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

In the Matter of	)	MM Docket No. 99-25
	)	
Creation of a Low	)	RM-9208
Power Radio Service	)	RM-9242
	)	
	)	

To: The Commission

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FEDERAL COMMUNICATIONS COMMISSION  
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COMMENTS OF COX RADIO, INC.

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## TABLE OF CONTENTS

	<b>Page</b>
SUMMARY.....	i
I. THE CREATION OF NUMEROUS INTERFERING STATIONS IS CONTRARY TO THE COMMISSION'S STATUTORY DUTY TO ENSURE EFFICIENT SPECTRUM USE.....	2
A. Relaxing Existing FM Interference Standards Would Impermissibly Create Harmful Interference. ....	3
B. Interference Problems Would Be Exacerbated by the Commission's Limited Enforcement Capacity. ....	8
C. LPFM Service Would Create Other Inefficiencies. ....	10
II. THE LPFM PROPOSAL WOULD NOT ACCOMPLISH THE COMMISSION'S STATED GOALS.....	11
III. NOW IS NOT THE TIME TO IMPLEMENT LPFM.....	17
CONCLUSION.....	19

## Summary

To create an appreciable number of LPFM stations, the Commission proposes a harmful relaxation of existing FM interference protections. As NAB's receiver study demonstrates, to abandon or modify those protections at this time would be disastrous. The proposed LPFM service would create new interference in densely populated urban areas to the detriment of all – the public, existing FM licensees, and proposed LPFM operators who would experience disproportionate interference over a small service area. In the *Notice*, the Commission does not offer any steps to ensure that existing FM stations and their listeners would be protected. If the Commission is dedicated to implementing LPFM service, it should, at a minimum, conduct a rigorous technical and cost-benefit study.

The Commission's reasons for proposing LPFM service are based upon incorrect assumptions and are incongruent with the proposal itself. The Commission believes that LPFM service will counteract a perceived loss of media diversity, but Congress already determined the appropriate levels of diversity, and, in any event, media diversity has never been greater given the impact of the internet. Moreover, the implementation of LPFM would not foster new opportunities for new radio ownership. Instead, LPFM licensees would face the same high fixed costs as full power stations but would not command the same economic base, advertiser and listener support, or broadcast expertise necessary to ensure the viability of the LPFM service.

Implementing LPFM at this time would not be a reasonable exercise of the Commission's rule making powers. Not only would the proposed LPFM service hinder the implementation of digital radio – which will require a robust FM band to tolerate a lengthy transition – but the level of interference caused to existing full power stations and new LPFM stations would have no public interest benefit.

In light of the research data being submitted in this proceeding, Cox urges the Commission not to authorize LPFM service until such time as further studies regarding interference and the economic viability of this service can be completed and fully analyzed by the industry and the public. Delay also is necessary to ensure that digital radio technology is permitted to grow and mature.

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**COMMENTS OF COX RADIO, INC.**

Cox Radio, Inc. (“Cox”),<sup>1</sup> by its attorneys, submits herewith its comments in response to the Commission’s Notice of Proposed Rule Making<sup>2</sup> proposing the creation of a new low power FM (“LPFM”) broadcast service. As shown herein, the Commission should refrain from implementing an LPFM service. Although the Commission’s goal to increase the nation’s diversity of media voices is laudable, the Commission’s LPFM proposal would have none of the intended benefits and likely will cause more harm to diversity than good.

As the Commission admits, its existing interference protection standards essentially preclude the creation of a new LPFM service. Relaxing the Commission’s time-tested and effective interference protections is not the answer, however. The Commission’s proposed LPFM service would create new interference in densely populated urban areas to the detriment of all parties involved. The public would lose relied-upon service. Existing radio licensees

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<sup>1</sup> Cox, either directly or through its wholly-owned subsidiary CXR Holdings, Inc., owns and operates over fifty AM and FM radio stations throughout the United States.

<sup>2</sup> Creation of a Low Power Radio Service, *Notice of Proposed Rule Making*, MM Docket 99-25, FCC 99-6 (rel. Feb. 3, 1999) (“*Notice*”).

would lose critical interference protection resulting in a loss of listeners. And proposed LPFM licensees would be severely handicapped in their ability to reach listeners in an already small service area. Introduction of an LPFM service at this time also would hinder severely the introduction and development of digital radio service. At the very least, the Commission should delay implementation of LPFM service until the completion of a rigorous economic and technical study and the maturation of digital radio technology.

**I. THE CREATION OF NUMEROUS INTERFERING STATIONS IS CONTRARY TO THE COMMISSION'S STATUTORY DUTY TO ENSURE EFFICIENT SPECTRUM USE.**

Ensuring the effective and efficient use of the electromagnetic spectrum is one of the Commission's fundamental responsibilities.<sup>3</sup> Congress, in the Communications Act of 1934, as amended,<sup>4</sup> directed the Commission to "make available . . . a rapid, efficient, Nation-wide and world-wide wire and radio communication service."<sup>5</sup> Under that mandate, the Commission may not abandon functional, well-considered rules and policies affecting the electromagnetic spectrum without carefully considering the facts and articulating a rational basis for the changes proposed.<sup>6</sup> Thus, any decision to change or relax the interference rules and standards applicable to FM radio stations must be based on significant cost-benefit and interference studies. At this point in time, the Commission is not in a position to make the changes it is proposing because

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<sup>3</sup> 47 U.S.C. §§ 151, 303(f),(g), 307(b) (1998).

<sup>4</sup> 47 U.S.C. § 151 et. seq. (the "Act").

<sup>5</sup> 47 U.S.C. § 151.

<sup>6</sup> "When an agency undertakes to change or depart from existing policies, it must set forth and articulate a reasoned explanation for its departure from prior norms." Telecommunications Research & Action Ctr. v. FCC, 800 F.2d 1181, 1184 (D.C. Cir. 1986).

they lack a rational basis and will be contrary to longstanding FCC precedent and policy on spectrum use.

**A. Relaxing Existing FM Interference Standards Would Impermissibly Create Harmful Interference.**

The Commission's proposal to relax existing interference protection standards for the purpose of creating an LPFM service<sup>7</sup> represents a dramatic departure from longstanding FCC spectrum policy. Over the past 20 years, and based on its concerns over spectrum integrity and efficiency, the Commission consistently has rejected proposals to authorize low power FM stations to operate on a primary basis. Instead, the Commission has determined time and again that full power FM stations "make more efficient use of the spectrum than . . . [low-power stations] in that the ratio of coverage to interference area is much larger for full-service stations than for low-power [stations]."<sup>8</sup> Accordingly, in 1978, the Commission stopped accepting applications for new low power Class D noncommercial FM stations and required existing facilities to upgrade or move to commercial channels because the Class D stations were "impeding the licensing of more efficient Class B and C stations."<sup>9</sup> In 1990, after an extensive review of FM translator operations, the Commission similarly declined to authorize the operation of FM translators on a primary basis.<sup>10</sup> The Commission consistently has determined that

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<sup>7</sup> Notice at ¶¶43-50.

<sup>8</sup> Amendment of Part 74 of the Commission's Rules Concerning FM Translator Stations, *Notice of Inquiry*, MM Docket No. 88-140, 3 FCC Rcd 3664, 3668 (1988).

<sup>9</sup> *Id.*

<sup>10</sup> Amendment of Part 74 of the Commission's Rules Concerning FM Translator Stations, *Report and Order*, MM Docket No. 88-140, 5 FCC Rcd 7212, 7213 (1990).

efficiency requires a maximized coverage to interference ratio and that the existing interference protection standards effectively provide for spectrum efficiency.

Other than making the uncontroverted assertion that existing interference protections would impede the creation of an LPFM service, the Commission offers little basis – technical or otherwise – that would justify abandoning years of policy and precedent. The Commission’s analogy to the level of interference experienced by third-adjacent grandfathered short-spaced stations<sup>11</sup> undermines rather than helps its argument. Typically the areas of possible interference for short-spaced stations are outlying and beyond core populations. The Commission, however, clearly contemplates that the proposed LPFM stations would operate in densely-populated urban areas (as well as less populated rural areas)<sup>12</sup> such that substantial interference will occur in densely populated areas. Such a result is at odds with any notion of efficient spectrum management.

But for a brief analysis of the consequences of eliminating the third-adjacent channel protection, the Commission spends scant effort in the *Notice* to assess or quantify in any regard the effect of the relaxed standards on existing full power FM stations. Alarming, the Commission characterizes interference extending nearly one mile from an LPFM antenna site – which inevitably could occur over densely populated areas – as “very small.”<sup>13</sup> The Commission appears too willing to accept the risk of interference without fully studying how severe the interference will be. For instance, the Commission does not offer any proposal for roll-outs,

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<sup>11</sup> *Notice* at ¶43.

<sup>12</sup> If the Commission perceived that LPFM stations could be economically viable in non-urban areas, it would not be proposing to eliminate existing interference protections.

<sup>13</sup> *Notice* at ¶43.

testing periods, or other exploratory steps that could be taken to ensure that existing radio stations and their listeners will be protected. If the Commission wishes to pursue implementing LPFM service, Cox urges the agency to oversee the preparation of a rigorous and extensive study – with participation from interested parties – that would include a technical and cost-benefit analysis.<sup>14</sup> Without such a study, it would be unreasonable for the Commission to approve this new service.

The NAB report on FM radio receivers being submitted today in this proceeding demonstrates the inefficiency of LPFM service and the necessity of retaining the existing interference protections intact.<sup>15</sup> In evaluating third-adjacent channel protections, for desired field strengths of 60 dBu/m, NAB found that, based upon median receiver performance, the D/U ratio needed to produce interference is  $-39.7$  dB<sup>16</sup> – essentially equal to the existing protection of  $-40$  dB.<sup>17</sup> Significantly, overall data revealed that receiver performance was more closely related to the strength of the undesired signal level rather than the D/U ratio, meaning that if new second- and third-adjacent channel stations were permitted to operate inside existing protected contours, they would cause harmful interference for existing listeners.<sup>18</sup> As the report states, the susceptibility of FM receivers to adjacent-channel interference is a function of the filtering

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<sup>14</sup> *E.g.*, the Commission should quantify proposed service population losses and gains.

<sup>15</sup> *See* NAB Comments, FM Receiver Interference Test Results Report (“NAB Receiver Study”).

<sup>16</sup> *Id.*

<sup>17</sup> 47 C.F.R. § 73.215(a)(2).

<sup>18</sup> *See* NAB Receiver Study. Note also that this tends to undermine the Commission assertion that as one gets closer to a broadcast station’s transmission site, the signal is less vulnerable to interference *Notice* at fn. 59.

employed in the IF stages of the tuner.<sup>19</sup> The lesser the slope of the receiver's filter skirts, the poorer the rejection characteristics of the FM receiver. Since the FCC adopted the existing interference standards, receiver manufacturers have not had any incentive to enhance technology to prevent certain types of interference because the Commission's rules do not permit such interference. In other words, advances in technology have not produced high-performance FM receivers designed to filter heretofore imaginary interference. Instead, advanced technology has allowed manufacturers to design *less costly* receivers intended to permit ownership by as great a number of persons as possible.<sup>20</sup> In the event the Commission chooses to mandate LPFM-interference-tolerant receiver standards, the hundreds of millions of existing receivers that would remain in operation, possibly for years, would be rendered ineffective.

Moreover, there is no one particular type of receiver that will be able to overcome the interference more successfully than another, and most consumers listen to FM radio on a variety of different receivers. Cox conducted its own survey regarding FM listeners and their receiver use, revealing that a substantial number of people listen to various types of receivers.<sup>21</sup> The popularity of current radio service is undeniable: seventy percent of persons surveyed listened to the radio at home and ninety-five percent listened in the car. Of those listening at home, seventy-four percent listened to home stereos, thirty-four percent listened to portable radios, twenty-seven percent listened to clock or desk radios, and twelve percent listened to personal radios. The NAB Receiver Study indicates that, while car radios and home stereos generally

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<sup>19</sup> *Id.*

<sup>20</sup> This is of no small consequence. Until FM receivers decreased in cost, the FM band was not widely used. The recent success of FM radio is due in part to the decreased cost of FM receivers.

<sup>21</sup> Cox surveyed 413 persons in the Atlanta, Georgia area.

performed better than personal, portable and clock radios, only a very few receivers could tolerate interference levels greater than those currently permitted.<sup>22</sup> A relaxation of the interference protections likely would render those few receivers ineffective as well. Given the extent to which persons listen to FM radio, and the variety of receivers they use, relaxing the protection standards would have a widespread and devastating effect on the full power FM service.

Cox urges the Commission not to relax existing interference protection standards. There simply is no justification for such a radical policy departure. “While agency expertise deserves deference, it deserves deference only when it is exercised; no deference is due when the agency has stopped shy of carefully considering the disputed facts.”<sup>23</sup> Agencies are bound to adhere to their own rules and procedures.<sup>24</sup> Moreover, “[t]he Commission’s notion of the public interest cannot justify its failure to abide by its own rules and to act in a manner consistent with its own precedents.”<sup>25</sup> Hastily implementing a new and ill-considered service – and concurrently abandoning reliable and relied-upon interference protection standards without a rational basis – falls far short of the Commission’s statutory duty to “make available . . . a rapid, efficient, Nation-wide and world-wide wire and radio communication service.”<sup>26</sup>

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<sup>22</sup> NAB Receiver Study.

<sup>23</sup> *Cities of Carlisle and Neola v. FERC*, 741 F.2d 429, 433 (D.C. Cir. 1984)

<sup>24</sup> *Teleprompter Cable Comm. Corp. v. FCC*, 565 F.2d 736, 742 (D.C. Cir. 1977).

<sup>25</sup> *Id.*

<sup>26</sup> 47 U.S.C. § 151.

**B. Interference Problems Would Be Exacerbated by the Commission's Limited Enforcement Capacity.**

The Commission assumes incorrectly that new LPFM licensees would operate in accordance with authorized parameters. As the Commission makes plain, no entities with broadcasting experience would be permitted to own LPFM stations.<sup>27</sup> It is not difficult to predict that even well-intentioned LPFM licensees may find their facilities operating in a non-compliant fashion. In the best of circumstances, the Commission's already limited enforcement capacity would be strained by the introduction of numerous swaths of both "permissible" (at least under the proposed relaxed rules) and impermissible FM interference. The problem is compounded by the increased costs that would be imposed upon existing licensees forced to monitor numerous pockets of LPFM interference.

Whether the FCC would be able to monitor LPFM operations effectively is questionable. The *Notice* contemplates opening the door to allow so-called "rehabilitated" pirate broadcasters to become LPFM licensees.<sup>28</sup> As an initial matter, it has been very difficult for the Commission to monitor and shut down illegal FM operations. The experiences of Cox station WHPT-FM (Sarasota, Florida) are noteworthy. In July 1996, the station filed with the Commission an official complaint regarding the unauthorized broadcasts of a pirate operation on the second-adjacent channel that was creating substantial interference with WHPT-FM's signals.<sup>29</sup> Numerous citizens, believing they were listening to WHPT-FM, complained to the station about programming being aired by the pirate broadcaster that, *inter alia*, promoted illegal drug use.

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<sup>27</sup> *Notice* at ¶58.

<sup>28</sup> *Id.* at ¶67.

<sup>29</sup> Letter from Elizabeth McGeary to Sandy Watson, *Compliance and Information Bureau* (July 24, 1996).

WHPT-FM filed additional complaints in October 1996 and December 1996, providing the Commission with supporting information.<sup>30</sup> In April 1997, the Commission finally responded to the complaints by informing the station that the Department of Justice was investigating the pirate operations. However, the Commission was unable to terminate the pirate broadcasts until November 1997 – some sixteen months after the initial complaint was filed.<sup>31</sup> In fact, the pirate broadcasters’ attorney charged afterward that, apparently because of the number of such illegal pirate operations, the government’s seizure constituted “selective enforcement.”<sup>32</sup>

Surely, the Commission would have greater difficulty terminating illegal LPFM operations than pirate broadcasts given the procedural protections that would be available to LPFM licensees. The Commission increasingly is relying on licensees’ certifications rather than a thorough investigation or review of station applications to ensure that FCC licensees are complying with FCC rules.<sup>33</sup> Thus it will be a formidable task for the Commission to monitor LPFM operations and ensure compliance with technical rules, making it difficult for the agency to pursue and prosecute even existing unauthorized broadcasters.<sup>34</sup> The combination of a proposed dramatic increase in the number of FM stations, the Commission’s strained and limited

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<sup>30</sup> Letter from Elizabeth McGeary to Gerard Daubar, *FCC* (Oct. 7, 1996); Letter from Elizabeth McGeary to Gerard Daubar, *FCC* (Dec. 12, 1996).

<sup>31</sup> Richard Danielson, *Marshals Take Out Pirate Radio*, ST. PETERSBURG TIMES, Nov. 20, 1997, at 1A.

<sup>32</sup> *Id.*

<sup>33</sup> 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, FCC 98-281, 14 CR 351, at ¶22 (1998).

<sup>34</sup> While estimates vary on the number of pirate broadcasters, the number is sufficient to generate protest marches. Frank Ahrens, *Yo Ho Ho and A Battle of Broadcasters*, WASH. POST, Oct. 6, 1998, at D2.

enforcement capacity, and the prospect of “rehabilitated” pirate broadcasters acquiring licenses dangerously exacerbates interference concerns.

**C. LPFM Service Would Create Other Inefficiencies.**

The Commission traditionally has established policies promoting broadcast service for the largest number of recipients.<sup>35</sup> In that regard, the Commission encourages FM stations to maximize coverage to the extent possible while minimizing interference.<sup>36</sup> The result is that many FM stations have regular listenership outside of their protected contour. The Atlanta metropolitan area, for example, extends miles beyond many FM stations’ protected contours, yet those stations routinely report significant listenership outside the protected contour. The Commission’s rules also contemplate listenership beyond protected contours, as evidenced by Section 74.1204(f) of the FCC’s rules which prohibits authorization of FM translator stations in areas outside an FM station’s protected contour if the full power FM station can demonstrate regular listenership in such areas.<sup>37</sup> Placing LPFM stations in even so-called “unprotected” areas will deprive regular listeners of desired full power FM service.

Additionally, surrounding full power FM broadcast service areas with smaller LPFM stations on second- and third-adjacent channels would prevent stations from maximizing service or modifying their facilities. Full power FM stations would lose the ability to provide service to shifting populations and rapidly growing areas – a significant factor in light of the exploding

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<sup>35</sup> See, e.g., Amendment of Part 74 of the Commission’s Rules Concerning FM Translator Stations, *Notice of Inquiry*, MM Docket No. 88-140, 3 FCC Rcd 3664, 3668 (1988).

<sup>36</sup> See, e.g., 47 C.F.R. § 73.315(b).

<sup>37</sup> 47 C.F.R. § 74.1204(f).

urban and suburban sprawl characterizing an increasing number of metropolitan areas.<sup>38</sup>

Creating an LPFM service would eliminate the flexibility necessary for full power FM stations to respond to the ever-changing needs of their communities. Full power FM stations also would be unable to respond to unanticipated circumstances, such as the need to relocate antenna facilities due to displacement by newly installed digital television facilities. If LPFM stations existed today, displaced FM stations would have difficulty relocating their antenna sites, resulting in a loss of service to existing listeners. Introducing this inefficiency to the FM Table is contrary to the Commission's statutory duty and would have a debilitating effect on existing, relied-upon FM service.

## **II. THE LPFM PROPOSAL WOULD NOT ACCOMPLISH THE COMMISSION'S STATED GOALS.**

In the Telecommunications Act of 1996, Congress significantly relaxed Commission-established limits on local radio ownership and fixed clear boundaries on the level of permissible consolidation.<sup>39</sup> In addition to the ownership rules, the Commission over the years wisely has protected the integrity of the FM Table of Allotments by establishing rules that ensure that listeners receive reliable service. As a result, radio stations have increased in value – as Congress surely intended.

The Commission expresses concern in the *Notice* that as a further result of ownership rule changes, “consolidation may have a significant impact on small broadcasters and potential new

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<sup>38</sup> If the FM Table of Allotments were generated from scratch today, while the same principles of central location with power sufficient to reach the entire community would be applied, the results probably would be substantially different.

<sup>39</sup> Pub. L. No. 104-104, 110 Stat. 56, § 202(b)(1)(D) (1996).

entrants into the radio broadcasting business by driving up station prices.”<sup>40</sup> The Commission then seems to conclude tentatively that consolidation has resulted in less program diversity and that full power stations are not adequately meeting certain needs of their communities of license. Implementing LPFM is the Commission’s proposed solution for this purported problem: “In creating these new classes of stations, our goals are to address unmet needs for community-oriented radio broadcasting, foster opportunities for new radio broadcast ownership, and promote additional diversity.”<sup>41</sup>

The Commission’s rationale, however, is flawed because it is based on incorrect assumptions. First, it runs contrary to the decision made by Congress in 1996 that relaxed radio ownership rules would be in the public interest. By establishing these new limits on radio ownership, Congress determined what levels of diversity were appropriate. Accordingly, absent a clear directive from Congress, the Commission should not propose initiatives that could undermine Congress’s policy decisions.

Second, the Commission mistakenly assumes that consolidation has resulted in less diversity. The Commission offers no evidence that radio consolidation has resulted in a reduction of program diversity, though the agency appears more than prepared to rely on such an assertion. The Commission cites comments that contend, without support, that consolidation has resulted in the loss of “less profitable formats.”<sup>42</sup> However, broadcasters have little incentive to duplicate other media voices (or, for that matter, their own voice, singular though it isn’t), especially in an increasingly competitive market. Instead, broadcasters must distinguish

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<sup>40</sup> *Notice* at ¶10.

<sup>41</sup> *Id.* at ¶1.

<sup>42</sup> *Id.* at ¶8.

themselves if they wish to grow and protect market share. One reasonably would expect that program diversity would increase in the face of the stiffer competition brought by increased station value. Based upon the evidence, or lack thereof, that diversity of ownership necessarily results in program diversity, adoption of the LPFM proposal would be unreasonable.

However, independent of *program* diversity, even if the Commission's goal simply is to increase ownership diversity for diversity's sake, any advances that the Commission's proposal would garner dim in comparison to those the private marketplace already provides and promises to provide through the internet. Undoubtedly, the internet represents an unprecedented explosion of access for individuals, empowering each person with the inexpensive ability to reach the entire globe and spread any message far and wide in a variety of multimedia forms. If the Commission solely were interested in its goal of increasing the diversity of media voices, it would focus its efforts on ensuring the development and deployment of broadband access to each household so that the full opportunity offered by the internet could be enjoyed by all. Instead, the *Notice* improperly dismisses the internet's contribution by claiming that internet access is not "sufficiently mobile or ubiquitous to be considered a substitute for radio."<sup>43</sup>

Cox respectfully disagrees. Today, there is an unprecedented number of media voices on the internet and all with distribution far greater than full power radio stations, much less an LPFM station. The internet offers a media platform for voices ranging from the largest of media companies to individuals. This includes those who provide *internet radio*.

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<sup>43</sup> *Id.* at ¶12. The Commission apparently finds the internet ubiquitous enough to justify requiring that applications for LPFM stations be filed electronically or to support its assertion of demonstrable interest in the creation of LPFM. *Id.* at ¶¶95, 11.

In the first quarter of 1999, 40% of the U.S. population 16 or older accessed the internet, representing a phenomenal annual growth of 25%.<sup>44</sup> For internet radio, the promising growth rate is equally impressive. In January 1999, the number of Americans who had listened to internet radio (13% of all Americans) had more than doubled in six months.<sup>45</sup> The penetration of online audio has occurred more quickly than for other audio technologies.<sup>46</sup> More than 2,000 internet radio stations are operating, taking the “power of the mass media and putting it in the hands of the masses.”<sup>47</sup> With wireless internet receivers being introduced, it is not difficult to envision a plethora of LPFM-type stations “broadcasting” via the internet to interested listeners.<sup>48</sup> Additionally, the internet lowers the entry cost for those who would provide internet radio, or, as a general matter, any other internet service, as compared to the brick-and-mortar broadcasting business. Would-be operators need only a server computer with a high-speed internet connection and audio streaming software.<sup>49</sup> While the Commission cites, without quantification, the lower entry cost of establishing an LPFM station as justifying the creation of

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<sup>44</sup> IntelliQuest Research (April 19, 1999) <[www.intelliquest.com/press/release78.asp](http://www.intelliquest.com/press/release78.asp)>.

<sup>45</sup> The Arbitron Company, Arbitron Internet Listening Study II – 1999: Radio and E-commerce (visited July 19, 1999) <[www.arbitron.com/studies/E-Commerce.pdf](http://www.arbitron.com/studies/E-Commerce.pdf)>.

<sup>46</sup> *I.e.*, AM or FM radio, CDs, cassettes, etc. *Id.*

<sup>47</sup> Thomas E. Weber, *Web Radio: No Antenna Required*, WALL ST. J., July 28, 1999, at B1.

<sup>48</sup> 3Com’s latest hand-held Palm can wirelessly link to a number of web sites. *See*, Steve Zurier, *Extending The Internet*, INTERNETWEEK, June 21, 1999. “The Wireless Internet will bring the hundreds of millions of wireless users onto the Internet through wide-band, packet-radio technologies that support telephony, data and video, and transform the network from a bottleneck into a facilitator for application development.” Tony Rybczynski, *Combining Telephony and IP for Business Advantage*, BUSINESS COMMUNICATIONS REVIEW, May 1, 1999, at S1. Rooftop Communications already has introduced its “Internet Radio,” a combination of an wireless internet access device and IP router, and has developed a group of protocols it calls Internet Radio Operating System (“IROS”) that it says will be practical and highly cost-effective. Tyra Turner, *Answers from Above*, TELE.COM, June 7, 1999.

the service, it is unreasonable for the Commission to ignore the internet's minimal entry costs and assert that the internet provides "no comparable alternative" to the opportunities that LPFM would purportedly offer.<sup>50</sup> The Commission apparently has improperly drawn a conclusion about radio station cost and market access that is not supported by real-world data.

The LPFM proposal also is incompatible with the stated purpose of "foster[ing] opportunities for new radio broadcast ownership."<sup>51</sup> By proposing a reduced bandwidth for LPFM operations, the Commission is ensuring that new entrants could not employ off-the-shelf broadcast equipment, thereby increasing station costs and eroding the speculative profit margin that may exist.<sup>52</sup> Moreover, if the Commission abandons second- and third-adjacent interference protections, LPFM stations would receive substantial interference from full power stations. The result would be an inferior service with spotty reception over a minimal service area – all qualities that are inconsistent with a viable business model.<sup>53</sup>

The Commission also cannot ignore historical data in evaluating whether LPFM actually will foster opportunities for new entrants. A more likely result is that the industry would become increasingly fragmented economically and the small operators of radio stations would be unable to sustain economically viable operations. Indeed, the Commission should look back upon the reasons it cited for modifying its radio broadcast ownership policies in 1992:

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<sup>49</sup> Thomas E. Weber, *supra* note 47.

<sup>50</sup> *Notice* at ¶12.

<sup>51</sup> *Id.* at ¶1.

<sup>52</sup> *Id.* at ¶55. Such an approach also could eliminate the ubiquity of receivers, the notion on which the Commission relies to discount the present significance of internet radio.

<sup>53</sup> If LPFM is adopted, the inevitable next issue would be for the Commission to resolve the disproportionate effect of interference on LPFM stations. Cox will not speculate here on the outcome of that proceeding.

[A]s a direct result of [the broadcast industry's] tremendous market fragmentation, many participants in the radio business are experiencing serious economic stress.... [S]mall stations in particular have been operating near the margin of viability for years.... [The] decline [in revenues], combined with rising programming, sales and general and administrative costs, has led to a sharp decrease in operating margins.... Moreover, the overall industry figures mask the fact that the outlook for small radio stations, which comprise the bulk of the radio industry, is particularly bleak.<sup>54</sup>

The Commission concluded that the radio “industry’s ability to function in the ‘public interest, convenience and necessity’ is fundamentally premised on its economic viability” and that *reducing* the number of station owners was the appropriate course for fostering radio service.<sup>55</sup> Whether proposed LPFM stations could exploit their “smallness” and become economically viable by sufficiently reducing their operating costs would remain to be seen, but radio remains a high fixed cost business and the media market fragmentation that slashed operating margins is an even greater force today. In this environment, it is very unlikely that LPFM would foster opportunities for new entrants.

Furthermore, the Commission fails to consider the availability of AM licenses as an alternative to LPFM. In many cases, the cost of purchasing a small, constructed, and fully-equipped AM station would not exceed the cost of placing into operation an entirely new LPFM station. As an example, Cox sold an AM station in Piqua, Ohio to a small broadcaster for a

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<sup>54</sup> Revision of Radio Rules and Policies, *Report and Order*, MM Docket 91-140, 7 FCC Rcd 2755, 2756-2760 (1992).

<sup>55</sup> *Id.* at 2760.

purchase price of only \$75,000. The Commission must consider whether other *existing* services can provide the same opportunities for new entrants.<sup>56</sup>

Although the Commission's goal to enhance program diversity is important, the proposed LPFM service will not accomplish that goal. The internet provides a far greater and likely less expensive opportunity for individuals and small organizations to reach out to the public. The Commission's proposal also fails to foster new radio station ownership because it would expose would-be LPFM licensees to predictable and familiar economic threats. Like a great hockey player, the Commission should be moving to where the puck is going – by fostering internet radio and wireless internet receivers – and not to where the puck was. Without establishing a congruent basis for adopting the LPFM proposal, it would be unreasonable for the Commission to implement the service.

### **III. NOW IS NOT THE TIME TO IMPLEMENT LPFM.**

In the event the Commission can establish a supportable basis for adopting the LPFM proposal, Cox urges the Commission to delay its implementation. Initiating LPFM service at this time would impede the development of nascent digital radio technology. If LPFM ultimately is adopted, its implementation should not occur until digital radio technology sufficiently has matured.

The Commission properly is concerned about the impact LPFM would have on the development of terrestrial digital radio service using “IBOC” technology.<sup>57</sup> Changing a familiar

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<sup>56</sup> It is unreasonable for the Commission to disregard AM because of “significant interference” while proposing to introduce significant interference to the FM band by relaxed interference protections. *Notice* at ¶17.

<sup>57</sup> *Id.* at ¶49.

analog radio landscape now inevitably will hinder digital radio's development. The concurrent implementation of digital radio and LPFM unnecessarily will introduce uncertainty that would liquefy the plans and potential for both. The urban-area interference that likely would occur as a result of the relaxed interference standards would disrupt and restrict the effective delivery of digital signals. For those who wish to promote the development of new, innovative, and advanced services in radio broadcasting, it is difficult to contemplate a worse time than now for the Commission to implement its LPFM proposal.

One example of the consequential problems is made manifest in the *Notice's* enthusiastic and deliberate speculation that digital radio receivers could be configured, *inter alia*, to filter received interference from LPFM stations.<sup>58</sup> The Commission ignores the increased development costs (and inevitable receiver costs) and the opportunity cost such would extract from the new digital service. Requiring layers of unknown engineering solutions for IBOC receivers to prevent one undeveloped and untested service from interfering with another undeveloped and untested service simply cannot be in the public interest. The high level of speculation necessary to engage in this exercise at this point in time reveals how detrimentally premature it would be to adopt the LPFM proposal now.

Nothing would be lost if the Commission delayed implementing LPFM. The intended opportunities for new entrants would remain available. In addition, delaying implementation would allow the Commission to demonstrate whether LPFM could be provided to the extent proposed without damaging the integrity of existing FM service. In short, it is difficult to identify any compelling reason for implementing LPFM at this time.

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<sup>58</sup> *Id.*

Cox urges the Commission to focus its regulatory efforts advancing technology rather than hindering it. For a successful digital radio roll-out, the integrity of the FM band must be robust to tolerate an inevitably lengthy transition period and must not be perforated by the introduction of LPFM service. This approach is the same as the Commission's reasoning behind rejecting the expansion of FM service through the operation of FM translators on a primary basis:

Such a change also would be particularly undesirable while we are implementing Docket No. 80-90 through the authorization of a large number of new and upgraded stations because the potential for interference between these new facilities and new translators is substantially greater until most or all of the new and upgraded primary stations are operating.<sup>59</sup>

In addition, by implementing LPFM at this time, the Commission appears willing to anchor new LPFM entrants with soon-to-be antiquated analog technology. If the Commission wishes to foster opportunities for new entrants, it should create policies that promote advanced technologies.

## CONCLUSION

Relaxing existing and effective FM interference protection standards to implement LPFM service would not provide the public interest benefits sought by the Commission. The research data demonstrates that existing interference protections are warranted and that LPFM stations, if created as proposed, would create harmful interference (and receive interference) in densely populated areas. The creation of LPFM service also would not further the Commission's stated

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<sup>59</sup> Amendment of Part 74 of the Commission's Rules Concerning FM Translator Stations, *Report and Order*, 5 FCC Rcd at 7215-16.

“diversity” goals and it would impede the development of advanced technologies. Accordingly, Cox urges the Commission not to relax existing interference protections, and, at a minimum, to conduct a study to assess fully the economic viability and the technical implications of an LPFM service.

For the reasons stated herein, Cox respectfully urges the Commission not to implement its proposed LPFM service.

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