

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Spectrum Policy Task Force Report	)	ET Docket No. 02-135
	)	
	)	

To: The Commission

**COMMENTS OF  
NATIONAL PUBLIC RADIO, INC.**

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## Summary

The Commission deserves commendation for the care and attention it is accorded the complex task of spectrum policy reform. The Commission was wise to convene a task force to examine existing Commission spectrum policies and to offer recommendations for improving those policies. The Spectrum Policy Task Force Report represents a valuable analysis of the Commission's existing spectrum policies and provides many thoughtful policy recommendations.

A notable oversight, however, is the Report's failure to address noncommercial education ("NCE") uses of spectrum in any meaningful way. While the Report acknowledges the need for spectrum for such uses, it offers no suggestion for assuring sufficient NCE access to spectrum. We are puzzled, moreover, by the Report's recommendation that the Commission impose spectrum "user fees," ostensibly to spur technological efficiency. To the extent the Task Force even considered the matter, reversing longstanding exemptions from regulatory and filing fees and imposing a new, spectrum-based cost on non-profit and governmental licensees of public radio stations would force the reallocation of already scarce resources, undermining what are, in many markets, the sole remaining providers of local broadcast services.

The Report deserves credit for recognizing the Commission's failure to effectively address the demand for spectrum and the need to address interference at the point of reception through receiver interference immunity standards. The Commission's approach to satisfying demand for radio broadcast spectrum has been to establish additional classes of radio broadcast facilities based on flawed interference prediction methodologies and without maintaining a baseline of acceptable interference-free reception. Moreover, despite encouraging improvements in consumer electronics equipment in other contexts, the Commission has heretofore refused to pursue appropriate interference immunity standards for radio receivers. Given the Task Force's

analysis and recommendations, the time has come for the Commission to establish a baseline of acceptable radio receiver performance. We commend this effort.

In particular, we urge the Commission take the following steps. First, the Commission should initiate a proceeding to establish a base-line understanding of current receiver performance capabilities. Second, the Commission should encourage broadcasters and consumer electronics manufacturers to develop appropriate performance standards. Third, the Commission should pursue a product labeling regime -- to inform the public of equipment performance against objective performance benchmarks.

Finally, the Task Force is correct in urging the Commission to more clearly articulate the technical rules governing spectrum use. Particularly in authorizing new classes of broadcast services, the Commission has all-too-often wielded its inherent waiver authority to reinterpret even long-standing rules. As the Task Force aptly noted, a clear delineation of the rules governing the interactions between and among the Commission and spectrum users should be a bedrock principle of sound spectrum policy. As a necessary complement, the Task Force is also correct in challenging the Commission to devote greater resources to protecting spectrum users and uses through enhanced enforcement of the Commission's technical rules.

We understand the Commission's desire to rely on the private sector to determine the proper allocation and use of spectrum. Reliance on market forces, however, should not amount to an abdication of the Commission's statutory responsibility to manage the radio-frequency spectrum in the public interest. We believe proper management of the spectrum requires the Commission to intervene to assure continued access to spectrum for NCE services, improved performance of radio receiving equipment, and proper enforcement of spectrum rights and responsibilities. Toward those objectives, NPR pledges its support.

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**COMMENTS OF  
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**Introduction**

National Public Radio, Inc. ("NPR") hereby submits its Comments regarding the Report of the Spectrum Policy Task Force.<sup>1</sup>

NPR is a non-profit membership corporation that produces and distributes noncommercial educational programming through more than 600 public radio stations nationwide. In addition to broadcasting award winning NPR programming, including *All Things Considered*<sup>®</sup>, *Morning Edition*<sup>®</sup>, *Talk Of The Nation*<sup>®</sup>, and *Performance Today*<sup>®</sup>, NPR's Member stations are significant producers of news, informational, and cultural programming. NPR also operates the Public Radio Satellite Interconnection System and provides representation and other services to its Member stations.

**I. In Reforming Its Spectrum Policies, The Commission Should Explicitly Recognize**

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<sup>1</sup> Spectrum Policy Task Force, Report, ET Docket No. 02-135 (rel. Nov. 15, 2002) reprinted at <http://www.fcc.gov/sptf/report.html> [hereinafter "Report"].

## **and Seek to Encourage Innovative Noncommercial Educational Uses of Spectrum**

In its comments to the Spectrum Policy Task Force, NPR urged the Task Force to consider not only how to how to further orient the Commission's current spectrum policies towards a market-based approach but also to recognize the limits to a market oriented allocation and assignment policy, particularly for noncommercial uses of spectrum.<sup>2</sup> Noncommercial educational ("NCE") services, in particular, are extremely valuable, even though NCE applicants are either non-profit educational organizations or governmental entities that typically lack the financial means or ready access to capital markets to outbid for-profit companies for spectrum.

In response, the Spectrum Policy Task Force Report acknowledged the need for spectrum for noncommercial broadcast uses.<sup>3</sup> The Task Force did not, however, address how those needs might be met either with respect to existing or future spectrum allocations.<sup>4</sup> Particularly given

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<sup>2</sup> Comments of National Public Radio, ET Docket No. 02-135, at 4-13 (filed July 8, 2002) [hereinafter "NPR Spectrum Comments").

Former Commission Chairman Fowler, the original Commission advocate of a market-based spectrum policy, recognized the limitations of any market-based policy.

Economists have long recognized the existence of 'merit goods,' which society values although the marketplace cannot explain or justify their retention. Reservation of valuable real estate for public parks, public support for museums and libraries, the special tax treatment accorded religious and eleemosynary institutions, and the system of public education are all services shielded, to a greater or lesser extent, from marketplace forces. So, too, public [broadcasting] . . . has been a merit good

Mark S. Fowler & Daniel L. Brenner, A Marketplace Approach to Broadcast Regulation, 60 Tex. L. Rev. 41, 46 (1982).

<sup>3</sup> Report at 45 ("It is likely that there will be a continued need to set aside some spectrum for non-market based broadcast uses, such as non-commercial and educational [sic] broadcasting.").

<sup>4</sup> Indeed, under the heading of "Promoting Access to Spectrum," the Task Force failed to mention promoting access to spectrum for noncommercial educational services as a priority. See

the Commission's mandate under Title III of the Communications Act to further the public interest, this omission is glaring, and we urge the Commission to work to assure continued access to spectrum for noncommercial educational uses.<sup>5</sup>

While the Report gives little consideration to noncommercial uses of spectrum, and noncommercial educational uses in particular, it recommends the imposition of "user fees or other steps to stimulate improvements in efficiency when marketplace is [sic] inadequate."<sup>6</sup> It is impossible to know from this conclusory statement why the Task Force believes imposing increased costs on already under-resourced non-profit and governmental entities will result in more efficient use of spectrum.<sup>7</sup> Indeed, we believe the imposition of spectrum fees on such entities is likely to force the reallocation of resources away from the production and delivery of services. In the case of NCE radio stations, in particular, such a reallocation is likely to mean diminished local service.

The Task Force's recommendation is also difficult to reconcile with its recognition that diversity of ownership and localism form the core of broadcasters' public interest

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id. at 54-62.

<sup>5</sup> See id. at 11 (noting, as an example of the Commission's statutory public interest considerations, the Commission's policies surrounding spectrum allocated for broadcasting service).

<sup>6</sup> Id. at 64; see also id. 21 ("The Task Force recognized that there may be situations where the Commission finds it necessary to promote spectrum or technical efficiency (as opposed to economic efficiency) in order to promote particular public interest goals. However, in those instances, where marketplace forces may be inadequate, *e.g.*, in spectrum that is allocated for government use, alternative mechanisms such as user fees should be considered to stimulate improvements in efficiency.")

<sup>7</sup> Nor does the Report address the longstanding exemptions of NCE broadcasters from filing and regulatory fees. See In the Matter of Establishment of a Fee Collection Program to Implement the Provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985, 2 FCC Rcd. 947, 959 ¶ 73 (1987) (implementing fee exemptions).

obligations.<sup>8</sup> Measured against these benchmarks, NCE radio broadcasters provide a critical contribution to the diversity of voices and serve as important outlets of local community expression. Public radio station licensees represent a broad range of public and private, community-based organizations: universities (188 licensees), non-profit community organizations (136 licensees), local governments (26 licensees), and state governments (8 licensees).<sup>9</sup>

Many NCE stations are required by the Communications Act to establish and maintain community advisory boards, conduct public meetings and otherwise remain responsive to the needs of all individuals within their service area.<sup>10</sup> With regard to NCE stations generally, the Communications Act and Commission rules ensure that public broadcast stations are and remain responsive to their communities of service. Indeed, localism is the single greatest factor in the

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<sup>8</sup> Report at 45. See also In the Matter of Rules and Policies Concerning Multiple Ownership of Radio Broadcast Stations in Local Markets, Definition of Radio Markets, Notice of Proposed Rulemaking and Further Notice of Proposed Rule Making, MM Docket No. 01-317, MM Docket No. 00-244, 16 FCC Rcd. 19,861, at ¶ 29 (rel. Nov. 9, 2001) ("Diversity is one of the guiding principles of the Commission's local radio ownership rule. This principle is intended to advance the values of the First Amendment, which, as the Supreme Court stated, 'rests on the assumption that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public.'") (quoting Associated Press v. United States, 326 U.S. 1, 20 (1945)).

The Communications Act of 1934 also established localism as a touchstone for the allocation of spectrum for over-the-air broadcast use. 47 U.S.C. § 307(b). See also Pinellas Broadcasting Co. v. FCC, 230 F.2d 204, 207 (D.C. Cir. 1956) ("In requiring a fair and equitable distribution of service, Section 307(b) encompasses not only the reception of an adequate signal but also community needs for programs of local interest and importance and for organs of local self-expression."), cert. denied, 350 U.S. 1007.

<sup>9</sup> See Corporation for Public Broadcasting, Frequently Asked Questions About Public Broadcasting, [http://www.cpb.org/pubcast/-who\\_runs](http://www.cpb.org/pubcast/-who_runs).

<sup>10</sup> 47 U.S.C. § 396(k)(4), (8).

Commission's point system for resolving mutually exclusive NCE applications for reserved spectrum.<sup>11</sup>

In many markets, NCE stations provide the last extensive local news coverage and are often the only outlet for classical music and related fine arts programming. NCE stations also provide listeners with access to talented new contemporary music performers, particularly regional and local performers, who are often locked out of centralized program decision making at consolidated media groups. As grass roots local public services and arts organizations in their own right, NCE stations are both familiar with and contributors to their community's local arts and cultural scenes.

In many countries, publicly funded NCE radio services have enjoyed preferential spectrum allocation as a matter of sound public policy. In the United States, by comparison, there is no AM band spectrum reserved for NCE services and only 20 percent of the FM band spectrum is reserved for NCE stations. With respect to the reserved FM spectrum, moreover, NCE stations have had to operate with reduced facilities or expensive custom antenna systems because they bear the entire burden of avoiding cross-service interference between the reserved FM spectrum and the immediately adjacent television channel 6 spectrum.<sup>12</sup>

In sum, we believe the need for spectrum for NCE use is compelling. We urge the Commission, therefore, to assure access to spectrum for noncommercial educational uses as it

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<sup>11</sup> See In the Matter of Reexamination of the Comparative Standards for Noncommercial Educational Applicants, Report and Order, 15 FCC Rcd 7386, at ¶¶ 41-55 (2000).

In addition, a significant portion of a public broadcaster's budget is composed of direct financial contributions from local audiences. Public broadcasters therefore have a compelling incentive to serve local needs and interests. See Revision of Program Policies and Reporting Requirements Relating to Public Broadcasting Licensees, 98 F.C.C. 2d 746, 753-754 (1984).

<sup>12</sup> See 47 C.F.R. § 73.525.

examines its spectrum policies generally.

## **II. The Spectrum Policy Task Report Is Correct In Concluding That The Commission Needs To Develop Better Means Of Measuring and Preventing Harmful Interference, Including Through The Development of Receiver Standards**

The bulk of the Spectrum Policy Task Force Report is devoted to improving the Commission's existing approach to measuring harmful interference and protecting spectrum users from interference. We believe the Report has correctly identified the problem: "Increasing demand for spectrum-based services and devices are straining longstanding, and outmoded, spectrum policies."<sup>13</sup> We also believe the Task Force is correct to focus on measuring and avoiding interference at the point of reception rather than at the point of transmission.<sup>14</sup> While we are intrigued by the "interference temperature" concept expounded by the Task Force,<sup>15</sup> the Commission should not lose sight of more immediate and concrete initiatives that it can undertake to improve existing Commission spectrum policy.

In the case of spectrum used for over-the-air radio broadcasting, severe congestion is far from a recent phenomenon. Indeed, as long ago as the early 1980s, the Commission concluded that "under the [then] present allotment rules, additional service cannot be offered to many parts of the nation where demand has not been satisfied."<sup>16</sup> Confronted by a demand for spectrum that

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<sup>13</sup> Report at 11.

<sup>14</sup> Id. at 27 ("In general, it is the ability of a receiver to select and receive a particular signal that determines whether the signal has been degraded by interference.").

<sup>15</sup> See id. at 27-30.

<sup>16</sup> Modification of FM Broadcast Station Rules to Increase the Availability of Commercial FM Broadcast Assignments, Report and Order, BC Docket No. 80-90, 94 F.C.C.2d 152, 153 (1983) [hereinafter "BC Docket No. 80-90 Report and Order"]. See also Conflict Between Applications and Petitions for Rulemaking to Amend the FM Table of Allotments, 7 FCC Rcd. 4917, 4919 (1992) (noting "the significant increase in the number of FM stations and the

continues to outpace supply, the Commission's response has been to increase the number of radio broadcast stations through the establishment of additional classes of radio broadcast facilities<sup>17</sup> and by attempting to relax the interference protections.<sup>18</sup> The Commission has pursued this approach without attempting to measure, let alone maintain, a baseline of acceptable interference-free reception. The matter is now even more critical, given the transition to digital broadcasting and concerns regarding same-service and cross-service digital-to-analog interference.<sup>19</sup>

The Commission's rules currently seek to limit interference between and among radio broadcast stations through assumptions made about the effective radiated power of a given station transmitter and the distance between that station and adjacent channel stations. In the case of the non-reserved FM channels, a table of allotments based on distance and station class determines where stations are predicted to operate without causing interference.<sup>20</sup> In the AM

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accompanying congestion in the FM band that has occurred since the formation of the FM Table of Allotments in 1964”).

<sup>17</sup> See BC Docket No. 80-90 Report and Order at ¶ 10.

<sup>18</sup> See In the Matter of Creation of a Low Power Radio Service, Notice of Proposed Rulemaking, MM Docket No. 99-25; RM-9208; RM-9242, 14 FCC Rcd 2471, at ¶¶ 43-49 (1999) (considering the elimination of the second and third adjacency protections for FM broadcast stations). But see Radio Broadcasting Preservation Act of 2000 ("RBPA"), Pub. L. No. 106-553, 114 Stat. 2762 (2000) (requiring the Commission to reinstate the second and third adjacency protections).

<sup>19</sup> See Ken Kerschbaumer, DTV Interference Issues Loom, *Broadcasting & Cable*, June 24, 2002 (“Industry experts warn that, when broadcasters get on-air with full-power DTV signals, interference issues like that being experienced by [analog station] WBOC-TV Salisbury, Md., may be the norm rather than the exception.”). See also Final Report, DTV Channel 6 Interference to FM Band Reception, Test Findings (July 24, 1998) (finding a likelihood of significant interference to reserved FM band stations in DTV channel 6 markets), MM Docket No. 87-268 (filed Oct. 20, 1998).

<sup>20</sup> See 47 C.F.R. § 73.207.

band and in the reserved portion of the FM band, the Commission employs less-protective contour prediction approaches such that new station applicants must provide an engineering showing that the interfering contour of the proposed facility is unlikely to overlap the service contour of the existing stations.<sup>21</sup> While these approaches to siting new broadcast stations are generally successful in minimizing interference, they are far from perfect.

As with any prediction, the challenge is to account for all potentially relevant variables.

The Commission's technical rules, in particular, do a poor job of accounting for terrain.

Because of the limited length (3 to 16 kilometers) of the radials used to determine antenna height above average terrain, the Commission's standard propagation methodology does not accurately account for all terrain effects. For example, our standard contour methodology, which is used to calculate both interfering and protected contours, would not take into account a mountain at 25 kilometers from a transmitter site, and thus, would incorrectly predict service (or interference) to areas well beyond this mountain.<sup>22</sup>

While the Commission has proposed the adoption of a supplemental point-to-point ("PTP") prediction model to account for terrain beyond 16 kilometers from the transmitting antenna,<sup>23</sup> the proposed methodology requires further development.<sup>24</sup> In addition, as NPR and others have suggested,<sup>25</sup> the Longley-Rice terrain prediction model used for digital television ("DTV") might

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<sup>21</sup> See *id.* §§ 73.37, .509.

<sup>22</sup> In the Matter of The Biennial Regulatory Review -- Streamlining of Radio Technical Rules in Parts 73 and 74 of the Commission's Rules, Notice of Proposed Rulemaking, MM Docket No. 98-93, 13 FCC Rcd. 14849, at ¶ 29 (1998) [hereinafter "Technical Streamlining NPRM"].

<sup>23</sup> *Id.* at ¶¶ 29-35.

<sup>24</sup> See Comments of V-Soft Communications, Technical Streamlining NPRM, at 4-5 (filed Oct. 15, 1998).

<sup>25</sup> Comments of National Public Radio, Technical Streamlining NPRM, at 7-8 (filed Oct. 15, 1998); Comments of V-Soft Communications, Technical Streamlining NPRM, at 5 (filed

be a better approach, offering a single interference methodology to assess potential interference within the FM service and between adjacent FM and DTV services.<sup>26</sup>

As an essential component of improving the system for allocating and assigning broadcast spectrum licenses, moreover, the Report properly highlights the longstanding and compelling need for radio receiver standards. Predictions of interference-free service depend on the performance capabilities of radio reception equipment. Unfortunately, the existing technical rules are based on outdated studies of receiver sensitivity and selectivity. While there has been much conjecture over whether receiver manufacturers have improved receiver performance or merely reduced their manufacturing costs,<sup>27</sup> it is time for the Commission to establish a base line for modern receiver performance.<sup>28</sup>

The Commission has sought to encourage improvements in consumer electronics performance in other contexts. For instance, the Commission has mandated a range of standards to assure greater compatibility between cable television service and consumer electronics equipment.<sup>29</sup> More recently, the Commission has shepherded the cable television and consumer

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Oct. 15, 1998)

<sup>26</sup> See Comments of National Public Radio, Technical Streamlining NPRM, at 7-8.

<sup>27</sup> See In the Matter of Creation of Low Power Service, Report and Order, MM Docket No. 99-25, 15 FCC Rcd. 2205, at ¶¶ 75-92 (2000).

<sup>28</sup> The Commission long ago eliminated its AM and FM transmission proof of performance standards based on its view that competitive marketplace pressures would induce radio broadcasters to continue to meet or exceed the existing standards and, therefore, assure quality reception. See A Re-Examination of Technical Regulations, GEN Docket No. 83-114, 99 F.C.C.2d 903 (1984). At no time since has the Commission conducted a comprehensive examination of receiver performance to assure that the quality of radio signals at the point of reception sufficiently approximates the quality of the signal at the transmission point.

<sup>29</sup> In the Matter of Compatibility Between Cable Systems and Consumer Electronics Equipment, Notice of Proposed Rulemaking, PP Docket No. 00-67, 15 FCC Rcd 8776, at ¶ 14

electronics industries to a memorandum of understanding intended to allow consumers to directly attach their DTV receivers to cable systems and receive cable television services without the need for an external navigation device.<sup>30</sup> The Commission's intervention in receiver standards setting offers valuable benefits by encouraging the affected industry sectors to address compatibility issues in advance, thereby reducing the number and severity of problems.<sup>31</sup>

NPR urges the Commission to champion a comparable initiative in this proceeding. While the development of appropriate standards is a task properly borne by the private sector, the Commission has an important, catalytic role to play. First, it can initiate a proceeding to establish a base-line understanding of current receiver performance capabilities. This should include the significance and prevalence of Receiver-Induced Third Order Intermodulation interference ("RITOI") and television channel 6 defects. Second, depending on the outcome of such an inquiry, the Commission can encourage broadcasters and consumer electronics manufacturers to develop an appropriate standard, including, as warranted, with the threat of administrative action<sup>32</sup> and with the assistance of the Commission's expert engineering staff. Third, and as a related matter, it might require manufacturers to inform the public, through

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(2000) ("In essence, then, our compatibility rules and scrambling limitations were designed to ensure that consumers could access a range of cable services using a 'cable-ready' television receiver without obtaining additional equipment from the cable operator.")

<sup>30</sup> See Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, Compatibility Between Cable Systems and Consumer Electronics Equipment, Further Notice of Proposed Rulemaking, CS Docket No. 97-80, PP Docket No. 00-67, at ¶¶ 1-3 (rel. Jan. 10, 2003) [hereinafter "Plug and Play FNPRM"].

<sup>31</sup> See also Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Fifth Further Notice of Proposed Rule Making, MM Docket No. 87-268, 11 FCC Rcd. 6235, at 6260-61 (rel. May 20, 1996).

<sup>32</sup> See Implementation of Section 17 of the Cable Television Consumer Protection and Competition Act of 1992, First Report and Order, 75 R.R.2d 152, at ¶ 41 (1994).

product labeling, of equipment performance against objective performance benchmarks.

The Commission has long recognized the importance of consumer choice, including in selecting consumer electronics equipment.

If immunity standards are imposed by government regulation, the increased cost of achieving them will fall on all purchasers of home electronic entertainment equipment. It is quite conceivable that some consumers, given a choice, would prefer the less protected equipment at a lower cost. Some consumers may not experience interference at their location or may prefer to cope with the interference in other ways. An alternative to government regulation would be the provision of information to consumers on the interference immunity of various grades of equipment so that consumers could select the equipment which best met their individual needs. This might be done voluntarily by manufacturers and retail dealers or by a government requirement for equipment labeling which indicated the interference immunity of the product.<sup>33</sup>

As a result of relatively unobtrusive regulatory intervention, consumers could be placed in a better position to choose receiver equipment and to receive broadcast services based on their individualized needs.<sup>34</sup>

NCE radio broadcasters, and their listeners, have been particularly aggrieved by the absence of receiver labeling requirements and interference immunity standards. In adopting the current rules to address blanketing interference, the Commission rejected the suggestion that it adopt technical interference immunity rules.<sup>35</sup> It did so based on the conclusion that “[a] more desirable [alternative to government imposed standards] would be voluntary standards developed

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<sup>33</sup> In the Matter of Radio Frequency (RF) Interference to Electronic Equipment, 70 F.C.C.2d 1685, 1688 (1978).

<sup>34</sup> See also Plug and Play FNPRM, at ¶ 3(2) (seeking comment on an agreement between the cable and consumer electronics industries requiring, inter alia, the “[e]stablishing [of] a labeling regime for unidirectional digital cable television receivers and related digital cable products that meet certain technical specifications that would be voluntarily used by consumer electronics manufacturers.”).

<sup>35</sup> In the Matter of FM Broadcast Stations Blanketing Interference, 57 R.R.2d 126, 130

by industry leaders.”<sup>36</sup> While NPR agrees with that view as a general matter, it has been almost two decades since the Commission chose to defer to purely voluntary standards setting efforts, with no appreciable progress in the voluntary development of interference immunity standards.

Likewise, the Commission has long required reserved FM band NCE stations to protect the signals of adjacent channel 6 television licensees.<sup>37</sup> That has been the case, even though the record in the Channel 6 interference proceeding established that the interference problems are attributable to a design flaw in television receivers.<sup>38</sup> As in the case of blanketing interference, the Commission declined to address the actual cause of the interference problem, based on the assumption that “the [consumer electronics] industry appears to have every intention of developing improved immunity standards on its own.”<sup>39</sup>

In the absence of television receiver standards, the channel 6 interference rules have placed the entire burden of avoiding interference on reserved FM band NCE stations.<sup>40</sup> Indeed, despite the strong Federal interest in extending public radio service to all,<sup>41</sup> NCE FM radio in the

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(1984).

<sup>36</sup> Id.

<sup>37</sup> See Changes in the Rules Relating to Noncommercial Educational FM Broadcast Stations, Memorandum Opinion and Order, 58 R.R.2d 629, at 630-31 (1985) [hereinafter “Channel 6 Memorandum Opinion and Order”]; 47 C.F.R. § 73.525.

<sup>38</sup> Channel 6 Memorandum Opinion and Order at 631. See also Public Notice, FCC 81-340, rel. July 22, 1981 (“The problem is widely recognized as a problem in the design of the television receiving system. Television sets have been designed in such a way that under certain conditions they are unable to reject the undesired FM signal.”).

<sup>39</sup> Channel 6 Memorandum Opinion and Order at 632.

<sup>40</sup> 47 C.F.R. § 73.525.

<sup>41</sup> 47 U.S.C. § 396(a).

United States has been severely restrained by the presence of TV channel 6 broadcasters.

We therefore urge the Commission to spearhead an examination of the current performance characteristics of radio reception equipment and, in particular, the interference immunity of mass market receivers. Based on such an examination, the Commission should seek to develop baseline minimum performance levels for the principal categories of radio receivers, including automobile, table, and portable radios as well as new Satellite Digital Audio Radio Service ("SDARS") and emerging In-band, On-channel ("IBOC") receiver equipment. With a comprehensive understanding of the performance characteristics of radio receivers, the Commission should pursue the development of appropriate equipment standards. Particularly given the Task Force's analysis and recommendation, we believe the time has come for such an initiative.

### **III. As The Task Force Recommended, The Commission Needs to Clearly Articulate Spectrum Rights And Responsibilities And Devote Greater Resources to Enforcing Its Technical Rules**

As a basic principle of effective spectrum policy, the Task Force Report properly identified the need for a clear articulation of the rules and responsibilities of spectrum users. "[A]ll spectrum users require clear rules governing their interactions with the Commission and other spectrum users."<sup>42</sup> Complementing a clear articulation of the governing technical rules, the Task Force is also correct in urging the Commission to devote sufficient resources to monitoring spectrum use and enforcing its technical rules.<sup>43</sup> In the case of broadcast spectrum use, as the Commission has deregulated broadcast licensees over the past two decades, the Commission has also sought to reduce the resources it allocates to the broadcast services.<sup>44</sup> While understandable as a fiscal matter, we believe additional resources should be allocated to achieving interference-free broadcast service.

In the radio broadcast service, interference issues typically arise at two stages: when an applicant proposes to construct a new station and after a station is constructed and operating.

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<sup>42</sup> Report at 18.

<sup>43</sup> *Id.* at 23 ("The Task Force believes that in order for the Commission to be able to meet the increasingly complex spectrum management demands being presented by the enormous growth in spectrum use, the Commission must devote sufficient resources to monitoring spectrum use and enforcing the spectrum management rules.").

<sup>44</sup> For instance, the Commission has sought to rely on licensee certification rather than requiring applicants to demonstrate compliance with applicable requirements. See In the Matter of 1998 Biennial Regulatory Review -- Streamlining of Mass Media Applications, Rules, and Processes; Policies and Rules Regarding Minority and Female Ownership of Mass Media Facilities, Report and Order, MM Docket No. 98-43, MM Docket 94-149, 13 FCC Rcd 23056, at ¶¶ 22-24 (1998). Additionally, the Commission has sought to privatize certain of its enforcement activities, including addressing interference complaints. See In the Matter of Improving Commission Processes, Notice of Inquiry, PP Docket No. 96-17, 11 FCC Rcd. 14006, at ¶ 37 (1996).

Particularly in the context of new applications for translator stations, the experience of NPR's Member stations has been that the Commission overlooks interference issues in the interest of introducing additional broadcast service. Thus, despite the secondary status of translator stations<sup>45</sup> and the potential disruption to existing services, the Commission has increasingly placed a heavy burden on existing licensees to demonstrate the likelihood of interference to station listeners.<sup>46</sup> The Commission has justified this approach in part on the grounds that any actual interference can be remedied after the new station is constructed and operating.<sup>47</sup>

Remediating interference at that stage, however, is dependent upon listener complaints. Whether consciously considered or not, listeners tune out channels that offer lower fidelity reception, are plagued by interference at certain locations, suffer from splatter or stoplight "grunge", or for other reasons cannot compete with the quality of sound available on their cassette and CD players. As a result, the lynchpin of the Commission's enforcement efforts -- listener complaints -- is predicated on the questionable assumption that listeners will complain to a radio station or the Commission rather than choose the far more expedient alternative of changing the channel or listening to a CD or cassette tape.

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<sup>45</sup> Under the Commission's rules, FM translator stations may not cause either predicted or actual interference to the public's direct reception of any authorized FM broadcast station. 47 C.F.R. §§ 74.1203(a)-1204(a).

<sup>46</sup> See, e.g., Calvary Chapel of Twin Falls, 13 FCC Rcd 25286 (1998) ("Although Citicasters submitted exhibits suggesting that there is likelihood of interference to KIOZ, Citicasters has not demonstrated that KIOZ has any listeners within the translator's proposed 1 mV/m contour. Citicasters states that Arbitron's Spring 1997 survey indicates that it has ' . . . a resident of the 92325 zip code . . . ' that listens to KIOZ. However, Arbitron data does not demonstrate that any such listener is within the translator's 1 mV/m contour.").

<sup>47</sup> See, e.g., id. ("Should operation of Calvary Chapel's authorized facility cause actual interference to reception of KIOZ, Calvary Chapel would be required to remedy such interference or cease operation in accordance with 47 C.F.R. § 74.1203.")

We understand the Commission's desire to encourage the development of private mechanisms to ensure the proper, non-interfering use of spectrum. Indeed, an evaluation of the Commission existing enforcement efforts may identify specific ways in which the Commission's enforcement efforts may be strengthened through private means. At the end of the day, however, the objective remains the same: spectrum users and the public interest require effective management of the radio-frequency spectrum. Accordingly, we urge the Commission to examine its existing spectrum policies with an eye toward assuring sufficient protection for spectrum users and uses.

### **Conclusion**

NPR appreciates and supports the Commission's efforts to examine and improve its current spectrum policies, and we urge the Commission to pursue the initiatives discussed above.

Respectfully submitted,

NATIONAL PUBLIC RADIO, INC.

Gregory A. Lewis /s/

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