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

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In the Matter of	)	
	)	
1998 Biennial Regulatory Review -- Spectrum Aggregation Limits for Wireless Telecommunications Carriers	)	WT Docket No. 98-205
	)	
Cellular Telecommunications Industry Association's Petition for Forbearance From the 45 MHz CMRS Spectrum Cap	)	
	)	
Amendment of Parts 20 and 24 of the Commission's Rules -- Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap	)	WT Docket No. 96-59
	)	
Implementation of Sections 3(n) and 332 of the Communications Act	)	GN Docket No. 93-252
	)	
Regulatory Treatment of Mobile Services	)	

REPLY COMMENTS OF GTE

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SUMMARY

In its opening comments in this proceeding, GTE recommends that the Commission eliminate the CMRS spectrum cap in conjunction with other measures designed to balance the interest in promoting efficiency and innovation with concerns about the potential for anti-competitive conduct. Specifically, GTE recommends that the Commission: (1) eliminate the CMRS spectrum cap; (2) possibly retain the cellular cross-interest rule on an interim basis; (3) rely on antitrust enforcement mechanisms to address any concerns about the potential for anti-competitive behavior; and (4) monitor the CMRS marketplace to assess whether additional allocations might be needed to facilitate development of future advanced services.

As discussed in detail in these Reply Comments, the record supports GTE's recommended approach. First, the record and applicable law demonstrate that the approach outlined in GTE's comments is consistent with the Commission's obligations under the Section 11 biennial review process. Meaningful competition has arrived in the CMRS marketplace and anti-competitive behavior is a virtual impossibility. At the same time, retention of the spectrum cap may undercut the Commission's goals by inhibiting the introduction of advanced services and technologies. As such, the cap is precisely the sort of regulation that Section 11 directs the Commission to repeal.

As support for elimination of the spectrum cap, GTE and numerous commenters have submitted data documenting the tremendous change in the CMRS marketplace since the spectrum cap was adopted in 1994. The record confirms that the vigorous competition characterizing the CMRS marketplace today makes anti-competitive conduct exceedingly difficult and irrational from an economic standpoint. In addition, as

outlined in GTE's comments, six structural attributes of the marketplace further deter anti-competitive behavior. These are: (1) national providers and pricing plans; (2) the difficulty of dominating the market for both spectrum and equipment; (3) the limited spectrum requirements needed to compete effectively in today's mobile voice market; (4) declining entry barriers; (5) the durable nature of spectrum; and (6) the prohibitive costs of spectrum warehousing.

Furthermore, numerous commenters agree that continued application of the spectrum cap will have a damaging impact on the CMRS marketplace and consumers. Specifically, the record indicates that retention of the cap is likely to: (1) inhibit introduction of advanced services, such as bandwidth-intensive Third Generation ("3G") technologies; (2) prevent wireless carriers from meeting growing consumer demand for bundled voice and advanced data offerings; and (3) hinder realization of important market efficiencies.

On the basis of the evidence in the record, GTE submits that its four-part plan represents the most effective means for balancing the need to facilitate efficiency and development of innovative products and services against any residual concerns about the potential for anti-competitive conduct. GTE's recommended approach takes into account the attributes of the CMRS marketplace that police against anti-competitive behavior, the availability and effectiveness of antitrust enforcement mechanisms, and the evolving nature of new technologies. In short, GTE's plan replaces a regulatory constraint founded in the duopoly market structure of the past with an approach designed to accommodate the mobile services marketplace of the future.

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REPLY COMMENTS OF GTE

GTE Service Corporation and its below-listed affiliates[1] ("GTE") respectfully submit this reply to the opening comments filed in response to the Commission's Notice

[1] GTE Alaska, Incorporated, GTE Arkansas Incorporated, GTE California Incorporated, GTE Florida Incorporated, GTE Hawaiian Telephone Company Incorporated, The Micronesian Telecommunications Corporation, GTE Midwest Incorporated, GTE North Incorporated, GTE Northwest Incorporated, GTE South Incorporated, GTE Southwest Incorporated, Contel of Minnesota, Inc., GTE West Coast Incorporated, and Contel of the South, Inc., GTE Communications Corporation, and GTE Wireless Incorporated.

of Proposed Rulemaking ("*Notice*") in the above-captioned proceeding.[2] A wide array of commenters with diverse interests provided the Commission with evidence demonstrating that the CMRS spectrum cap is not necessary to promote competition. In fact, as illustrated by GTE and others, rather than advancing competition as intended, continued application of the spectrum cap may hamper the ability of CMRS carriers to deploy certain advanced capabilities such as high-speed, bandwidth-intensive Third Generation ("3G") products and services. Based on the record generated in response to the *Notice*, GTE believes that the public interest requires elimination of the spectrum cap.

In its opening comments, GTE recommends a four-part plan for regulation of the CMRS marketplace. GTE suggests that the Commission: (1) eliminate the CMRS spectrum cap; (2) consider interim retention of the cellular cross-interest rule; (3) rely on antitrust enforcement mechanisms to address any anti-competitive concerns; and (4) monitor the marketplace to determine whether additional spectrum is needed to facilitate the development of future advanced services. As discussed in Section I of these Reply Comments, this approach is fully consistent with the Congressional intent undergirding the biennial review process, which is the basis for the instant proceeding. Section II presents overwhelming and compelling evidence from GTE and other commenters demonstrating that the CMRS marketplace is rapidly evolving and fully competitive. Moreover, as Section III explains, six structural elements of the CMRS

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[2] *1998 Biennial Regulatory Review – Spectrum Aggregation Limits for Wireless Telecommunications Carriers,* FCC 98-308 (rel. Dec. 10, 1998) ("*Notice*").

marketplace make it particularly resistant to anti-competitive conduct. Section IV describes the significant losses in innovation, efficiencies, and economies that commenters indicate will flow from maintenance of the spectrum cap. Finally, the substantial record support for GTE's overall regulatory prescription is documented in Section V.

I. THE COMMISSION FACES A SUBSTANTIAL BURDEN IN JUSTIFYING RETENTION OF THE SPECTRUM CAP

Congress's Section 11 biennial review process charges the Commission with determining whether any regulation applicable to telecommunications service providers "is no longer necessary in the public interest as the result of meaningful economic competition between providers of such service."[3] In assessing the record gathered in this docket, the Commission bears the "burden of demonstrating that continued regulation will promote competitive market conditions."[4] Thus, the Commission may maintain only those regulations for which it can "demonstrate a clear cut need."[5]

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[3] 47 U.S.C. § 161(a)(2). As the Commission acknowledges in the *Notice*, even where regulation is necessary, "the Commission should endeavor to craft narrowly any regulation to impose only the minimum restraint on the market necessary to achieve the public interest." *Notice*, ¶ 5.

[4] See Comments of Bell Atlantic Mobile Inc. at 5-6 ("Bell Atlantic Mobile") (*citing Petition of the Connecticut Department of Public Utility Control to Retain Regulatory Control of the Rates of Wholesale Cellular Service Providers, Order*, 10 FCC Rcd 7025, 7031 (1995), *aff'd* 78 F.3d 351 (2d Cir. 1996); *see also* Comments of BellSouth Corp. at 5 ("BellSouth") (citing *Notice*, Commissioner Michael Powell's Separate Statement at 1).

[5] *See* Comments of Bell Atlantic Mobile at 6.

As Bell Atlantic Mobile puts it, the Commission must "proceed[ ] through three steps in considering CMRS regulation:"[6]

(1) Identify the specific goals to be achieved;

(2) Explain how the rule in question will achieve those goals;

(3) Explain why the rule is the least restrictive means for doing so.[7]

Bell Atlantic Mobile summarizes the Commission's task as follows: "It is not enough for a rule merely to be a means to achieve particular ends; it must also be the *minimum necessary* to accomplish those ends."[8]

Guided by these principles, a review of the record clearly indicates (1) that the spectrum cap is not necessary to achieve the Commission's goals, and (2) that the cap certainly is not the least restrictive means of accomplishing these ends. Meaningful competition has arrived in the CMRS marketplace and there are ample corresponding protections against anti-competitive conduct. At the same time, there is extensive evidence demonstrating that, in addition to being unnecessary to achieve the Commission's goals, retention of the spectrum cap may actually undercut FCC policies. This being the case, the record makes plain that the Commission cannot satisfy the burden it faces to maintain the cap. Indeed, the record dictates that the Commission

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[6] *Id.* at 4.

[7] *Id.*

[8] *Id.*

should eliminate the spectrum cap rule and "place its trust[ ] in the operation of market forces . . . [to] better serve[ ] the public interest than regulation."[9]

II. THE CMRS MARKETPLACE HAS CHANGED DRAMATICALLY SINCE THE COMMISSION ADOPTED THE SPECTRUM CAP

As GTE stresses in its opening comments, the mobile services marketplace has been transformed since the Commission adopted the spectrum cap in 1994.[10] Among the most significant developments are the near quadrupling of licensed CMRS spectrum, six new PCS licensees in each market, the dawn of national carriers and nationwide pricing plans, and a steady decline in CMRS prices. Coupled with spiraling consumer demand, these factors provide evidence of a highly competitive CMRS marketplace that no longer requires the artificial constraint created by the spectrum cap.

The metamorphosis in the CMRS marketplace is difficult to deny. Indeed, the vast majority of commenters concur that competition in the CMRS marketplace is vigorous. Omnipoint observes that even "[s]ince the last review of the spectrum cap rules in 1996, the CMRS marketplace has changed considerably."[11] Bell Atlantic Mobile summarizes the developments as follows: "[t]he rapid infusion of new spectrum has created an industry in which competition is robust and increasing – the number of

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[9] *Notice*, ¶ 5.

[10] *See* Comments of GTE at 6-11.

[11] Comments of Omnipoint Communications, Inc. at 3 ("Omnipoint") (citation omitted).

suppliers is increasing; substantial new wireless capacity is being added; and prices are falling."[12]

In fact, even since GTE filed its initial comments in this proceeding, it announced its own nationwide and wide-area regional pricing plans. GTE's AmericaChoice gives customers the peace of mind to use their phone to call wherever and whomever they want within the U.S. With AmericaChoice, there are no roaming charges within the 50 states and no domestic long distance charges. GTE also launched two regional rate plans designed for customers who travel primarily within the eastern/western United States. For an additional monthly charge, HomeChoice customers may select the EasternChoice/WesternChoice option, which permits customers to use included minutes within specified regions. GTE's recent innovative pricing plans offer even more evidence of the rapidly changing and increasingly competitive CMRS industry.

As referenced by Bell Atlantic Mobile, this competitive explosion includes vast expansion of consumer choice and rapid decreases in price.[13] A number of commenters point out that 87 percent of the U.S. population now has at least three mobile telephone carriers to choose from, while 68 percent of the population has at least four competitive choices.[14] AirTouch notes that six or even seven competitive

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[12] Comments of Bell Atlantic Mobile at 16 (internal quotations omitted).

[13] *Id.*

[14] Comments of GTE at 8; *see also* Comments of AT&T Wireless Services, Inc. at 2 ("AT&T Wireless"); Comments of Bell Atlantic Mobile at 16; Comments of BellSouth at 6-7.

providers now serve many markets.[15] Emerging LMDS and MSS offerings only augment these competitive options.[16]

The record also shows that consumers do not need six or seven carriers in the CMRS market to gain the benefits of vigorous competition. Most agree that there is no such thing as an "ideal number" of carriers.[17] The only hard data on this point suggests that the benefits of competition arrive as soon as the new third carrier begins to compete with the two incumbent cellular providers. As Bell Atlantic Mobile notes, "[s]tatistical analyses of cellular price data indicate that the presence of only one additional firm caused CMRS prices to fall."[18]

With falling prices and more choices, consumers have been quick to take full advantage of the dynamic competition that characterizes the CMRS industry. AirTouch states that "[c]ustomers are not locked into one single carrier, and they routinely switch wireless carriers on the basis of price and service quality."[19] The experience of SBC Wireless bears this out. "The success of PBW [Pacific Bell Wireless] in California and

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[15] Comments of AirTouch Communications, Inc. at 6-7 ("AirTouch").

[16] *See, e.g.*, Comments of the Cellular Telecommunications Industry Association at 7 ("CTIA") (noting the "expanding fringe of smaller firms (e.g. SMRs, satellite providers) render collusion among CMRS providers unlikely").

[17] *See* Comments of Bell Atlantic Mobile at 8-9 (noting that "there is no magic number of CMRS competitors any more than there is a 'right' number of competitors in the wireless handset industry or any other business").

[18] *Id.* at 17. Bell Atlantic Mobile also notes that "comparable evidence is lacking that a second or third PCS provider lowered prices further." *Id.* *See also* Comments of BellSouth at 7 ("BellSouth") (noting falling prices).

[19] *See* Comments of AirTouch at 7 (citations omitted).

Nevada in signing almost a million customers in less than [two] years, despite the presence of long-time established cellular carriers in each market, is perhaps the best empirical evidence that the CMRS marketplace is fully competitive."[20]

The Commission should not be distracted from the overwhelming empirical evidence of robust CMRS competition by the nits offered up by a few commenters. Criticisms levied by these commenters include charges that the CMRS market does not have the right number of competitors, that the competitors are not the right kinds of companies, and that customers are not properly distributed across providers. First, as set out above, there is no "right" number of competitors that must exist to prove competition.[21] The vital fact is that consumers have choices and service and innovation are thriving. Second, in response to Wireless One's concerns about the fate of various C Block licensees,[22] GTE notes that there are no "right" kinds of companies. Although GTE appreciates the concerns voiced by Wireless One, they involve discrete issues applicable to certain providers that should be addressed, if at all, in other proceedings. Third, some commenters point out that most CMRS customers still obtain their service

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[20] Comments of SBC Wireless, Inc. at 13 ("SBC Wireless"). This evidence seems to undercut the Telecommunications Resellers Association's ("TRA's") argument, *see* Comments of TRA at 6-7, that the lack of number portability and the fact that many handsets cannot be utilized by multiple providers restricts the competitive impact of the multitude of carriers in the marketplace. It appears instead that these impediments are minor.

[21] *See, e.g.*, Comments of Sprint PCS at 4 ("Sprint PCS").

[22] Comments of Wireless One Technologies, Inc. at 4 ("Wireless One").

from cellular providers.[23] Yet, even if most customers continue to utilize cellular carriers, the declining market shares of cellular operators actually serve to illustrate the vast market strides made by new providers in a very short period of time.[24] Most importantly, all three of these criticisms fail to link the alleged market shortcomings with the presence or absence of the cap.

Along these same lines, Sprint PCS attached a declaration to its comments purporting to show that the CMRS market is not sufficiently competitive.[25] The declaration, prepared by Dr. John Hayes, suffers from a number of key shortcomings, including the fact that it ignores how carriers actually use their spectrum and fails to analyze the impact of the cap on the marketplace. Moreover, the survey data utilized appear to contain a very small sample and the factors used by Dr. Hayes to explain market power – service agreements and CPE – are transient. In short, Dr. Hayes's analysis does little to rebut the overwhelming evidence that the CMRS market is competitive and that the cap is no longer necessary.

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[23] Comments of the Personal Communications Industry Association at 7-9 ("PCIA").

[24] Relatedly, Sprint PCS points out that two or more PCS providers are operational in only 17 percent of BTAs. Comments of Sprint PCS at 9. However, as GTE noted in its opening comments, 68 percent of the population now has four or more operational CMRS carriers. Thus, not surprisingly, multiple providers have appeared first in larger markets where there are more lucrative financial opportunities. The "percentage of BTAs served" statistic cited by Sprint PCS misses the larger point: that competition is robust.

[25] *See* Comments of Sprint PCS, Declaration of Dr. John Hayes.

III. THE CMRS MARKET IS STRUCTURALLY RESISTANT TO ANTI-COMPETITIVE CONDUCT

Vigorous competition makes anti-competitive behavior virtually impossible. As AirTouch observes, "[t]oday . . . with up to seven carriers in a given market, the costs of engineering (much less obtaining regulatory approval of) such a [monopolistic] consolidation are likely to be extraordinary and out of the reach of any given mobile operator."[26] In addition, as a result of six structural attributes of the CMRS marketplace, anti-competitive behavior is irrational and exceedingly difficult.[27] In their Declaration appended to GTE's opening comments, two economists, Dr. J. Gregory Sidak and Dr. David J. Teece, show that these factors include the presence of national providers and pricing plans, the difficulty of dominating the market for both spectrum and equipment, the limited spectrum requirements for effective competition, declining entry barriers, spectrum's durability, and the prohibitive costs of warehousing.[28] Other commenters agree that these and additional similar factors thwart anti-competitive conduct in the CMRS marketplace.

National Providers and Pricing Plans. The emergence of national carriers with national pricing plans strictly limits efforts by any one carrier to extract monopolistic

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[26] Comments of AirTouch at 13.

[27] *See* GTE Comments at 11-18.

[28] The Sidak/Teece Declaration was filed as an attachment to GTE's opening comments in this proceeding. Dr. Sidak is the F.K. Weyerhaeuser Fellow in Law and Economics of the American Enterprise Institute for Public Policy Research in Washington, D.C. Dr. Teece is a Professor at the University of California at Berkeley and a Principal at LECG, Inc., in Washington, D.C.

charges in a specific market because "any unilateral price increases would induce the immediate exit of customers to the lower-priced nationwide carrier."[29] This market dynamic was also recognized by Radiofone: "[t]he emergence of nationwide or near-nationwide competitors, including AT&T Wireless, Sprint PCS and Nextel, are evidence that . . . any concerns about the harmful effects of excess spectrum concentration in the hands of one company are simply unwarranted."[30] As further evidence of the increasing use of national CMRS pricing, GTE recently launched its own national pricing plan: AmericaChoice.

Difficulty of Dominating the Market for Both Spectrum and Equipment. Efforts to monopolize the CMRS marketplace would require not only dominion over the available spectrum in a given market, but also substantial control over capacity-expanding equipment. Thus, as AT&T Wireless points out, "it would be relatively easy for existing competitors to add capacity in response to any price increase [by a competitor]. . . . For these reasons, no wireless provider could sustain a price increase for any significant period of time."[31] Because monopolist-thwarting capacity expansion can be achieved either via additional spectrum or capacity-expanding equipment, anti-competitive carriers would be hard pressed to achieve significant market power.

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[29] Comments of GTE, Sidak/Teece Declaration, ¶ 21.

[30] Comments of Radiofone, Inc. at 5; *see also* Comments of GTE at 12; Comments of SBC Wireless at 5-6 (noting the relevance of a national market that "virtually ignores the more narrow limitations of a designated service area"); Comments of AT&T Wireless at 2, n.4 (noting rise of national plans).

[31] AT&T Wireless at 9; *see also, e.g.,* Comments of Sprint PCS at 12-13 (setting forth vast spectrum-expanding capacity of new technologies).

Limited Spectrum Requirements for Effective Competition. As explained in GTE's initial comments, with today's overall level of demand, one 10 MHz block of spectrum is "sufficient spectrum to allow a firm to be competitive in the present wireless voice industry."[32] Indeed, as Nextel's experience shows, 10 MHz is sufficient spectrum to compete effectively for the short-term future.[33] In this connection, Bell Atlantic Mobile notes that "suppression of competition [through market foreclosure] is unlikely because large amounts of spectrum will remain for competitors, even if one or more firms acquire more than 45 MHz of spectrum in an area."[34] Thus, a new wireless firm "can compete effectively with 10 MHz of spectrum; many are already doing so."[35] Relatedly, the effectiveness of this 10 MHz competitor will be further enhanced by the continuing evolution of capacity-expanding technologies.[36]

Declining Entry Barriers. The decline in barriers to entry in the current CMRS marketplace also serves as a check on anti-competitive conduct. Barriers to acquisition of adequate spectrum capacity, capital, and tower sites have all trended downward in recent years. Thus, if a carrier moved to monopolize a market, other carriers could

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[32] Comments of GTE, Sidak/Teece Declaration, ¶ 26.

[33] As GTE explains in its opening comments, this 10 MHz carrier may not provide an effective price competitor in the future depending on the evolution of the market and the demand for bandwidth-intensive services and bundles of services. *See* Comments of GTE at 15-16.

[34] Comments of Bell Atlantic Mobile at 10.

[35] *Id.*

[36] *See* Comments of Sprint PCS 12-13; Comments of Bell Atlantic Mobile at 10, 16-17.

quickly enter and undercut the anti-competitive carrier's efforts to extract monopoly rents.[37] The spectrum cap policy, as AT&T Wireless points out, "ignores . . . the ability of firms to enter . . . relatively easily in order to defeat an attempted price increase."[38] Similarly, Western Wireless observes that "attempted monopolization would . . . create an immense market opportunity that alternate carriers would rush to fill, quickly restoring the market's competitive status quo."[39]

Some commenters argue that entry barriers to the introduction of broadband PCS service are still quite high. These commenters cite in particular delayed build-outs[40] and difficulty obtaining capital.[41] Even assuming these descriptions are correct, the problems referred to by these commenters are less likely to occur in the future. Indeed, evidence submitted by Sidak and Teece demonstrates that barriers to competitive entry are decreasing in the mobile services market.[42]

In any event, even the imminent entry of new providers acts as a disciplining agent against anti-competitive conduct. A rational carrier, in order to engage in predatory behavior, must have some certainty in its ultimate ability to recover the costs

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[37] Comments of GTE, Sidak/Teece Declaration, ¶ 27.

[38] Comments of AT&T Wireless at 9-10.

[39] Comments of Western Wireless Corporation at 11-12 ("Western Wireless) (citing a series of candidates to take advantage of this opportunity including 220 MHz SMR, LMDS, and other services) (emphasis omitted).

[40] Comments of D&E Communications at 7, n.21; Comments of PCIA at 7.

[41] Comments of Omnipoint at 4.

[42] Comments of GTE, Sidak/Teece Declaration, ¶¶ 27-29.

of such conduct through protracted extraction of monopoly rents. The existence, or the imminent entry, of a new PCS provider would eliminate any carrier's certainty about its ability to recover such costs and thus extinguish the incentive to engage in anti-competitive behavior.

Spectrum's Durability. The unilateral exercise of market power is also restrained by the "durable" nature of spectrum. That is, a carrier's spectrum does not disappear when the competitor exits the market; rather, the spectrum remains available "for another firm to buy the capacity at a distress-sale price and immediately undercut the carrier's noncompetitive prices."[43] The market opportunity presented by such spectrum for new entrants is recognized by a number of commenters, including the analysis of Western Wireless outlined above.[44] Thus, spectrum durability casts further substantial doubt on a carrier's ability to obtain and exploit market power.[45]

The Prohibitive Costs of Warehousing. Lastly, the CMRS market is also structurally resistant to anti-competitive behavior due to the high opportunity costs associated with spectrum warehousing.[46] A warehousing strategy would be

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[43] Comments of GTE, Sidak/Teece Declaration, ¶ 30. Although not explicitly using the "durability" language, many commenters note the nature of the spectrum resource as a constraint on anti-competitive behavior. *See e.g.* Comments of AT&T Wireless at 8-10; Comments of Bell Atlantic Mobile at 9-13.

[44] Comments of Western Wireless at 11-12; *see also* Comments of AT&T Wireless at 10.

[45] As GTE points out in its comments, the Commission has embraced this rationale in other proceedings. *See Access Charge Reform Order,* 12 FCC Rcd 15982, 16103 (1997). *See also* Comments of GTE at 17.

[46] Comments of GTE, Sidak/Teece Declaration, ¶ 31.

exceedingly expensive and irrational in light of the other market factors at work. As AirTouch points out, in a market with declining prices and highly competitive carriers, "[t]here is little room for carriers to absorb additional expenses, particularly those of the magnitude involved in acquiring enough spectrum to reduce competition in the market to the point where excessive returns are possible."[47] AirTouch thus concludes that warehousing is "extremely unlikely."[48] As Omnipoint explains, "[t]he concern of 'spectrum hoarding' in the initial license allocation phase of CMRS as a means of incumbents to block out competitor[s] has largely passed."[49] The Rural Telecommunications Group similarly concludes that, "because competition already exists, larger carriers will find hoarding of spectrum simply for anti-competitive reasons to be cost-ineffective and financially unwise."[50]

Thus, the intensive competitiveness of the CMRS marketplace, combined with the six structural factors outlined above, make the CMRS marketplace highly resistant to anti-competitive conduct. This market-based resistance eliminates the need for the spectrum cap.

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[47] Comments of AirTouch at 13.

[48] *Id.* at 12.

[49] Comments of Omnipoint at 5.

[50] Comments of The Rural Telecommunications Group at 10 ("RTG").

IV. CONTINUED ENFORCEMENT OF THE CMRS SPECTRUM CAP WILL IMPEDE PUBLICLY BENEFICIAL INNOVATIONS, EFFICIENCIES, AND ECONOMIES

In its opening comments, GTE demonstrates that continued application of the spectrum cap will have a deleterious impact on the CMRS marketplace and consumers as a result of several factors. Specifically, GTE provides evidence illustrating that retention of the spectrum cap will inhibit: (1) the introduction of advanced services, such as bandwidth-intensive 3G technologies;[51] (2) wireless carriers from meeting growing consumer demand for bundled voice and advanced data offerings;[52] and (3) realization of numerous potential market efficiencies.[53] Citing the potential loss of publicly beneficial innovations, efficiencies, and economies under the current cap regime, GTE's comments urge the Commission to remove the spectrum cap to enable market forces to maximize the public interest benefits derived from the CMRS marketplace.[54] As outlined below, the opening comments contain widespread support for GTE's analysis.

The Spectrum Cap Impedes Introduction of New Technologies. Virtually all commenters addressing the issue agree that retention of the spectrum cap is likely to impede the introduction of evolving advanced technologies, including the range of high-

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[51] Comments of GTE at 19-22.

[52] *Id.* at 23-24.

[53] *Id.* at 25-27.

[54] *Id.* at 19.

speed, high-bandwidth services that currently define 3G.[55] In this connection, BellSouth states that "the CMRS spectrum cap acts as an impediment to the development and introduction of advanced services and technologies, including new third generation/IMT 2000 services, which will require access to large amounts of additional spectrum."[56] In support of this claim, BellSouth cites the comments of numerous parties filed in response to the Commission's public notice concerning long-term spectrum requirements for 3G mobile wireless services.[57] In addition, BellSouth explains that the existing 45 MHz cap would "virtually foreclose" existing carriers "from having access to the substantial amounts of new spectrum needed to offer new third generation services, including multimedia, Internet access, imaging, and video conferencing."[58] BellSouth notes that the 45 MHz cap "also places an arbitrary . . . limit on the amount of spectrum available to [new entrants], and would likewise prevent them from offering a full range of services."[59] "Indeed," BellSouth continues:

> it may not even be *possible* to provide the more spectrum-intensive services, such as multimedia and Phase II services, to multiple

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[55] *See, e.g.*, Comments of AirTouch at 16; Comments of BellSouth at 10-11; Comments of Bell Atlantic Mobile at 22-24; Comments of CTIA at 3, 14; Comments of Omnipoint at 4; Comments of Western Wireless at 9 n.16.

[56] Comments of BellSouth at 10.

[57] *Id.* n.29. As noted in GTE's opening comments and as indicated in the *Notice*, most commenters responding to the 3G public notice agree that the 45 MHz spectrum cap will inhibit the introduction of high-speed, high-bandwidth 3G services by existing CMRS licensees. *See* Comments of GTE at 20; *see also Notice* n.121.

[58] Comments of BellSouth at 10.

[59] *Id.*

> subscribers on a commercial basis within 45 MHz of spectrum, and a carrier managing to provide such services even to a handful of subscribers would clearly not have any capacity available to provide other, narrower-bandwidth services, such as voice, messaging, and switched data.[60]

Several other commenters, including AirTouch, Bell Atlantic Mobile, CTIA, Omnipoint, and Western Wireless, similarly observe that retention of the spectrum cap is likely to impede effective provision of advanced mobile offerings including bandwidth-intensive 3G products and services.[61]

In fact, only one commenter, Sprint PCS, appears to suggest that removal of the spectrum cap may not be necessary to facilitate introduction of 3G products.[62] Sprint PCS premises this argument on two assertions: (1) its claim that second and third generation technologies are "capacity-expanding innovations [that] make the cap far less intrusive;"[63] and (2) its observation that few carriers have yet accumulated up to 45 MHz of spectrum in a given market.[64] This analysis misses the mark.

Significantly, Sprint PCS offers no technical evidence in support of its suggestion that capacity gains brought forth by new technologies negate the need for additional spectrum to facilitate provision of advanced CMRS services. Indeed, Sprint PCS's

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[60] *Id.* at 10-11 (emphasis in original).

[61] *See* Comments of AirTouch at 16; Comments of Bell Atlantic Mobile at 23-25; Comments of CTIA at 3, 14; Comments of Omnipoint at 4; Comments of Western Wireless at 9 n.16.

[62] *See* Comments of Sprint PCS at 13-14.

[63] *Id.* at 13.

[64] *Id.* at 14.

position is starkly at odds with the views of major equipment manufacturers who agree that more spectrum will be needed to enable incumbent CMRS operators to provide high-bandwidth 3G products and services.[65] While GTE agrees that the conversion to digital technologies has expanded the capacity of existing CMRS systems competing in the current market for voice services, additional spectrum will be needed to enable CMRS operators to provide the full array of advanced, bandwidth-intensive 3G offerings.

As to the second assertion made by Sprint PCS, it is not surprising that few carriers have acquired 45 MHz of CMRS spectrum in any given market given that high-speed, high-bandwidth 3G products have not yet been introduced in the U.S. Because additional spectrum is not needed to enable carriers to compete in today's market for mobile voice service, it stands to reason that few carriers would accumulate additional spectrum at this time. The point is that quantities of spectrum beyond the 45 MHz limit are needed to permit deployment of evolving bandwidth-intensive services as the underlying technologies for these offerings develop.[66] Lifting the cap will encourage investment in these new capabilities; maintaining the cap will stifle investment and innovation. Thus, contrary to the flawed analysis of Sprint PCS, the decision to lift the

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[65] *See* Comments of GTE at 20-21 (noting that in response to the Commission's 3G public notice, Motorola, Northern Telecom, and Lucent suggested that new spectrum will be necessary for to allow provision of bandwidth-intensive 3G services).

[66] In such respects, an incremental, ad hoc approach of raising the cap only after new allocations would fail to provide the regulatory certainty necessary to allow manufacturers and carriers to allocate the investment needed for the development of technologies and business plans associated with the introduction of 3G products and services.

spectrum cap is not about the past or even today; it is about securing the future of the innovative and competitive CMRS market and allowing domestic carriers to compete effectively in the global wireless marketplace.[67]

The Spectrum Cap Prevents Carriers from Meeting Demand for Bundled and Other Advanced Wireless Services. In addition to the spectrum needed to provide advanced 3G services, numerous commenters echo GTE's view that growing consumer demand for high-speed data applications and bundled voice and data offerings necessitates removal of the CMRS spectrum cap.[68] In this connection, Bell Atlantic Mobile cites an economic study prepared by Dr. Charles L. Jackson predicting "an explosion in the use of wireless data over the next decade" and underscoring the increasing emphasis on mobile access to network computers.[69] Bell Atlantic Mobile points out that, to provide competitive Internet service as well as current voice applications, broadband wireless services require considerably more capacity than that remaining on existing CMRS networks.[70] Two declarations appended to Bell Atlantic Mobile's comments – one prepared by Dr. Jackson and another prepared by Drs. Robert W. Crandall and Robert H. Gertner – indicate that the spectrum cap will

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[67] Indeed, it is possible that advanced bandwidth-intensive services will be deployed in Europe more quickly than in the U.S. because U.S. carriers are constrained by the Commission's restrictive spectrum cap policy. Thus, removal of the spectrum cap may well be essential to enable U.S. carriers to keep pace with developments in the global marketplace.

[68] *See* Comments of GTE at 23-24.

[69] Comments of Bell Atlantic Mobile at 22-23.

[70] *Id.* at 23.

likely constrain the ability of CMRS providers to meet consumer demand and remain viable competitors in light of the growing market desire for high-speed data applications and concomitant increases in wireless system usage.[71]

Other parties voice similar concerns. For example, SBC Wireless notes that "the dedication of available spectrum in high usage markets to deliver mandatory voice service often does not leave sufficient unused spectrum to be utilized for advanced features and new technologies."[72] Similarly, AirTouch documents the explosive growth in demand for mobile voice services as well as an expanding consumer market for high-speed mobile data services and other innovative offerings.[73] According to AirTouch, "[t]he increased demand for mobile service will constrain capacity on those networks most successful in meeting this demand, potentially limiting service quality and harming consumer interests if an artificial spectrum cap is maintained."[74] On this basis, AirTouch concludes that "maintenance of the spectrum cap is not only unnecessary to promote the Commission's public interest objectives of promoting competition, but may in fact disserve other public interest objectives."[75]

The Spectrum Cap Results in Efficiency Losses. Finally, the opening comments also reflect widespread agreement that continued enforcement of the

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[71] *Id.* at 26-27.

[72] Comments of SBC Wireless at 10.

[73] Comments of AirTouch at 16.

[74] *Id.*

[75] *Id.*

spectrum cap will inhibit realization of numerous market efficiencies. In its comments, GTE points to three specific efficiency losses associated with retention of the spectrum cap: (1) misallocation of carriers' resources across equipment and spectrum; (2) distortions in the optimal scope and scale of affected firms; and (3) retardation of investment and innovation.[76]

Many parties share GTE's observations. For example, AT&T Wireless notes that "[b]y limiting the amount of CMRS spectrum that a single competitor may acquire, the cap automatically prevents consumers from benefiting from potential economies of scale and scope that may arise when firms have access to increased spectrum."[77] Additional commenters noting that the cap inhibits economies of scope and scale include AirTouch, BellSouth, the Rural Telecommunications Group ("RTG"), and Western Wireless.[78]

Significantly, these commenters also agree that foregone efficiencies as a result of the spectrum cap may well impede the provision of CMRS services to rural areas. For example, BellSouth notes that "[t]he spectrum cap does not work well in a rural environment . . . where there are simply not enough customers to justify the huge investments in multiple redundant wireless networks . . . ."[79] BellSouth concludes that

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[76] Comments of GTE at 25-27.

[77] Comments of AT&T Wireless at 5.

[78] *See* Comments of AirTouch at 17-18; Comments of BellSouth at 11; Comments of RTG at 10; Comments of Western Wireless at 8.

[79] Comments of BellSouth at 12.

"[e]liminating the spectrum cap will incent those carriers with sufficient resources to build out rural systems to enter these markets, resulting in more consumer choices and lower prices."[80] Similarly, the Rural Telecommunications Group observes that, in order to take advantage of economies of scale, several PCS and SMR providers are actively seeking out existing rural cellular carriers to construct, operate, and jointly market their PCS-based services through carrier affiliation arrangements.[81] According to RTG, "[e]limination of the spectrum cap would allow rural cellular carriers greater flexibility to serve additional areas, thereby advancing the build out of PCS and SMR networks in rural America which, in turn, enhances competition and allows advanced telecommunications service offerings."[82] Likewise, Western Wireless indicates that "[t]he Commission is rightly concerned that the spectrum cap may preclude carriers from offering new wireless services and/or expanding existing operations to high-cost areas."[83] Other commenters, including AT&T Wireless, Bell Atlantic Mobile, CTIA, and Triton Cellular Partners, L.P., similarly indicate that the spectrum cap chills timely

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[80] *Id.* at 13.

[81] Comments of RTG at 6.

[82] *Id. See also* Comments of AirTouch at 17-18 (observing that the spectrum cap "may instead have the unintended effect of actually precluding the development of economies of scope and scale by carriers that would facilitate the provision of service to higher-cost rural areas").

[83] Comments of Western Wireless at 8.

provision of service to rural areas by deterring investment in and construction of rural infrastructure.[84]

The opening comments also reinforce GTE's view that the spectrum cap imposes additional types of costs and efficiency losses. For example, AT&T Wireless points out that the cap clearly interferes with the ability of firms to allocate resources efficiently by (1) prohibiting potentially beneficial transactions that are not likely to create or enhance market power, and (2) prohibiting transactions in which the pro-competitive effects outweigh any anti-competitive harm.[85] Other "pernicious effects" of the spectrum cap identified by AT&T Wireless include distorting a firm's use of inputs and increasing production costs and reducing incentives to decrease prices, increase quality, and invest in innovations.[86]

V. THE RECORD SUPPORTS GTE'S RECOMMENDED FOUR-PART REGULATORY APPROACH

In its opening comments, GTE suggests a four-part approach to regulation of the CMRS marketplace. GTE's approach is designed to balance the need to facilitate efficiency and development of innovative products and services, on the one hand, with lingering concerns about the potential for anti-competitive conduct, on the other. In particular, GTE proposes in its comments that: (1) the anachronistic spectrum cap be eliminated; (2) the Commission consider interim retention of the cellular-cross interest

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[84] *See* Comments of AT&T Wireless at 12; Comments of Bell Atlantic Mobile at 20-21; Comments of CTIA at 12; Comments of Triton Cellular Partners, L.P. at 1-6.

[85] Comments of AT&T Wireless at 5-6.

[86] *Id.* at 7-8.

rule to alleviate concerns about the level of competition in certain areas; (3) the Commission rely on the Justice Department, the Federal Trade Commission, and private causes of action to police against anti-competitive conduct; and (4) the Commission continue to monitor the CMRS marketplace to determine whether additional spectrum should be allocated to facilitate delivery of advanced services.[87] The record supports this approach.

Initially, as outlined above, the record demonstrates that the market for CMRS services is highly competitive and that numerous structural attributes of the CMRS marketplace make it irrational, if not impossible, for a mischievous carrier to exert market power. In addition, a broad range of commenters agree that elimination of the spectrum cap will generate significant public interest benefits. Thus, there is widespread support for the first prong of GTE's recommended approach: elimination of the spectrum cap.

Next, although the record is divided with respect to the cellular-cross interest rule,[88] it is imminently logical to retain the rule as an interim safety valve measure in response to concerns about the level of competition in certain markets. GTE believes that the strong opposition to retention of the CMRS spectrum cap – and the

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[87] *See* Comments of GTE at 29-33.

[88] *Compare* Comments of RTG at 12-13 (urging elimination of the cellular cross-interest rule); Comments of SBC Wireless at 13-14 (same); Comments of Western Wireless at 16 (suggesting that, except in compelling cases, the Commission should forbear from enforcing the cellular cross-interest rule) *with* Comments of TRA at 13 (supporting retention of the cellular cross-interest rule); Comments of Wireless One at 7 (same).

comparatively quieter response concerning the cellular cross-interest rule – confirms that the spectrum cap is the more damaging and intrusive of these regulatory constraints. In short, although GTE remains certain that additional competition from broadband PCS and SMR service providers will reach all areas of the country in due course – indeed, based on the record, elimination of the spectrum cap is likely to help achieve this result – interim maintenance of the cellular cross-interest rule may be a viable means for addressing residual worries about the slow growth of competition in certain areas.[89]

Numerous commenters also agree with the third prong of GTE's suggested approach: that existing antitrust enforcement mechanisms should be the primary vehicle for protecting the CMRS market from anti-competitive conduct. In its comments, GTE notes that a number of mechanisms are in place to protect against the unlikely event of anti-competitive behavior, including the enforcement authority of the Justice Department, substantial penalties against anti-competitive actions under the Sherman and Clayton Acts, the Justice Department's power to prosecute collusion criminally, the Federal Trade Commission's regulatory oversight, government review prompted by Hart-Scott-Rodino examination of mergers and acquisitions, and private causes of action.[90] Other commenters that endorse the sufficiency of various of these measures include AirTouch, AT&T Wireless, Bell Atlantic Mobile, BellSouth, CTIA, SBC

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[89] As noted in GTE's opening comments, the Commission should assess whether the cellular cross-interest rule should sunset uniformly as digital PCS and SMR coverage extends to rural areas. *See* Comments of GTE at 29-31.

[90] *See* Comments of GTE at 31-32.

Wireless, and Western Wireless.[91] These commenters also generally agree that, given the substantial costs associated with retention of the CMRS spectrum cap, reliance on antitrust enforcement procedures best serves the public interest.

Finally, based on the evidence accumulated in this proceeding and in response to the Commission's 3G public notice, there is strong support for continued FCC monitoring of the CMRS marketplace to determine whether additional spectrum is needed to facilitate provision of advanced offerings. The record generated in response to the 3G public notice and that developed in this proceeding make plain that additional spectrum will be needed in order for CMRS carriers to provide the full range of emerging high-speed, high-bandwidth products and services.[92] The exact quantity of spectrum needed to permit effective provision of these and other unfolding technologies is less clear.

Although elimination of the spectrum cap is a step in the right direction, continued monitoring of the marketplace is an equally essential component of GTE's regulatory model. Elimination of the spectrum cap will permit market forces to respond more effectively to consumer demand and produce valuable information that will allow the optimal input selections by market participants. It is critical, however, that the Commission vigilantly monitor the marketplace to assess whether new spectrum allocations are necessary to meet these evolving needs.

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[91] *See* Comments of AirTouch at 14-15; Comments of AT&T Wireless at 3 and n.9; Comments of Bell Atlantic Mobile at 13; Comments of BellSouth at 5, 14; Comments of CTIA at 21-22; Comments of SBC Wireless at 8; Comments of Western Wireless at 12.

[92] *See, e.g., supra* Section IV.

VI. CONCLUSION

As the foregoing discussion demonstrates, the record strongly supports elimination of the CMRS spectrum cap. Most commenters agree that the cap is not needed to protect against anti-competitive conduct and that retention of the cap will impede the introduction of advanced technologies and services as well as realization of important market efficiencies. In accordance with GTE's suggested approach, the Commission should: (1) eliminate the CMRS spectrum cap; (2) consider interim retention of the cellular cross-interest rule; (3) place primary reliance on the Justice Department, the Federal Trade Commission, and private causes of action to police against anti-competitive conduct; and (4) continue monitoring the CMRS marketplace to evaluate whether additional spectrum allocations are necessary to facilitate delivery of advanced services.

Respectfully submitted,

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