

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

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FILE

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Federal Communications Commission  
Office of the Secretary

In the Matter of )  
)  
Advanced Television Systems )  
and Their Impact on the )  
Existing Television Broadcast )  
Service )  
)  
Review of Technical and )  
Operational Requirements: )  
Part 73-E, Television )  
Broadcast Stations )  
)  
Reevaluation of the UHF )  
Television Channel and )  
Distance Separation )  
Requirements of Part 73 of )  
the Commission's Rules )

MM Docket No. 87-268

COMMENTS OF THE MOUNTAIN STATES TELEPHONE  
AND TELEGRAPH COMPANY, NORTHWESTERN BELL TELEPHONE  
COMPANY AND PACIFIC NORTHWEST BELL TELEPHONE COMPANY

The Mountain States Telephone and Telegraph Company,  
Northwestern Bell Telephone Company and Pacific Northwest Bell  
Telephone Company ("MTN, NWB and PNB") file these comments in  
response to the Federal Communications Commission's  
("Commission") Tentative Decision and Further Notice of Inquiry  
in this proceeding.<sup>1/</sup>

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<sup>1/</sup> See Advanced Television Systems, MM Docket No. 87-268,  
Tentative Decision and Further Notice of Inquiry, FCC 88-288,  
rel. Sept. 1, 1988 (hereinafter "Further Notice").

I. INTRODUCTION

This proceeding was instituted by the Commission to consider the technical, economic, legal and policy issues raised by development of advanced television ("ATV") techniques designed to deliver significantly improved television picture and sound quality. The Commission's primary focus in this regard has been the introduction of terrestrial broadcast ATV and related concerns, such as the relative costs and benefits of various spectrum allocation options and the alternatives available for continuing existing service to viewers utilizing National Television System Committee ("NTSC") receivers during the transition to ATV.<sup>2/</sup>

In addition, however, the Commission notes the potential for development of ATV services employing non-broadcast distribution media, such as cable, fiber, satellite service or videocassette recorders ("VCRs"). Commendably, the Commission has determined that it should not inhibit independent development and introduction of non-broadcast ATV.<sup>3/</sup> In this regard, the

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<sup>2/</sup> See generally Advanced Television Systems, 2 F.C.C. Rcd 5125 (1987). See also Further Notice at ¶¶ 1-4.

<sup>3/</sup> See Further Notice at ¶¶ 4 and 133.

Commission seeks comment on, among other things, how ATV standards should be established and whether the public interest would be served by requiring compatibility between equipment associated with the various video delivery methods. In what follows, MTN, NWB and PNB restrict their comments to a brief discussion of ATV standards and compatibility.

## II. ESTABLISHMENT OF ATV STANDARDS

In the Further Notice, the Commission summarizes the pros and cons of its adopting an ATV standard.<sup>4/</sup> On the one hand, the establishment of a standard may provide needed guidance to the many elements of the industry, (e.g., researchers, manufacturers, broadcasters, programmers, broadcast networks), reduce the risk of obsolescence, encourage investment in ATV technology, spur demand for ATV-related equipment, and aid spectrum conservation. On the other hand, however, the Commission notes that "detailed, inflexible standards that have the force of law may reduce consumer choice and prevent the timely introduction of new technology" and agrees that its mandate in this matter is to "preserve flexibility in the standard setting process to the greatest extent possible."<sup>5/</sup> Finding that the need for a flexible standards process outweighs

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<sup>4/</sup> See Further Notice at ¶¶ 113-21.

<sup>5/</sup> Id. at ¶ 115 (quoting the May 1988 Report of the Advisory Committee, Planning Subcommittee Working Party 5, at 97).

any guidance or greater certainty that adoption of a rigid standard might afford, the Commission concluded that it is premature to adopt such a standard at this time,<sup>6/</sup> and instead asked for comments on how such flexibility might be preserved.<sup>7/</sup>

MTN, NWB and PNB are in full agreement with the Commission that it should play a role in the standards-setting process and its call for industry participation in the Advisory Committee and voluntary standards organizations, such as the American National Standards Institute, the Advanced Television Systems Committee, and the Electronics Industry Association.<sup>8/</sup> Flexible standards for ATV transmission systems would be beneficial for both the industry and the consuming public for the reasons discussed by the Commission. However, MTN, NWB and PNB believe that the Commission's role in this regard should be supplemental and primarily supportive of these other groups. The Commission's inquiry in this matter will frame the many important standards issues and provide the other groups with the policy foundation required to develop standards which will foster continued development and innovation. This support role, in MTN, NWB and PNB's view, would best utilize the Commission's expertise and resources.

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<sup>6/</sup> See id. at ¶ 113.

<sup>7/</sup> See id. at ¶¶ 116-22.

<sup>8/</sup> See id. at ¶ 121.

III. NTSC COMPATIBILITY WITH ALTERNATIVE MEDIA

As noted, the Commission has concluded that the public interest will be served by the independent introduction of ATV via non-broadcast media. Unlike broadcast ATV, which will be limited by spectrum availability, non-broadcast media will afford consumers the option of receiving ATV signals which realize the maximum potential of each given non-broadcast technology. Of course, the availability of greater bandwidths for ATV through non-broadcast media raises the question of compatibility between the current NTSC standard, on the one hand, and non-broadcast media on the other.

Likewise, on the basis of its tentative finding that "interoperability" between broadcast and non-broadcast media may develop without government involvement due to economic and market forces, the Commission has concluded that it should not at this time require compatibility among the various ATV media or set signal or equipment standards for that purpose.<sup>9/</sup> Nonetheless, owing to its sensitivity to the benefits of compatibility between equipment associated with the various ATV delivery methods, the Commission seeks public comment on a number of issues related to compatibility.<sup>10/</sup>

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<sup>9/</sup> See *id.* at ¶¶ 132-33.

<sup>10/</sup> See *id.* at ¶ 134.

MTN, NWB and PNB concur with the Commission that it would be premature, at this point, to require compatibility among the various ATV delivery media. Furthermore, MTN, NWB and PNB submit that such compatibility, as a general matter, would not be beneficial. In order to achieve their maximum potential for enhancing the video and audio quality of television programming, no medium should be constrained by the potential limitations of another medium (i.e., non-broadcast versus broadcast media). Individual broadband networks must be permitted to utilize encoding methods which are dependent solely on the medium employed. Although unrestricted development of such "media-dependent" program delivery methods may result in the development of multiple, incompatible ATV delivery systems, the consumer, as the ultimate beneficiary, will be presented with an array of ATV options of varying quality with different attributes which may make them attractive nonetheless.

MTN, NWB and PNB believe that all ATV media should have an equal opportunity to deliver ATV programming, and that the consumer should have the opportunity to choose among these media. MTN, NWB and PNB feel particularly strongly that the marketplace, not the Commission, should determine the viability of the various potential ATV media.

Notwithstanding the foregoing discussion, MTN, NWB and PNB believe that the development of a standard baseband interface at the display unit would greatly serve the public interest by enabling consumers to accept signals from various sources,

including NTSC and the various non-broadcast ATV media. With a simple baseband or component signal input, the output of any decoding device could be designed to take a standard display interface specification and, thereby, potentially take advantage of signals of wider bandwidth.

Service providers, carriers and consumers would all benefit from an ATV display which is not constrained by demand with capacity of a tuner and demodulator. Service providers could have their products (e.g., videotext or video-on-demand) displayed with higher resolution and better color rendition. The coding and encoding methods for each medium could be optimized to obtain the best combination of quality and cost. The consumer would then be free to select among the alternative modes of ATV signal delivery and levels of quality and cost, without having to invest in additional display units or elaborate converters. The consumer would likewise be able to receive the optimal signal quality available through storage devices, such as videodisc players.<sup>11/</sup>

For these reasons, MTN, NWB and PNB support the development of a simple and straightforward baseband interface to all video display units. However, as is true with respect to ATV standards generally, MTN, NWB and PNB urge the Commission to leave the development of a standard baseband interface to the

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<sup>11/</sup> Coding and encoding techniques, beyond even those currently envisioned, could evolve because of technological advances. A standard baseband interface could preclude the need to make costly receiver replacements under such circumstances.

voluntary standards organizations and their industry and consumer participants. This approach will foster the widest participation and representation of diverse points of view. The Commission, with the assistance of its Advisory Committee on Advance Television, should again restrict its role to one of support.

IV. CONCLUSION

For the foregoing reasons, MTN, NWB and PNB support the Commission's decision not to require compatibility among ATV media or to set signal or equipment standards for that purpose. In addition, MTN, NWB and PNB urge the Commission to support the development of ATV transmission standards and a standard based manned interface by voluntary standards organizations.

Respectfully submitted,

THE MOUNTAIN STATES TELEPHONE AND  
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November 30, 1988

CERTIFICATE OF SERVICE

I, Kelseau Powe, Jr., do hereby certify on this 30th day of November, 1988, that I have caused a copy of the foregoing COMMENTS OF THE MOUNTAIN STATES TELEPHONE AND TELEGRAPH COMPANY, NORTHWESTERN BELL TELEPHONE COMPANY AND PACIFIC NORTHWEST BELL TELEPHONE COMPANY to be hand delivered to the persons named on the attached service list.

  
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