Before the
Federal Communications Commission

In the Matter of	)	
	)	
Digital Broadcast Content Protection	)	**MB Docket No. 02-230**
	)	

In the Matter of	)	**CS Docket no. 97-80,**
Implementation of Section 304 of the	)	
Telecommunications Act of 1996	)	
	)	
Commercial Availability of	)	**PP Docket No. 00-67**
Navigation Devices	)	
	)	
Compatibility Between Cable Systems	)	
And Consumer Electronics Equipment	)	

OPPOSITION TO THE PETITIONS FOR RECONSIDERATION
REPLY COMMENTS
OF THE
CONSUMER FEDERATION OF AMERICA

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SUMMARY

The Commission's adoption of a broadcast flag and several aspect of the plug and play rule threaten to restrict consumer usage and limit the functionality of digital display equipment, thereby slowing the digital transition. We remain convinced that the best way to speed the adoption of digital technology is to maximize use and consumer freedom to choose what, where, when and how they use their display devices to view digital video content. The broad consumer issues that these proceeding raise have been compounded by the failure of the Commission to exempt news and information from the broadcast flag requirement. By allowing broadcasters to lock down news and information with a broadcast flag, the Commission has transformed the potential infringement on consumer rights into an infringement on the free speech rights of citizens.

The Commission can narrow the anti-consumer impact by taking a minimalist approach to the scope of these proceedings and seek to preserve and expand the functionality and interoperability of display devices to the maximum extent possible. The Commission can minimize the anticompetitive impact by ensuring that the technology certification process is as neutral and flexible as possible.

The Commission has no business attempting to define a personal-digital-network-environment (PDNE) in which to confine the interoperability of electronic devices. Electronic fences work great for pets, but not for humans. The Commission must not take on the role of master, dictating where the consumer's digital activity can roam.

Unfettered software development promises to expand the potential for the use of spectrum dramatically. Any attempt by the Commission to regulate software demodulation would carry it into the direct regulation of software and many hardware components that are beyond its authority. The broadcast flag regime applied to software would undermine open source development of software-defined radio, eliminating the most powerful competitive force in the industry.

Proposals to undermine the quality of the video images that display devices provide should be rejected by the Commission. Neither of the two justifications offered for reducing the resolution of a digital picture ("down- rezzing") – copy protection or speeding the transition to digital TV – makes sense as public policy.

The introduction of a new technology in a complex consumer device as pervasive as televisions and personal computers is a formidable task for consumers and the industry. These devices are also large, infrequent purchases for consumers. Pre-purchase information is critical to ensuring that consumers make informed choices about the devices they purchase.

Proposals to impose even more restrictions on consumer usage and allow content providers and video distributors to control functionality should be rejected. These include the Motion Picture Association of America (MPAA) effort to impose restrictions on display devices that would affect analog content, give broadcasters selective output controls (SOC)

that give them the ability to stop the viewing and recording of all content, and appear to be seeking to reduce the functionality of devices to speed the transition to digital distribution of content.

The record companies have jumped on the train. They are seeking controls over audio only content. Their proposals would prevent recording of content and devalue the tens of millions of existing audio devices consumers have purchased in the past decade.

Copyright holders want the FCC to write the rules so they can further their objectives of digital rights management.

The cable operators continue to seek to gain control over the home viewing environment and freeze out competition.

The Commission must emphasize that the purpose of these standards is to protect copy, not provide a competitive advantage. In seeking to achieve the goal of having many different technologies available, the Commission must ensure that the process does not favor any technology. Above all, the Commission must not allow one industry or industry segment to dominate the process.

The only manner in which the Commission can move forward with the administration of standards and not inhibit innovation or tilt the playing field is to publish standards defined in terms of technology neutral objective criteria and allow technology suppliers to self-certify that they meet the standards. Technological neutrality means that both hardware and software approaches should be acceptable. Technological neutrality should include a requirement for interoperability and compatibility between content-protection technologies.

Ensuring that the process for approving technologies is open and fair and not subject to anti-competitive abuse is challenging enough, contemplating the revocation of approval is even more daunting. Once consumers have purchased a product that has been approved, withdrawal of the product can impose severe harm on both consumers and the manufacturer of the product. The Commission must move with extreme caution in undertaking such an action. Such an action should be triggered only by a specific complaint. A heavy burden of proof must be placed on a complaining content owner or distributor and the Commission must be the sole arbiter of such a complaint.

INTRODUCTION

The Consumer Federation of America opposed the imposition of a broadcast flag requirement on consumer electronic equipment[1] and has criticized many aspects of the plug-and-play proposal[2] because the Federal Communications Commission's approach threatens to impose anti-consumer, anticompetitive standards on the public. We have urged the Commission to ensure that consumers get maximum functionality and interoperability across all the consumer devices that will make up the new digital information environment. As we stated in our initial comments in the broadcast flag proceeding:[3]

> A decade of analysis of the new digital media by the Consumer Federation of America has shown that policies that expand consumer choice with increased options, enhance consumer control, and encourage consumer use speed adoption and stimulate innovation."[4]

We remain convinced that the best way to speed the adoption of digital technology is to maximize use and consumer freedom to choose what, where, when and how they use their display devices to view digital video content.

The Commission can narrow the anti-consumer impact by taking a minimalist approach to the scope of these proceedings and seek to preserve and expand the functionality and interoperability of display devices to the maximum extent possible. The Commission can

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[1] "Comments of the Consumer Federation of America, *In the Matter of Digital Broadcast Content Protection, Notice of Proposed Rulemaking*, MB Docket 02-230, December 6, 2002 (hereafter Broadcast Flag).

[2] "Comments of the Consumer Federation of America, *In the Matter of Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, Compatibility Between Cable Systems and Consumer Electronics Equipment*, *Second Report and* Order, CS Docket no. 97-80, PP Docket No. 00-67, April 28. 2003.

[3] "Comments of the Consumer Federation of America, Broadcast Flag, p. 7.

[4] Cooper, Mark, *Expanding the Information Age for the 1990s: A Pragmatic Consumer Analysis*, (Consumer Federation of America and American Association of Retired Persons, January 1990), *Developing the Information Age in the 1990s: A Pragmatic Consumer View* (Consumer Federation of America, June 8, 1992), *A Consumer Road Map to the Information Superhighway: Finding the Pot of Gold at the End of the Road and Avoiding the Potholes Along the Way* (Consumer Federation of America, January 26, 1994), *A Consumer Perspective On Economic, Social And Public Policy Issues In The Transition To Digital Television: Report Of The Consumer Federation Of America To People For Better TV* (Consumer Federation of America, October 29, 1999).

minimize the anticompetitive impact by ensuring that the technology certification process is as neutral and flexible as possible.

FROM BAD TO WORSE

The broad consumer issues that these proceeding raise have been compounded by the failure of the Commission to exempt news and information from the broadcast flag requirement. By allowing broadcasters to lock down news and information with a broadcast flag, the Commission has transformed the potential infringement on consumer rights into an infringement on the free speech rights of citizens.

When it comes to news and information, the Supreme Court has repeatedly asserted that "the widest dissemination of information from diverse and antagonistic sources is essential to the welfare of the public."[5] The Commission's intention *In the Matter of Digital Broadcast Content Protection* is to "provide content owners with reasonable assurance that DTV broadcast content will not be indiscriminately redistributed while protecting consumers' use and enjoyment of broadcast video programming."[6] The Commission goes on "to clarify our intent that the express goal of a redistribution control system for digital broadcast television be to prevent the indiscriminate redistribution of such content over the Internet or through similar means."[7] "Indiscriminate redistribution over the Internet or through similar means" sounds like a very good paraphrase of "the widest possible dissemination." In refusing to exempt news and information from the Broadcast Flag requirement, the

[5] *Associated Press v. United States*, 326 U.S. 1, 20 (1945).
[6] In the Matter of Digital Broadcast Content Protection, *Report and Order and Further Notice of Proposed Rulemaking*, MB Docket 02-230, November 3, 2003; para 4.
[7] Broadcast Flag, FNPRM, para. 10.

Commission has once again put the economic interests of content owners ahead of the free speech rights of citizens.[8]

Another ominous sign in the ongoing proceeding is the mission creep about which we warned the Commission. The narrowly defined goal of preventing "indiscriminate redistribution" of digital content, which it was claimed, incorrectly, is uniquely vulnerable to such abuse, has now expanded in the minds of the content owners and distribution companies.

The Motion Picture Association of America (MPAA) is seeking restrictions on display devices that would affect analog content, give broadcasters selective output controls (SOC) that give them the ability to stop the viewing and recording of all content, and appear to be seeking to reduce the functionality of devices to speed the transition to digital distribution of content.[9]

The record companies have jumped on the train. They are seeking controls over audio only content.[10] Their proposals would prevent recording of content and devalue the tens of millions of existing audio devices consumers have purchased in the past decade.

Copyright holders want the FCC to write the rules so they can further their objectives of digital rights management.[11]

The cable operators continue to seek to gain control over the home viewing environment and freeze out competition.[12]

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[8] The Commission points out that (Broadcast Flag, FNPRM, para 38) "broadcast interest argue that local broadcasters should have the right to protect news programming as it ahs inherent economic value and that to do otherwise could discourage its creation. We agree."

[9] Motion Picture Association of America, Inc., *Petition for Reconsideration*, CS Docket No. 97-80, PP Docket No. 00-67, December 29, 2003, Comments of the Motion Picture Association of America, Inc., et al., CS Docket No. 97-80, PP Docket No. 00-67, February 13, 2004.

[10] Joint Petition for Reconsideration of NMPA, ASCAP, SGA, and BMI, MB Docket No. 02-230, December 31, 2003.

[11] Joint Petition for Reconsideration of NMPA, ASCAP, SGA, and BMI.

In spite of the fundamental error the FCC has made in charging into these dangerous and uncharted waters, the Commission can minimize the damage by following the advice of the public interest interveners in the initial rounds of comment in response to the Further Notice of Proposed Rulemaking and in their opposition to the requests for reconsideration.[13]

PROMOTING CONSUMER ADOPTION OF DIGITAL DISPLAY DEVICES BY PRESERVING CONSUMER RIGHTS AND EXPANDING FUNCTIONALITY

The Commission has been asked by the content providers and distribution companies to impose a series of limitations on usage that will have negative impacts on consumers and diminish the value of digital display devices. While the extent of the damage varies from proposal to proposal, the next effect will be to harm consumers and slow the transition to delivery of digital content. Each of these proposals should be rejected by the Commission.

However, merely preventing the outrageous proposals to reduce the functionality of display devices or limit consumer uses is not enough. The Commission should be headed in the opposite direction, seeking to preserve and expand uses, promoting increased functionality and guaranteeing the interoperability of devices. The Commission should take several steps to ensure that the new devices provide the maximum functionality and interoperability of which they are technically capable.

Today, consumers can purchase and share content with their friends and family to be viewed when they want, as often as they desire, on the devices they choose no matter where those devices can be found. This type of behavior – this fair use of legally obtained content –

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[12] Petition for Reconsideration or Clarification of the NCTA, *In the Matter of Digital Broadcast Content Protection,* MB Docekt No. 02-230, January 2, 2004.

[13] In the Matter of Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, Compatibility Between Cable Systems and Consumer Electronics Equipment, *Second Report and* Order, CS Docket no. 97-80, PP Docket No. 00-67, October 9, 2002. February 13, 2004.

is fundamentally different from the type of behavior that the Commission seeks to prevent in its rules – the "indiscriminate redistribution"[14] of content. Thus, there is no conflict between preserving consumer rights to use legally obtained content and protecting content owners from the "indiscriminate redistribution" of content.[15] The Commission has recognized that it must not limit or prevent consumer from making copies of digital content or prevent the sending of content over the Internet where that transmission is not "indiscriminate, but "is tailored in nature."[16]

There is no doubt that the new digital devices are capable of providing these routine functionalities to which consumers have become accustomed. The Commission rules must not ban or infringe on these consumer rights. These include preserving the usability of unmarked content, allowing shifting of viewing in time and space, and unlimited physical copying.

The interoperability that has been achieved in the current environment must be extended to the new environment. The Commission should not allow interoperability to be diminished by either technological fixes or licensing conditions. Indeed, to promote the transition to delivery of digital content the Commission should promote additional interoperability.

The Commission must avoid calls to impose restrictions on interoperability implicit in proposals that seek to put an electronic fence around consumer uses. The Commission has no business attempting to define a personal-digital-network-environment (PDNE) in which to confine the interoperability of electronic devices. Electronic fences work great for pets, but

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[14] *Broadcast Flag FNPRM*, at para. 10.
[15] Of course, when it comes to speech protected by the First Amendment, there can be no limitation, governmental or private, on redistribution.
[16] *Broadcast Flag FNPRM,* at para. 63.

not for humans. The Commission must not take on the role of master, dictating where the consumer's digital activity can roam.

We are convinced that any attempt to define a restricted digital environment will fail in the marketplace. No company would risk it, except if the Commission mandates it. A government orchestrated cartel that restricts the usability of content to some predefined digital environment will diminish the functionality of digital devices and slow, if not stop, the transition to digital delivery of content.

To the extent that the Commission's decisions involve it in the management of the transition to digital delivery of content (and the adoption of rules in these proceedings has put it in that position), the Commission must ensure that its actions do not destroy the value of consumer purchases by cutting them off from the ability to use content. Therefore, the standards and processes the Commission adopts must ensure *inter* and *intra* generational interoperability of the devices affected by its standards and processes. New content protection technologies must exhibit full compatibility, backward, forward and sideways.

Thus, the Commission should adopt a rule that requires content protection technologies to be able to display prior generations of content that was either not copy-protected or copy-protected by approved technologies. Each new technology should be able to display all current and future content that is subject to an approved content-protection

ANTI-CONSUMER LIMITATIONS ON FUNCTIONALITY AND USE

A variety of proposals have been made that would impose limits on consumer use or devalue the content. These should be rejected by the Commission.

The Commission has asked for comment on whether cable operators may encrypt DTV broadcast signals when they are part of the basic tier (Broadcast Flag FNPRM, para 59).

Encryption of the basic tier would merely give cable operators an opportunity to control the flow of content within the home. The Commission should not compound the damage to democratic discourse by allowing the cable operators to encrypt basic tier signals since most local news and information shows are in the basic tier channels. Prohibiting the encryption of basic tier channels would also preserve a space for innovation.

"DOWN-REZZING"

Proposals to undermine the quality of the video images that display devices provide should be rejected by the commission. Neither of the two justifications offered for reducing the resolution of a digital picture ("down-rezzing") – copy protection or speeding the transition to digital TV – makes sense as public policy.

"Down-rezzing" does not serve a legitimate function of copy protection. By reducing the quality of a copy, advocates of down rezzing claim that there will be a disincentive to copy. However, they promise that the quality will still be better than a routine analog picture. In the process, the proposal undermines its purpose. By reducing the size of files by 75 percent, down rezzing will dramatically increase the ability to distribute them over the Internet.

In a remarkably anti-consumer proposal, the Motion Picture Association of America (MPAA) suggests that the Commission pursue an industrial policy of forced obsolescence to speed the transition to digital TV by undermining the functionality of existing devices. Penalizing the first purchasers of the first generation of a new technology is hardly the way to promote the second. If the government pursues such a policy, it should be liable for the costs incurred by consumers. Even then, it would be difficult to restore public confidence that content owners and distributors will not fiddle with the functionality in the future.

The proposals for downrezzing ask the Commission to perform a high wire balancing act in which the Commission will inevitably take a bad fall. If downrezzing diminishes the quality of the picture sufficiently to undermine the incentive to and acceptability of duplicating and distributing content illegally (sufficiently to offset the increased ease of such copying), then consumers will certainly be dissatisfied with the devices that degrade output. They will be much more resistant to purchasing such devices.

MISSION CREEP

These rulemaking have become a train to which a host of private interests want to hitch their anti-consumer, anticompetitive freight cars. The MPAA would dramatically expand the Commission's role to order product mandates to achieve total control over what consumers view. The record companies want to extend the rules to audio devices. Copyright holders want an extraordinary right to decrypt content to enforce their royalty rights, dragging the Commission into the debate over digital rights management. Satellite providers want the Commission to regulated standards for connectors. The Commission should reject the efforts to expand these proceedings into a broad-based program of FCC content control. The petitions for reconsideration should be rejected. Several of the more egregiously anti-consumer proposals are discussed below.

The MPAA asks the Commission to require implementation of selectable output controls and allow its use in certain circumstances.[17] Selectable output controls go far beyond the stated intent and purpose of these proceedings. It allows the content owner to turn of a consumer's television for purposes of both viewing and recording. Since the Commission set out to do neither, the request is clearly out of bounds.

[17] Motion Picture Association of America, Inc., *Petition for Reconsideration*.

The MPAA request that the Commission define the level of copying to be allowed for material distributed as Subscription Video on Demand (SVOD) should also be rejected. The MPAA request that this content be marked as "copy never" violates the fundamental objective of the Commission of preserving consumer rights to fair use of content. It short-circuits and precludes market forces from driving content-owners to treat consumers fairly.

The MPAA seeks to have the FCC impose conditions that will be rejected by consumers in the marketplace, if they are given a choice. Because these two suggestions would severely limit the functionality and uses of new devices they will inevitably slow the transition to digital delivery of content.

The recording industry has also sought to divert the proceedings from their intended objective, by asking the Commission to assert authority over audio only content.[18] Here too, the proposal would violate the basic premises on which the proceedings have been conducted and destroy consumer fair use rights. In the case of the music proposal, it would dramatically devalue a huge stock of devices. The Commission lacks the legal authority and the evidentiary record to implement such a rule. Indeed, this proposal directly contradicts the principles articulated by congress in the Audio Home Recording Act[19] that preserve the ability of consumers to make widespread use of audio content that they have legally obtained.

SOFTWARE DEFINED RADIO

The Commission has asked for comment on "the interplay between a flag distribution control system and the development of open source software applications, including software

[18] Joint Petition for Reconsideration of NMPA, ASCAP, SGA, and BMI.
[19] 17 U.S.C. 1001.

demodulators, for digital broadcast television."[20] This issue exemplifies the complex interactions between technologies that typify the convergence all media and communications into a single, digital communications platform and it underscores how important it is for the Commission to steer clear of imposing restrictions on technologies.

Unfettered software development promises to expand the potential for the use of spectrum dramatically.[21] Any attempt by the Commission to regulate software demodulation would carry it into the direct regulation of software and many hardware components that are beyond its authority. The broadcast flag regime applied to software would undermine open source development of software-defined radio, eliminating the most powerful competitive force in the industry.

PRE-PURCHASE CONSUMER INFORMATION

The introduction of a new technology in a complex consumer device as pervasive as televisions and personal computers is a formidable task for consumers and the industry. These devices are also large, infrequent purchases for consumers. Pre-purchase information is critical to ensuring that consumers make informed choices about the devices they purchase.

The fact that the Commission has issued standards and is overseeing processes for setting standards that affect the functionality of these devices creates an obligation to ensure that consumers are informed. The Commission must exercise it authority as a consumer protection agency and require equipment manufacturers to fully inform consumer about the nature and functionality of this new equipment. The provision of this information will help

[20] Broadcast Flag FNPRM, para. 60.
[21] Federal Communications Commission, *Notice of Proposed Rulemaking in the Matter of Facilitating Opportunities for Flexible, Efficient, and Reliable Spectrum Use Employing Cognitive Radio Technologies,* ET Docket No. 03-108, FCC No. 03-322, December 30, 2003.

ensure the adoption of the technology and a smooth transition to the delivery of digital content.

PREVENTING ANTICOMPETITIVE ABUSE OF TECHNOLOGY APPROVAL PROMOTES INNOVATION AND SPEEDS ADOPTION

The Commission can minimize the anticompetitive impact of its rules by ensuring that the technology certification process is as neutral and flexible as possible. The Commission must emphasize that the purpose of these standards is to protect copy, not provide a competitive advantage. In seeking to achieve the goal of having many different technologies available, the Commission must ensure that the process does not favor any technology.

INDEPENDENT OVERSIGHT

Above all, the Commission must not allow one industry or industry segment to dominate the process. On an interim basis, the Commission has already committed the egregious error of putting Cable Labs, a organization whose sole purpose is to promote the interests of the cable industry at the expense of the public in charge of a critical part of the process. Cable Labs represents the private interest of the small cartel of cable operators and it has already acted to undermine its credibility in this area.[22] Cable labs must not be the sole entity for testing technologies and it must not have any greater authority in the process than any other qualified entity.

NCTA and Cable Labs are sister organization subservient to the cable industry. The industry has used these two entities to frustrate competition in the set top box market for

[22] "Comments of the Consumer Electronics Association in Response to Second Further Notice of Proposed Rulemaking," *In the Matter of Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, Compatibility Between Cable Systems and Consumer Electronics Equipment*, CS Docket no. 97-80, PP Docket No. 00-67, February 13, 2004, p. 7, points out that with respect to technology for triggering HDTV downresolution "CableLabs unilaterally revised the offered license so as to defin a trigger and require a response, and made this requirement effective immediately."

years. They are using these proceedings as another excuse to delay, yet again, a fully competitive environment. The Commission should reject efforts by cable operators to wall off or gain an advantage in the home network by delaying the opening of set top boxes to competition or allowing encryption to take place at the head end.[23] The Commission must immediately remove Cable Labs from any position of authority in the technology approval process. It must them build a technology approval process in which individual companies can self-certify compliance and the Commission has the sole authority to adjudicate claims of failure to comply with its standards.

The only manner in which the Commission can move forward with the administration of standards and not inhibit innovation or tilt the playing field is to publish standards defined in terms of technology neutral objective criteria and allow technology suppliers to self-certify that they meet the standards. Technological neutrality means that both hardware and software approaches should be acceptable. Technological neutrality should include a requirement for interoperability and compatibility between content-protection technologies.

Self-certification should involve a significant filing requirement. The Commission should prescribe a clear set of requirements and testing procedures. Entities should be required to file documentation that the conditions for certification have been met.

The Commission should allow a complaint process in which the complainant bears the burden of proving that a technology does not meet the objective standards adopted. The complaint process should be open and transparent, allowing for public comment. A technology company supplying competing technologies should not be allowed from competing technologies however, except insofar as the complaint involves a claim of

[23] NCTA Petition, pp. 6-10. Reply Comments of the NCTA, pp. 5-7.

incompatibility. The complaint process should be open and transparent, allowing for public comment.

The criteria for copy-protection technologies should be functional. The copy protection is targeted at ordinary, non-expert users and indiscriminate redistribution of content that has sought copy protection. It is obvious that redistribution of content which is unmarked – for which no copy-protection is sought – should not be hindered by any copy-protection technology.

The Commission must undertake regular reviews of the impact of copy-protection to ensure that it is not having unanticipated consequences and that it remains necessary and in the public interest.

REVOCATION OF CERTIFICATION

Ensuring that the process for approving technologies is open and fair and not subject to anti-competitive abuse is challenging enough, contemplating the revocation of approval is even more daunting. Once consumers have purchased a product that has been approved, withdrawal of the product can impose severe harm on both consumers and the manufacturer of the product. The Commission must move with extreme caution in undertaking such an action. Such an action should be triggered only by a specific complaint. A heavy burden of proof must be placed on a complaining content owner or distributor and the Commission must be the sole arbiter of such a complaint.

The complainant must demonstrate that the technology in question has been widely compromised in such a way that there is actual, widespread abuse because of the compromised elements by non-expert users. Hypothetical problems that can be conjured up by highly sophisticated users should not be the basis for a revocation. Because the

Commission recognizes that no copy-protection scheme is perfect, it has aimed its rule at preventing average, non-expert users from "indiscriminate redistribution" of content. Therefore, the problem that must be demonstrated before revocation of certification is even contemplated is widespread "indiscriminate redistribution" by average, non-expert users.

The compromised technology must be the unique cause of the problem and the solution proposed must solve the actual problem. If a broad pattern of abuse has emerged and it cannot be demonstrated that withdrawing a specific technology will actually solve the problem, than revocation is inappropriate.

The solution should be specific to the problem. Only those aspects of a technology that are actually at fault should be addressed. Moreover, modification of the technology to address the problem should be attempted first, before certification is revoked.

Whatever actions are taken to solve the problem (modification or revocation) should apply only on a going forward basis. That is, the use of the technology should be prohibited on a going forward basis, until it is successfully modified, but the Commission should not allow or require that existing devices to be rendered inoperable.

Respectfully submitted,

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