning the entire TV broadcast industry to digital-only operation on each station’s final channels will be complex”).

<sup>4</sup> The DTV Transition Coalition is a consortium of public and private organizations whose mission is to inform American consumers about the transition to digital television. For more information, see [www.dtvtransition.org](http://www.dtvtransition.org).

frequency.<sup>5</sup> According to the Commission, 517 stations will return to their NTSC channel; 117 stations will move to a new digital channel; and 137 stations that do not have a DTV channel paired with their analog channel will have to “flash cut” to their new DTV channel on February 17, 2009.<sup>6</sup> Even among those stations that will stay on the same channel, there may be some that make technical changes in the conversion to digital-only transmission.

But just focusing on the 600-plus stations that will change their digital channel, the technical modifications that may accompany those changes has a direct impact on how a cable operator will deliver high quality digital broadcast signals to cable households throughout the country. For example, some broadcasters may need to move their digital and analog antennas, or make other transmitter adjustments prior to the 2009 transition date. This may result in a change in the broadcasters’ coverage area, and consequently, the ability of a cable headend to receive the signal properly.

Moreover, it is unclear what changes broadcast stations may make in the configuration of their digital multiplex – such as MPEG2 program numbers, packet identifiers (“PIDs”), and PSIP data. Again, changes to any of these elements of the digital signal impacts cable carriage and may require changes at a cable headend. And with all the new digital channels, cable operators will need to revamp their channel mapping schemes to ensure that channel selection for station viewing continues to be transparent to the customer.

Finally, cable’s planning to accommodate broadcasters’ conversion to digital must take into account that local broadcast signals are delivered to cable headends using a variety of methods including over-the-air, fiber, microwave and other transport mechanisms. These alternative delivery modes too could change, further illustrating the complexity for cable

---

<sup>5</sup> Notice at ¶¶ 16 – 32.

<sup>6</sup> *Id.*

operators whose carriage of broadcast stations is dependent on getting clear and timely information on each broadcaster's transition plans.

The Commission should be reassured by the knowledge that cable operators have a long history of carrying broadcast stations and that cable systems are already carrying DTV signals successfully in many markets around the country today, along with non-broadcast digital programming. Decades of experience with managing channel line-up changes to minimize customer confusion and disruption gives operators a headstart in tackling the carriage of new DTV signals. And in a fiercely competitive marketplace, cable operators have every incentive to ensure the smooth, uninterrupted delivery of high quality broadcast and non-broadcast programming in a format that their customers desire during and after the transition.

But the comprehensive scope of the digital transition – with wide-scale broadcast station power changes, frequency changes, transmitter relocations, and other technical challenges – will require tremendous coordination with broadcasters and testing prior to final implementation by the February 2009 conversion date. There is no global answer to cable carriage of digital broadcast stations. Nor can it be the case that broadcasters alone should be allowed to dictate the answers to these complex technological cable carriage issues. The varying technical approaches taken by each broadcast station in implementing its transition plan will require every local cable operator to look at each station market-by-market. And cable operators will need continued flexibility to determine on a system-by-system basis how best to achieve a smooth transition for their customers and to do so in a way that optimizes spectrum efficiency on the cable plant.

Therefore, we believe that it is critical that each licensed broadcaster publicly declare the details of its transition plans as soon as possible and by no later than December 1, 2007, the proposed date for broadcast television stations to submit their “DTV Transition Status Report” to

the Commission.<sup>7</sup> This will provide adequate lead time for cable operators to make technical modifications at cable headends, conduct tests, and provide timely notice to customers of channel changes and any other changes in their service.

The following are examples of the types of specific information that cable operators need from broadcasters by December 1, 2007 in order to plan for a seamless transition for their customers:

1. Whether a broadcast station is changing its over-the-air channel identification number. For example, will the station still identify itself by its old NTSC channel number, even if that channel number no longer exists, or will it identify itself using its digital frequency?
2. What are the station's transition plans with respect to its transmitter and antenna? For example, will the station change the analog and digital antenna placement on its towers, and/or adjust the transmit power of either signal? What changes should cable operators expect for the signal strength of the station at the cable headend?
3. When will the broadcast station actually cease analog transmissions on or before February 17, 2009?
4. Will the station utilize the ATSC Active Format Descriptor (AFD)?
5. For new digital multiplexes that are expected to be used by MVPDs, what values will be assigned to data structures and tables such as TSID, PSIP tables, MPEG2 program numbers and PIDs? For existing digital multiplexes, what changes should MVPDs expect with respect to these or other tables and values?

The Commission also asks about the need to test reception and retransmission capabilities of broadcast signals by MVPDs in advance of the transition. The cable industry believes that some form of pre-transition testing over cable is important to ensure a seamless cut-over from analog broadcasting to the carriage of all-digital broadcast transmissions.

---

<sup>7</sup> See Notice, Appendix B, "Proposed Changes to FCC Forms" 22 FCC Rcd. 9478, 9544 (referencing new FCC Form 387: DTV Transition Status Report).

## CONCLUSION

The cable industry is committed to working with the broadcast industry to ensure that cable viewers do not experience disruption in their service after February 17, 2009 and continue to have a high quality viewing experience. At this time operators can not make significant headway on, much less finalize, their transition plans without key information that only broadcast stations can provide. As the dialogue between local broadcast stations and local cable systems goes forward, broadcast stations need to provide details on the technical characteristics of their digital signals to cable operators as soon as possible and no later than December 1, 2007 in order to facilitate a successful transition.

Respectfully submitted,

**/s/ Daniel L. Brenner**

William Check, Ph.D.  
Senior VP, Science & Technology

Andy Scott  
Vice President, Engineering

August 15, 2007

Daniel L. Brenner  
Loretta P. Polk  
Counsel for the National Cable &  
Telecommunications Association  
25 Massachusetts Avenue, N.W.  
Suite 100  
Washington, D.C. 20001-1431  
(202) 222-2445