

RECEIVED

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

APR 21 2003

In the Matter of)
)
Second Periodic Review of the)
Commission's Rules and Policies)
Affecting the Conversion)
To Digital Television)

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

MB Docket No. 03-15

RM 9832

COMMENTS OF THE ASSOCIATION OF PUBLIC TELEVISION STATIONS, THE CORPORATION FOR PUBLIC BROADCASTING AND THE PUBLIC BROADCASTING SERVICE

<p>Marilyn Mohrman-Gillis Vice President, Policy and Legal Affairs Lonna M. Thompson Associate Vice President Strategic Initiatives & Corporate Counsel Andrew D. Cotlar Senior Staff Attorney Association of Public Television Stations 666 Eleventh Street, NW, Suite 1100 Washington, D.C. 20001 www.pts.org Telephone: 202-654-4200 Fax: 202-654-4236</p>	<p>Donna Coleman Gregg Vice President, General Counsel and Corporate Secretary Robert M. Wintenngham Senior Staff Attorney Corporation for Public Broadcasting 401 Ninth Street, NW Washington, DC 20004 www.cpb.org Telephone: 202-879-9600 Fax: 202-879-9694</p>
<p>April 21, 2003</p>	<p>Katherine Lauderdale Senior Vice President and General Counsel Paul Greco Vice President and Deputy General Counsel Public Broadcasting Service 1320 Braddock Place Alexandria, Virginia 22314-1698 www.pbs.org Telephone: 703-739-5000 Fax: 703-837-3300</p>

CH

EXECUTIVE SUMMARY

In these Comments, Public Television presents the Commission with data on the progress public television stations have been making with the conversion to digital television. Public television stations are fully embracing the power of digital broadcast technology to further enhance their educational mission by rolling out new and exciting high-definition, multicast standard-definition and datacast digital broadcast services. However, while there are presently 122 public television stations on-air with digital operations, a number of stations are facing significant challenges in building digital facilities. These include a critical lack of federal, state and local funding, technical problems, equipment delays, weather problems, and legal issues that have made timely conversion difficult. Public Television urges the Commission to consider modifying its financial hardship standard when granting extensions to the construction deadline to reflect the unique and diverse ways in which public television stations are funded.

In addition Public Television comments on three issues that must be resolved to ensure a successful transition from analog to digital broadcasting in this nation. Public Television urges the Commission to (a) create reasonable and limited transitional digital cable carriage rules; (b) ensure that the entirety of a station's free, over-the-air digital broadcast signal is carried by cable systems both during and after the transition is complete; and (c) create rules to facilitate the operation of digital translators (and digital on-channel repeaters) so that the digital transition may proceed in rural as well as urban areas.

Public Television also comments on a number of specific issues affecting the digital television transition. Public Television supports the Commission's proposal that

stations with two in-core channels must elect their permanent channel by May 1, 2005, but requests that any proposed replication or maximization deadline come only at the end of the digital transition in each market. Public Television also opposes the proposal to establish a date earlier than December 31, 2005 by which a licensee must provide a city grade signal to its principal city of license. In addition, stations without a DTV construction permit should have the construction deadline delayed until a permit is issued and then have a reasonable amount of time to construct thereafter. Public Television also argues that the current simulcast requirement does not serve its purported purpose and should be deleted.

Regarding the proper interpretation of Section 309(j)(14)(B) of the Communications Act, which governs the return of analog television spectrum and extensions thereof, Public Television believes that the appropriate definition for market-by-market extensions should be based on Nielsen DMAs. In addition, all stations in a DMA should benefit from any extension that the Commission may create pursuant to this statutory section. Where a station's signal reaches multiple DMAs, the return of analog spectrum should only occur when the last DMA in which a station's signals are received has reached the 85 percent threshold. In addition, Public Television agrees with the Commission that only those "digital-to-analog converters" that are capable of converting all forms of digital broadcast signals to analog (including all HDTV formats) should be counted toward satisfying the test at Section 309(j)(14)(B)(ii). Public Television also believes that for purposes of satisfying Section 309(j)(14)(B)(iii), the Commission should count only those MVPD's that carry all local digital broadcast stations that are eligible for must-carry status. Moreover, Commission should count only those MVPD

subscribers that are actually able to view digital signals in their homes, whether in digital format or down-converted to analog in the home (but not including digital signals down-converted to analog at a cable headend). In addition, Public Television believes that Section 309(j)(14)(B) and its legislative history place the bulk of the responsibility for determining market conditions on the Commission, not on broadcasters.

Lastly, Public Television voices support for the authorization of distributed transmission technologies, including the creation of limited primary status where this technology is used to serve the predicted DTV contour of a full power DTV operation. In this regard, Public Television supports the Comments of the Merrill Weiss Group filed in this proceeding. Public Television also supports the Comments of the Advanced Television Systems Committee filed in this proceeding, insofar as **ATSC** supports adoption of the revised **ATSC** standard A/53B into Commission rules.

TABLE OF CONTENTS

Executive Summary		i
I.	Progress with the DTV Transition	2
	A. Public Television Program Plans	2
	B. Public Television Digital Conversion: Status of the Digital Build-Out	8
	1. Public Television: Critically Underfunded	9
	2. Other Challenges in the Digital Transition	11
II.	Special Relief Measures for Public Television	13
III.	Additional Factors Affecting the DTV Transition	17
	A. The Commission Should Implement a Reasonable and Limited Cable Carriage Rule for the DTV Transition	18
	B. The Commission Should Ensure that the Entirety of a Station’s Free, Over-the-Air Digital Broadcast Signal is Carried on Cable	20
	C. The Commission Should Immediately Consider Rules for the Operation of Digital Translators	22
IV.	Comments on Specific Issues Affecting the DTV Transition	24
	A. Channel Election, Replication, Maximization and Enhanced City-Grade Requirements	25
	B. Relief for Licensees without DTV Construction Permits ..	28
	C. Simulcasting Requirement	30
	D. Interpretation of Section 309(j)(14)	32
	E. Distributed Transmission Technologies	39
	F. ATSC Issues	42
Conclusion		44
Appendix A	Public Television Multicast Plans	
Appendix B	Public Television and State Funding Cuts	

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

In the Matter of)	
)	
)	
Second Periodic Review of the)	MB Docket No. 03-15
Commission’s Rules and Policies)	
Affecting the Conversion)	RM 9832
To Digital Television)	

**COMMENTS OF THE ASSOCIATION OF PUBLIC TELEVISION
STATIONS, THE CORPORATION FOR PUBLIC BROADCASTING
AND THE PUBLIC BROADCASTING SERVICE**

The Association of Public Television Stations (“APTS”), the Corporation for Public Broadcasting (“CPB”) and the Public Broadcasting Service (“PBS”) (collectively, “Public Television”) hereby submit comments in the above-captioned proceeding.

¹ **APTS** is a nonprofit organization whose members comprise the licensees of nearly all of the nation’s 357 CPB-qualified noncommercial educational television stations. *APTS* represents public television stations in legislative and policy matters before the Commission, Congress, and the Executive Branch and engages in planning and research activities on behalf of its members. CPB is a private, nonprofit corporation created and authorized by the Public Broadcasting Act of 1967 to facilitate and promote a national system of public telecommunications. *See* 47 U.S.C. § 390 *et. seq.* PBS is a nonprofit membership organization of the licensees of the nation’s public television stations. PBS distributes national public television programming and provides other program-related services to the nation’s public television stations.

1. Progress with the DTV Transition

The Commission has sought comment on the extent to which broadcasters continue to face difficulties in building their DTV stations.* While public television stations have embraced the digital transition with vigor – rolling out a number of high-definition, multicast standard definition and datacasting services – the stations have faced a number of challenges, including foremost a critical **lack** of funding but also including a range of technical problems, equipment delays, weather problems and legal issues that have made timely conversion difficult.

A. Public Television Digital Conversion Program Plans

Since the inception of the digital proceedings, Public Television has played a leadership role in, and has been an active participant in and enthusiastic proponent of, digital television.³ With its higher quality images and sound, and its inherent flexibility to broadcast multiple standard definition streams, along with additional streams of data,

² In this regard, the Commission has asked whether stations are continuing to face unresolved zoning or tower siting issues, whether stations are continuing to experience difficulties in obtaining financing for construction, and what other obstacles may pose impediments to the DTV build-out. Second Period Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, Notice of Proposed Rulemaking, FCC 03-8, ¶¶ 18-19 (rel. Jan 27, 2003) ("NPKM"). In addition, the Commission has sought information on the nature of DTV programming, especially the extent to which licensees are planning to provide programming formatted for HDTV or multiple standard definition programming. NPRM, ¶ 21. The Commission has also sought comment on any other factors affecting the DTV transition in preparation for its report to Congress as mandated by the Auction Reform Act of 2002. NPRM, ¶ 23, citing Pub. L. No. 107-195, Sec. 3 (2002).

³ Public television played an active role in developing the transmission standard for digital television and served on the Commission's Advisory Committee on Advanced Television Service, whose recommendations gave rise to the adoption of the "ATSC Standard." In addition, PBS was one of the founding members of the Advanced Television Test Center, which conducted laboratory tests of the Grand Alliance System. PBS also conducted field tests of the Grand Alliance system in Charlotte, North Carolina. WMVT, the public television station in Milwaukee, was the first broadcaster to provide an HDTV satellite test signal. And in 1998, KCTS in Seattle was the first public broadcaster to begin transmitting digital signals using the ATSC standard and was the first station in the United States to produce HDTV programming.

digital television gives public television stations new and exciting tools to expand their educational mission in ways that were not possible in the analog world.

High-Definition Programming. Public Television is regularly producing new and exciting high-definition digital programming for national, regional and local distribution. Currently there are 88 high definition titles (spanning over 160 hours) that are available to local public television stations for broadcast.⁴ As of the end of 2002, there were over 260 digital programs that were either in high definition or digital standard definition wide screen, and 26 local licensees are involved in the production of high definition programs for both national and local distribution. Much of PBS's national programming is now available in high-definition format, including programs in its award-winning NOVA series *Cracking the Code of Life*, *Life's Greatest Miracle*, *Runaway Universe* and *Japan's Secret Garden*.

Multicasting. Multicasting will bring new services to the public that could not be made available under the constraints of a single analog program stream, including an expanded distribution of formal educational services, children's programming, locally-oriented public affairs programming, and programming addressed to traditionally unserved or underserved communities.

More than 95 percent of public television stations have committed to broadcast at least one multicast channel dedicated to formal educational programming. PBS YOU "Your Own University" offers PBS member stations the opportunity to build a full-time educational channel for their communities. Operating 24/7, PBS YOU is currently licensed to 50 PBS stations to enhance their current distribution of distance learning

⁴ Seventy-four of those titles are available either through PBS or another national distributor, American Public Television.

content as well as a variety of other programming for formal and informal education. In addition, several stations are partnering with state departments of education to develop supplemental educational programming that promotes state standards of learning and accountability. Typically, Public Television's educational programming will emphasize a combination of adult continuing education, K-12 instructional programming, workforce development/job training and college telecourses. For instance, South Carolina Educational Television offers an educational channel, featuring a combination of PBS You, college courses from University of South Carolina and Clemson University, and original educational programming. Similarly, WMEC (Macomb, IL) is working with the Illinois Board of Higher Education and five local colleges and universities to develop college credit and non-credit courses, as well as continuing education and job training courses.

Moreover, 77 percent of public television stations plan to provide a channel dedicated solely to children's programming. The PBS KIDS Channel is the 24/7 service to member stations featuring an array of PBS children's programs. Currently licensed to 55 PBS member licensees, PBS KIDS offers stations the opportunity to provide to their communities a full-time source of quality programming for analog, digital and second cable channels.

Other public television stations plan to multicast a digital channel dedicated to local issues and public affairs. These multicast channels will cover state legislatures, local town meetings and debates, and highlight local business, lifestyle, and political issues. For instance, the South Carolina Educational Television Network currently offers gavel-to-gavel coverage of the South Carolina General Assembly through its over-the-air

digital multicasting service. KNME in Albuquerque, New Mexico and KBDI in Broomfield, Colorado plan a similar service. In addition, a “South Carolina Channel” is in development, featuring regional arts festivals lecture series, book festivals, and university events. Moreover, a group of western public television stations (Idaho Public Broadcasting, KNPB in Reno, Nevada, KUED in Salt Lake City, Utah, and Wyoming Public Television) have created a multi-state partnership called FocusWest to deliver news and public affairs programming of interest to Americans in the west through an innovative new digital multicast channel.’

Still other multicast plans include targeting broadcasts at traditionally underserved communities. Several public stations will dedicate a multicast channel to foreign language programming. For instance, KBDI (Broomfield, CO) plans to broadcast a *Latino Initiative Channel* for the Spanish-speaking and bilingual community which will emphasize news, public affairs and social and cultural events in the region. WNYE (New York City) plans to broadcast a dedicated foreign languages channel, featuring programming in at least 12 different languages, including Japanese, Chinese, Italian, Greek, Polish, and Eastern European languages, and focusing primarily on public affairs – complete with local news, international news and cultural programming from various countries. Other public stations, such as Iowa Public Television are also considering channels dedicated to the needs of the senior community.

⁵ FocusWest is committed to covering significant public affairs issues in the intermountain west, and to bringing together local and regional perspectives on those issues. The project aims to deepen and enhance understanding of the issues it covers by melding the talents and resources of Idaho Public Television, KNPB Channel 5 - Reno. and Wyoming Public Television. Each featured production combines the unique strengths of television, print, and new digital media to encourage greater understanding of, and involvement in. regional civic affairs. See www.focuswest.org.

Detailed descriptions of selected station multicast plans are set forth at Appendix A for the Commission's information

Datacast Services. Lastly, a number of public television stations have plans to provide various educational and/or homeland security services over their digital allotment. Recognizing the power of digital to educate, public television stations have dedicated a portion of their digital bandwidth to providing access for all Americans to educational services. Public television stations have committed 4.5 megabits per second of their entire DTV bitstream (one-quarter of their digital channel capacity on average) to the delivery of formal educational services. This level of digital capacity will deliver data at rates 80 times faster than 56K dial-up modems and 15 times faster than digital subscriber line (DSL) connections. Included among the licensees that have already demonstrated the power of this kind of data service for education are Wisconsin Public Television, the New Jersey Network and KCPT (Kansas City, MO)

- The Wisconsin Educational Communications Board has used DTV technology to deliver educational data overnight to local schools with computers equipped with DTV tuner cards. In two Madison elementary schools, fourth-graders are now able to view video segments of downloaded material as many times as they wish and can explore additional resources such as graphics, written materials, and audio recordings. The enhanced resources include video segments, maps, photographs, historical documents, tours designed to help guide student learning, and audio segments of actual diaries. For teachers, there is an integrated teacher guide, teaching tips, and a list of related Wisconsin Model Academic Standards.
- New Jersey Network has produced original video content, which it datacasts to a media server located in Columbus Elementary School in Trenton, the pilot site. Teachers may then download from the server "on-demand" course supplements and NJN's customized, modular video segments to enhance the content in the lesson plan.

- Through its *New Jersey Workplace Literacy Program*, New Jersey Network has also been helping to address adult literacy through a groundbreaking partnership with the New Jersey Department of Labor in which it uses a variety of technologies, including its digital television signal, to deliver work force training materials to welfare recipients, dislocated workers and other job seekers to designated sites in New Jersey. NJN's first digital **series**, called JOBCAST, is broadcast on NJN's digital channel. NJN is now expanding this initiative to adopt in-school programs for teenagers, with private sector support
- In addition, public television station KCPT (Kansas City, Missouri) is currently running a pilot project for datacasting to schools and colleges. The project will take datacasting from content preparation through delivery to two K-12 schools and two colleges and evaluate technical and instructional support needed by the end users. KCPT is using locally produced video and web content for the project, including *Water and Fire. the Story of the Ozarks* and *Uniquely Kansas City*.

In addition, a fully digitized public television system could offer significant new public safety advantages. For example, on November 15, 2001, Kentucky Educational Television (KET), in partnership with the local branch of the National Oceanic and Atmospheric Administration (NOAA), debuted a new service to representatives from the state police, emergency management agency and weather service. KET commissioned the development of software that allows it to use its digital broadcast capacity to immediately send emergency storm alerts, weather information, criminal profiles and updates, and other time-sensitive materials instantaneously to computers around the state. Transmission of this data over the digital broadcast signal decreases alert time and information lags from minutes to seconds. Use of the digital broadcast infrastructure can also bypass the congestion of wireline and cellular networks that can plague communications in emergency situations, as was recently demonstrated on September 11, 2001. And because public television transmitters and translators together reach nearly all American television households, such public safety services could be distributed on a

universal basis to all Americans, in keeping with public broadcasting's statutory mandate to serve all Americans.⁶

Other examples of public television stations using their digital facilities to enhance homeland security include the following

- In partnership with the University of Texas Medical Branch-Galveston, public television station KERA is using digital broadcast facilities to deliver crisis communications to discrete recipients or the public at large.
- In Missouri, public television station KMOS has engaged in a partnership with Central Missouri State University and the Missouri National Guard to develop a Continuity of Operation plan for the Guard's state operations center in the event of a crisis or disaster and to serve as a backup system for the Guard as well.
- In addition, the New Jersey Network has become the first in the nation to use public digital television to enhance emergency preparedness for nuclear power plants through the power and flexibility of datacasting. **As** New Jersey Governor James E. McGreevey observed, "Communications via NJN's digital television system is yet another tool with great potential to add to New Jersey's homeland security preparedness efforts and protect citizens in times of an emergency."
- Similarly, station KLVX in Las Vegas is using its digital system to enhance the security of Las Vegas' water lines. KLVX is also working with the Clarke County Emergency Preparedness office to take advantage of its current links to over 300 schools in the region that are designated as safe evacuation sites in order to communicate with these centers in case of emergency.

B. Public Television Digital Conversion: Status of the Digital Build-out

There are presently 122 public television stations on air with digital signals, comprising nearly 35 percent of the nation's 357 public television stations and serving

⁶ 47 U.S.C. § 396(a)(5).

markets that include over 60 percent of households in the nation.' One-hundred and eighty-eight stations applied to the Commission for extensions of time to construct their digital facilities due to a number of factors that were beyond their control, including a critical lack of funding, technical problems, equipment **delays**, weather problems and legal issues that have made conversion difficult. Public Television therefore anticipates that the remaining stations that did not file extension requests will be on-air with a digital signal by May 1, 2003.

1. Public Television: Critically Underfunded

Of the public television stations seeking an extension of the May 1, 2003 digital build-out deadline, 24 percent cited funding difficulties as a motivating reason for the extension request. Public Television has estimated that the cost of digital conversion will total \$1.8 billion. Public television stations have raised a substantial amount of digital conversion funds, totaling \$771 million, from state, local and private sources.' To date, the Federal government has appropriated \$221 million, or only 13 percent of the total cost to convert. Forty percent of the federal contribution-- \$90 million — was contained in the FY 2003 appropriation. This was not enacted until February of 2003: three months before the May 1, 2003 construction deadline and too late for disbursement in time to help stations meet that deadline.

While Public Television will continue to work to obtain federal, state and local funding for the digital conversion, a number of stations are facing severe financial

⁷ www.aptv.org/html/digital/dtv/digital_services.htm.

⁸ Approximately **\$476** million in state Funds have gone to aid in the digital conversion and well over \$260 million in private funds have been **raised** for the digital transition.

challenges due to current economic conditions and state budget crises. Thus, circumstances beyond their control are affecting the ability of stations to construct digital facilities, to operate dual analog-digital facilities and to provide the kind of quality digital programming the public has grown to expect. For instance, the Rhode Island House of Representatives voted to rescind the digital funding for WSBE Providence, RI. Originally appropriated in 1997, the \$4.7 million cut was part of a last minute budget negotiation with the new senate leadership who forced the lower house to choose between the WSBE money and the automobile tax abatement, which has been a priority of the lower house for several years. Some additional representative examples of the kinds of financial pressures stations are facing as a result of state fiscal crises are contained at Appendix B to this document.

Meanwhile stations throughout the nation are simultaneously facing the increased cost associated with operating two stations – one analog and one digital — until the DTV transition has run its course. For example, Nebraska Educational Television reports that it will be incurring the following additional operating costs from its digital transmitters.

- FY 2003: \$470,000 (July 2002 to June 2003)
- FY 2004: \$649,000 (Transmitters on 50% of analog schedule)
- FY 2005: \$778,000 (Transmitters on 75% of analog schedule)
- FY 2006: \$908,000 (Transmitters on 100% of analog schedule)

⁹ See Deborah D. McAdams, "The Squeezing of Public Television," Digital TV Television Broadcast, p. 17 (March 2003).

Compared to other regions of the country, electricity costs are fairly inexpensive in Nebraska;" other stations in more financially challenging markets will face much greater electricity costs and a greater impact on their budgets.

2. Other Challenges in the Digital Transition

While public television stations are well on their way to successfi..., constructing digital facilities, a number of stations have faced unforeseen challenges that are beyond their control. Nearly 80 percent of the 188 stations tiling extension requests cited technical reasons (including lack of tower crews, delays in obtaining necessary equipment, and interference disputes) for filing their requests. Legal reasons (such as zoning disputes or delays in obtaining necessary permissions from authorities) were also referred to in **43** percent of extension requests. Below, in response to the Commission's inquiry, is a summary of the types of problems cited by public television stations in their requests for extension of the digital construction deadline.

First, a significant number of stations have encountered technical problems, including lack of tower installation crews and delays associated with the strengthening, rebuilding, relocation and/or construction of towers to accommodate digital facilities. Public television stations have also encountered significant delays in obtaining necessary equipment from manufacturers, either due to backlogs in the manufacturing process or due to delays in obtaining federal funding for ordering equipment. In some instances, **stations** discovered that certain key manufacturers had ceased production of necessary

¹⁰ Id.

equipment, requiring a search for replacement sources.¹¹ In other instances, stations have been hampered by a critical shortage of qualified tower installation crews. In still other instances, the construction of towers has been hindered by adverse weather as well as limitations in the seasons during which tower construction may proceed in some areas.

In addition to the myriad technical problems, stations have encountered problems in negotiating tower leases and clearances from relevant authorities. Frequently, where a station must move from its old tower (due to lack of space on the tower or due to issues related to the existing tower's weight tolerance), public television stations have sought to coordinate with other stations in the market for co-located tower facilities, requiring sometimes protracted and complex negotiations among multiple parties that are still ongoing in some instances. In this regard, public television stations have had to contend with tower owners who have demanded cost-prohibitive lease terms, interference issues among co-located broadcasters, and hold-over tenants who refuse to vacate towers early. In addition, a number of public television stations have encountered problems with state and local authorities over zoning issues and the issuance of building permits. In a number of instances, citizen groups have intervened to oppose the construction of new or refurbished towers, contributing to further delay in tower construction. Moreover, many public television stations have encountered delays in obtaining clearances from the Federal Aviation Administration, the U.S. Forest Service, the Bureau of Land Management, and various local historic preservation commissions. Indeed, one noted

¹¹ *Dielectric*, for instance, has purchased TCI, which manufactured dual-mode analog/digital antennas that a number of public television stations had planned on using to reduce the windload on towers associated with the presence of two antennas (one analog and one digital). *Dielectric*, however, has recently discontinued the manufacture of this antenna, an action that has required a number of public television stations to reassess the strength of existing towers where two antennas will have to be installed instead of one. In a number of instances, this has required additional strengthening of existing towers, relocation to other towers or the construction of new towers.

obstacle concerns international coordination and clearances from the government of Canada, which through delays in processing (and in some cases objections) has prevented the build-out of some digital stations near the border.’*

A number of state licensees have also encountered problems with state-mandated bidding and contract approval processes that have delayed construction of their digital facilities. The Arkansas Educational Television Commission, reports, for instance, that its antenna installation contract took a Full 18 months to move through the appropriate channels of state government before it was approved. In addition, it was discovered that the low bidder for the project had no experience installing broadcast television equipment; to reject this bid, the state was required under state law to reject all bids and re-bid the project in its entirety, causing further delays in the construction of digital facilities in Arkansas. Other state licensees, such as the Wisconsin Educational Communications Board and the Georgia Public Telecommunications Commission have also encountered unique delays in state-mandated bidding and contract approval processes.

II. Special Relief Measures for Public Television

Since the inception of the digital rules, the Commission has acknowledged the financial difficulties that public television stations face in constructing digital facilities.”

¹² Vermont Educational Television and WGTE (Toledo, OH) have had their digital construction delayed precisely due to this problem. WCMU (MI. Pleasant, MI) and WFUM (Flint, MI) have also encountered delays from Canada, although they now possess construction permits. It is said that the government of Canada has only one person assigned to evaluating and ruling on cross-border digital operations, a fact that has caused considerable delay of over a year for Vermont Educational Television. Public television stations that lack a construction permit due to international coordination problems have been unable to successfully apply for federal funding through the Department of Commerce.

¹³ Advanced Television Systems and Their Impact on the Existing Television Broadcast Service, Fifth Report & Order, FCC 97-116, 12 FCC Rcd 12809, ¶ 104 (1997) (“Fifth R&O”).

The Commission has consistently stated that public television stations will be accorded special relief to assist them during the transition.¹⁴ However, the Commission has repeatedly stated that it would defer considering what additional special treatment, if any, should be accorded to noncommercial broadcasters and would consider the issue in periodic biennial reviews.” Acknowledging that the time is now ripe, the Commission has asked in this periodic review what special relief measures should be accorded to public television stations that have not converted to digital or that do not anticipate converting to digital by May 1, 2003.

Public Television believes that the financial hardship standard for grant of an extension of time to construct a digital television station should be applied more liberally to public television stations to reflect their unique means of funding.¹⁶ Approximately 45 percent of public broadcasting revenues come from taxed-based sources including federal

¹⁴ “[W]e note our commitment to noncommercial educational television service and our recognition of the high quality programming service noncommercial stations have provided to American viewers over the years. We also acknowledge the financial difficulties faced by noncommercial stations and reiterate our view that noncommercial stations will need and warrant special relief measures to assist them in the transition to DTV. Accordingly, we intend to grant such special treatment to noncommercial broadcasters to afford them every opportunity to participate in the transition to digital television, and we will deal with them in a lenient manner.” Fifth R&O, ¶ 104. See also Fifth R&O, ¶ 93 and Advanced Television Systems and Their Impact on the Existing Television Broadcast Service, Memorandum Opinion and Order on Reconsideration of the Fifth Report and Order, FCC 98-23, 13 FCC Rcd 6860, ¶¶ 42, 64 (1998) (“Reconsideration, Fifth R&O”).

¹⁵ Fifth R&O, ¶ 104, and Reconsideration, Fifth R&O, ¶¶ 42, 64. However, in its first biennial review of the DTV transition, the FCC stated that it was premature to consider “issues relating to public television.” Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television, Notice of Proposed Rulemaking, FCC 00-83, ¶ 14 (March 6, 2000). See also Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television, Report and Order and Further Notice of Proposed Rule Making, 2001 FCC LEXIS 408, FCC 01-24, MM Docket No. 00-39, ¶ 33 (rel. January 19, 2001) (“DTV Review Order”) (“As we get closer to the construction and election deadlines for noncommercial educational broadcast stations we will be in a better position to determine what relief might be required by such stations and whether the scope of that relief needs to be on an industry-wide basis or only on a station-by-station or market-by-market basis.”).

“See NPRM, ¶ 64.

and state governments as well as public universities and local authorities.” Federal funding for the DTV conversion comes from two sources: through a specially earmarked fund within Corporation for Public Broadcasting (CPB) and through the Department of Commerce Public Telecommunications Facilities Program (PTFP).

Despite Public Television's diligent efforts to secure federal funding for the DTV conversion (our first comprehensive federal funding proposal was made in 1997), federal funds have been insufficient and not timely enough to meet the May 1, 2003 construction deadline.¹⁸ Forty percent of the current federal contribution— \$90 million— was contained in the FY 2003 appropriation. This was not enacted until February of 2003: three months before the May 1, 2003 deadline and too late for disbursement in time to help stations meet that deadline. Moreover, a number of public television stations did not receive PTFP grants for FY 2002 because of the sheer number of applicants and PTFP policy that gives highest priority in funding to those stations that provide either a sole digital public television service to their market or a statewide digital service.”

¹⁷ The other 55 percent comes from a mixture of membership donations (24%), business underwriting (14%), foundation (6%) and private sources like private colleges and station auctions (11%).

¹⁸ As noted above, Public Television has estimated that the cost of digital conversion will total \$1.8 billion. Public television stations have raised a substantial amount of digital conversion funds from state, local and private sources, a total of \$771 million. Approximately \$476 million in state funds have gone to aid in the digital conversion and well over \$260 million in private funds have been raised for the digital transition. To date, the Federal government has appropriated \$221 million, or only 13 percent of the total cost to convert.

¹⁹ For instance, PTFP will give its highest priority in awarding funds to stations that will provide the sole service in an area unserved by a digital public television signal in a market, to cooperative applications by two or more stations for the first digital public television signal in a market and to a statewide plan for the conversion of multiple stations. Of secondary and tertiary priority are stations or groups of stations that will provide a second or additional digital public television service to a market. See <http://www.ntia.doc.gov/otiahome/ptfp/attachments/Notice2003.html#DTVD>. Thus, for instance, a number of stations that provide differentiated public television services to a market where there is more than one public television station did not receive the highest priority for PTFP funding.

In addition, because of the budget crises many states are experiencing, state funding has also been inordinately delayed or reduced in a number of instances. In addition, in some instances, state legislatures convene for only a limited period of time. For instance, Georgia's legislature convenes for only the first three months of **every** year, and some other states have similar restrictions. In those situations, if state appropriations are not made during that brief window of opportunity, the public television station must wait for the next year's legislative session to pursue state funding, causing unavoidable delays in funding that is necessary to meet the Commission's construction deadline.

In addition, after federal or state funds are released to public television stations, a number of state and university licenses must then undergo a bidding process to award construction contracts prior to undergoing actual construction. This process may take a very long time – in some cases more than a year— and may further delay construction of facilities in order to comply with state laws. **As** discussed above, this was the case with state licensees in Arkansas, Georgia and Wisconsin.

Unlike the technical obstacles to constructing digital facilities that face public and commercial stations alike, these funding issues are unique to public television stations. Public Television therefore believes that it would be reasonable and appropriate for the Commission to consider modifying its financial hardship standard when granting extensions to the construction deadline to take into consideration the unique and diverse ways that public television is funded.

III. Additional Factors Affecting the Digital Transition

In addition to the challenges posed by inadequate or declining funding, and the technical or other obstacles that stations have faced when attempting to meet the Commission's May 1, 2003 construction deadline, public television stations face a number of regulatory challenges that pose obstacles to their success during the digital transition. In this regard, Public Television provides further comment on additional factors affecting the DTV transition that the Commission may find useful for its report to Congress."

Public Television has repeatedly stated that three such factors must be resolved immediately before the transition can be successfully completed: (a) the Commission must implement the law by promulgating reasonable and limited transitional digital cable carriage rules; (b) the Commission must ensure that the entirety of a station's free, over-the-air digital broadcast signal is carried by cable systems both during and **after** the transition; and (c) the Commission must quickly create rules to facilitate the operation of digital translators (and digital on-channel repeaters) so that the digital transition may proceed in rural as well as urban areas.

While Public Television recognizes that these issues are part of separate proceedings," they are of critical and direct importance to the success of the digital

²⁰ NPRM, ¶23

²¹ See In the Matter of Carriage of Television Broadcast Signals; Amendments to Part 76 of the Commission's Rules, CS Docket No. 98-120; and Media Bureau Seeks Comment on National Translator Association's Petition for Rulemaking to Establish a rural Translator Service, Public Notice, DA 03-622, RM 10666 (March 6, 2003).

transition.²² Without transitional digital carriage rules, public television stations face an indefinite period of transition in which licensees must operate two stations at once with all the attendant electricity and operating costs. Without full carriage of their entire digital signal on cable, public television stations will be unable to adequately address the need to provide educational programming to multiple audiences and to serve underserved audiences, in accordance with its statutory mandate, and will inevitably face declining underwriting, membership and government support, resulting in a deterioration or failure of service *to* their communities. And without rules to facilitate the conversion of translators to digital operation, millions of rural Americans will likely not receive critical educational and public safety services over digital broadcast technology.

A. The Commission Should Implement a Reasonable and Limited Cable Carriage Rule for the DTV Transition

On February 27, 2003, Public Television renewed its call for reasonable and limited digital cable carriage rules during the DTV transition and proposed a newly streamlined comprehensive plan to speed the DTV transition.²³ Under this plan, certain cable systems would be required to carry both the digital and analog signals of local broadcasters, subject to a number of important limiting conditions. *First*, the requirement would initially apply only to systems with at least 750 MHz of capacity, but by a date certain it would apply to all systems, regardless of capacity. *Second*, small systems -- those with fewer than a specified number of subscribers -- would be exempt from the transitional carriage requirement. *Third*, a 28 percent cap would be imposed on the

²² Accordingly, Public Television hereby incorporates by reference its comments and other **filings** in those proceedings into this docket.

²³ Ex Parte Letter to Chairman Powell from APTS, CPB and PBS (Feb. 27, 2003), Docket 98-120.

amount of capacity that a cable system would be required to devote to carriage of all broadcast stations' signals – both analog and digital, commercial and public – eligible for carriage under this proposal. **Fourth**, a sunset provision would apply: a cable system would no longer be obligated to carry a local station's analog signal when all of the cable system's subscribers can view the station's digital signal, either in digital format or downconverted for viewing on analog equipment.

The same public policy reasons in favor of analog carriage requirements found to be sufficient by the Court in *Turner II* apply with equal or greater force to the proposal here:

- Preserving the benefits of free, over-the-air local broadcast television;
- Promoting the widespread dissemination of information from a multiplicity of sources; and
- Promoting fair competition in the market for television programming.²⁴

Moreover, Public Television's proposed carriage requirement is supported by additional compelling policy objectives. It would, without question, propel the digital broadcast transition, which would in turn:

- Allow the government to reclaim and auction or otherwise reallocate the analog spectrum;
- Avoid the waste of indefinite dual analog/digital broadcast operations; and
- Achieve more efficient use of the spectrum.

Indeed, as the Congressional Budget Office concluded, digital carriage during the transition is essential to a successful transition. With close to 70 percent of American

²⁴ Turner Broadcasting System v. FCC, 520 U.S. 180, 189 (1997) (quoting Turner Broadcasting System, Inc. v. FCC, 512 U.S. 622 (1994)).

homes equipped with cable, it is amathematical impossibility that the country will achieve the 85 percent digital penetration required for the digital transition to be complete without cable carrying broadcasters' digital signals in the interim.

Moreover, because of the limiting conditions contained in Public Television's transitional carriage plan, advances in digital technology, and advances in digital cable build-out, the burden imposed on cable systems by our proposal would be substantially less than that of analog must-carry upheld by the Supreme Court. The 28 percent cap is well below the one-third cap on the carriage of analog signals that applies to commercial television stations only.

The Commission needs to act now to put reasonable and limited rules in place to ensure a timely and successful transition.

B. The Commission Should Ensure that the Entirety of a Station's Free, Over-the-Air Digital Broadcast Signal Is Carried on Cable

In numerous pleadings filed with the Commission, Public Television has demonstrated that the Commission's prior decision to limit digital carriage to a single multicast stream was an ill-advised and unnecessarily narrow reading of federal statute.²⁵ Public Television has also repeatedly demonstrated that full multicast carriage rules raise no serious constitutional questions, because any alleged burden on cable capacity would be the same, regardless of whether a broadcast station is disseminating high definition

²⁵ See, e.g., Association of America's Public Television Stations ("APTS"), *ex parte* notice, CS Docket No. 98-120, **Sept.** 6, 2002; APTS, *ex parte* notice, CS Docket No. 98-120, **Sept.** 6, 2002; APTS, *ex parte* notice, CS Docket No. 98-120, **Sept.** 6, 2002; APTS, Corporation for Public Broadcasting ("CPB"), and Public Broadcasting Service ("PBS"), *ex parte* submission, CS Docket No. 98-120, August 12, 2002; APTS and CPB, *ex parte* notice, CS Docket No. 98-120, March 7, 2002; APTS, PBS, and CPB, Reply Comments, CS Docket Nos. 98-120, 00-96, 00-2, **Aug.** 16, 2001; APTS, PBS, and CPB, Comments, CS Docket Nos. 98-120, 00-96, 00-2, June 11, 2001; APTS, CPB, and PBS, *ex parte* submission, CS Docket Nos. 98-120, 00-96, 00-2, June 11, 2001