Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	**)**	
	)	
Amendment of the Commission's Rules	**)**	**WT Docket No. 97-82**
Regarding Installment Payment Financing	**)**	
For Personal Communications Services	**)**	
(PCS) Licensees	**)**	
	)	

REPLY COMMENTS OF NORTH COAST MOBILE COMMUNICATIONS, INC.

SUMMARY

Through these Reply Comments, North Coast Mobile Communications, Inc. ("NCMC") urges the Federal Communications Commission to affirm its existing rules, which establish eligibility requirements to assure Designated Entity participation both in the auctions for C and F Block spectrum, and in the marketplace. To do otherwise would deprive the Designated Entities of opportunities granted to them under Section 309(j) of the Communications Act.

To do otherwise would also constitute poor public policy. If the Commission acts to reallocate C and F Block spectrums to make it available to large incumbent carriers instead of Designated Entities, it will be undoing the exact Public Policy position it has strived to maintain throughout the C block bankruptcies. In those circumstances, it has properly required business managers of NextWave and others to live with the decisions they made, however bad those decisions might have been. The Federal Government, placing the good of the American public above that of individual companies, did not rescue NextWave from bankruptcy.

Here, too, the FCC must do the right thing and not intervene. It should not bail out those carriers who made poor choices with respect to the efficiency of their technology. That is not the Federal Government's role. Rather it has been the policy of the Federal Government to allow marketplace forces to work. In this instance the marketplace has created a variety of technologies, some of which are far more efficient that others. Those that chose efficient technologies have sufficient capacity in 30 MHZ to serve both existing and future demand for wireless services. The Commission is not the arbiter of who should succeed and who should fail in the wireless marketplace, but it would be putting itself in exactly this position if it stepped in to eliminate the eligibility requirements for the C and F Block auctions based on alleged shortages of spectrum by some carriers.

North Coast Mobile Communications, Inc. urges the Federal Communications Commission to commence the auctions as scheduled, under the existing rules. This way Designated Entities will be assured of the opportunities created for them under Section 309(j) of the Communications Act, and consumers will be assured of an additional viable competitor in the mobile wireless broadband marketplace.

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North Coast Mobile Communications, Inc. ("NCMC") herein files reply comments in the above-captioned proceeding.

I. INTRODUCTION

NCMC was a bidder in the Federal Communications Commission's initial C block auction, including cities like New York, but withdrew when NextWave and others artificially drove the prices for its desired markets so high that they were beyond the scope of even the most aggressive of business plans. NCMC now seeks to preserve the opportunity it has waited for these long years – the opportunity to pursue the business plan it initially conceived and acted upon. NCMC, thus, urges the Commission to retain the existing eligibility and channelization rules, including the ability of licensees to obtain at least 20 MHz of spectrum under the current eligibility rules.

If the Commission acts to allocate C and F Block spectrum for large business entities, the Commission will be undoing a Public Policy position it has worked very hard to maintain throughout the C Block bankruptcies. The Commission has taken the position in these bankruptcies that it would not bail out the likes of NextWave just because NextWave made poor

management decisions and overbid for their licenses. The Commission made clear that NextWave's management team was responsible for its own actions, and that the Government, placing the good of the American public above that of an individual business as it has a mandate to do, could not and would not rescue NextWave from bankruptcy. This basic concept has been reiterated time and again by the Federal Government throughout the Oil, Transportation, Utility, and Computer industries. Should the Commission now step in and transfer spectrum reserved for designated entities ("DEs") to non DEs, the Commission will be reversing its hard fought decision not to "bail out" management teams for making short sighted business decisions.

The Commission has long stated that the marketplace, not the Commission, should be the final arbiter of winners and losers, and that the Commission should not insert itself into this process under any circumstance. This is particularly true when the Commission would have to deprive DEs' of strategic assets which are critical to their survival. These DEs have acted in good faith and relied upon the rules that the FCC originally set forth.

NCMC also urges the Commission to closely scrutinize the claims of incumbent carriers that they need more spectrum to serve existing subscribers or to seamlessly transition to Third Generation ("3G") technology. As set forth below, these carriers do not need more spectrum; they need to use the spectrum they have more efficiently. By proposing to reduce the amount of spectrum made available to DEs in favor of the established incumbent carriers who have not put their spectrum to its most efficient use, the Commission would blatantly be rewarding inefficiency. These carriers made their initial technological choices in order to get a first to market advantage utilizing immediately available technologies. In most cases, they have not modified or evolved their networks to allow them to become as spectrally efficient as possible.

NCMC is at a loss to understand why the Commission would endorse this type of bailout. It should no more take spectrum that was reserved for DEs and allow the established carriers to obtain it, than it should have allowed NextWave to renege on its obligations. The Commission did the right thing by recognizing that NextWave must live by the decisions of its management team. So too, should these carriers be required to live by their decisions to continue to deploy inefficient technology.

The Commission should not now bless the incumbent carriers' mistakes, in particular by allowing them to get additional spectrum from the C and F Blocks, and, in the same breath, hold NextWave to a far more rigorous standard. As more fully explained below, NCMC requests the Commission to continue with the C and F Block auctions under the existing rules. This would allow the DE community to continue to succeed.

II. AS AN EQUITABLE AND LEGAL MATTER, THE COMMISSION MUST LEAVE THE DESIGNATED ENTITY RULES VIRTUALLY INTACT

NCMC has been in existence since prior to the initial C Block auctions. It was formed for the purpose of participating in the C and F Block auctions. In reliance upon and in accordance with the Commission's then existing rules, NCMC did in fact participate, but ultimately withdrew because it had become evident that the prices for spectrum being bid were well in excess of what any viable business plan could support. NCMC was not alone in its conclusion; it was one of many potential licensees that exited the auctions. NCMC has patiently waited for the opportunity to participate in Auction 35 either directly or through an affiliated entity if the rules remain favorable to DE participation.

In that regard, NCMC urges the Commission not to change the rules so dramatically that DE participation by those like NCMC, is again realistically foreclosed. In order to achieve that result, the Commission must preserve the existing eligibility rules for at least 20 MHz of the remaining spectrum. It must also be sure that the rules foster the ability of bidders to obtain at least 20 MHz of spectrum, as that much is needed to provide a viable second or third generation mobile wireless systems. Without those things in place, the Commission may have an auction in which DEs are allowed to participate, but it will not be an auction in which a DE has the faintest possibility of ultimate success for even one license. Like so many of the commenters in this proceeding, NCMC believes this is both in violation of Congressional and Commission intent.[1]

The Commission should give no credence to incumbent carrier arguments that DEs are not entitled to a continuation of the set aside of C and F Block spectrum because, according to these carriers, DEs haven't yet built out the spectrum they already have. As fully discussed in PCIA's Comments in this proceeding, DEs have built out and are operational in many markets. Their build out schedule stands in stark contrast to, for example, AT&T. AT&T has apparently not built out the majority of its PCS licenses. It still has lying fallow 221 D and E Block licenses, and 10 A and B Block licenses. *See* Attachment A. Given this, it is hard to see how AT&T or other incumbents can use the DE build out record as evidence that DEs have not timely built out their systems.

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[1] *See, e.g.,* Comments of the National Telephone Cooperative Association at 2; Comments of PCIA at 4-5; Comments of OPM Auction Co. at 2-3; Comments of TeleCorp PCS, Inc. and Tritel Communications, Inc. generally.

III. WIRELESS PROVIDERS THAT CONTINUE TO EMPLOY OBSOLETE OR INEFFICIENT TECHNOLOGY SHOULD NOT BE REWARDED WITH THE OPPORTUNITY TO ACQUIRE ADDITIONAL SPECTRUM.

In the rush to condemn the entrepreneur's block as a "failure" by the small handful of companies that are attempting to dominate the telecommunications landscape, the inefficient use of valuable spectrum by large wireless companies is a matter of Public Policy that has been largely overlooked. Large wireless providers should not be given the opportunity to acquire additional spectrum until they make the most efficient use of their existing spectrum. To this day, large cellular providers continue to operate inefficient analog networks side by side with digital networks. In New York, the largest market where the need for additional capacity is presumably the greatest,[2] the incumbent cellular providers still operate extensive analog networks, and more fully explained herein, also continue to sell analog phones to new subscribers. This practice creates the illusion of spectral scarcity on the one hand while extracting a high return from mostly depreciated plant on the other.[3]

As a matter of public policy, wireless carriers should be encouraged to make the most efficient use of the spectrum they already have before new blocks of spectrum are made available to them. As long as incumbent carriers are given the opportunity to weigh the cost of acquiring additional spectrum against the cost of upgrading their networks more rapidly, they will always attempt to acquire the spectrum if by doing so they can block new competitors from

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2 As noted, supra, AT&T has not even built out its E block license in New York. Nor has it built out any of its other D and E licenses to date, according to Donaldson, Lufkin & Jenrette's Dick Tracy Report of June 2000, See Attachment A at 109-112.

3 Furthermore, in most major markets, including New York, cellular providers have implemented no more than three digital CDMA carriers or the equivalent in TDMA/GSM. This means that out of a 25 MHz allocation only 10 MHz at most is being used for digital service. 15 MHz is therefore lying fallow or is grossly underutilized and is available for providing additional digital services including 3G.

entering the marketplace, and then continue to plead spectral poverty to the outside world. This said, among the most striking things about the record in this proceeding is the blatant attempt by many incumbent broadband carriers to paint themselves as the white knights that have come to save the public and the Commission from rules that have been abused by the DE community at large. They claim that, unlike the DEs, they will use the spectrum efficiently. AT&T Wireless Services, Inc. ("AT&T Wireless"), for example, claims that allowing all bidders to participate ". . . regardless of size or incumbency would promote efficiency and ensure that licenses are disseminated to the parties that can put them to best use."[4] In some instances, these carriers holler that they are in dire need of this spectrum to serve their existing customers, and in other instances, that this spectrum is critical for them to make the transition from existing systems to Third Generation wireless systems.

Not one of these carriers, however, attempts to discuss the real underlying causes that have resulted in any needs these carriers may have for more and more spectrum, although the answers lie just below the surface of their complaint. As referenced above, the answer is that the vast majority of the incumbent broadband licensees have made decisions which are both spectrally inefficient, and which limit their flexibility to move from existing technologies to second and third generation technologies. These carriers should not be entitled to what amounts to a government bailout because they are either incapable of or unwilling to make efficient use of their existing spectrum. This is certainly not the fault of the DEs; the DEs should not have to pay for the mistakes and missteps of the incumbent carriers. It also should not be viewed as a problem of this Commission.

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[4] AT&T Wireless Services, Inc. Comments at 1.

Among the most egregious of the mistakes made by these carriers is the continued reliance on analog technologies, despite the fact that there has been the clear recognition for approximately 12 years that carriers must move quickly to digital technologies in order to meet the demand for mobile wireless services. The manufacturing and carrier community, under the auspices of various trade associations including the Telecommunications Industry Association ("TIA") and the American National Standards Institute ("ANSI"), with participation by Cellular Telecommunications Industry Association ("CTIA") and its members, devoted years to coming up with the technical standards for various digital technologies, and even more efficient analog technologies, such as n-AMPs. Yet many of the carriers complaining here that they need additional spectrum in order to "efficiently" serve the market have not aggressively deployed digital technology sufficient to serve their entire customer base. They thus have been dilatory in using the spectrum they do have efficiently.

AT&T Wireless's Comments in this proceeding prove the point. AT&T Wireless claims that incumbent carriers need additional spectrum in order to meet projected subscriber growth and to deploy the new technologies that will soon be available. AT&T Comments at 5. Yet in the next breath, AT&T recognizes that at present, most cellular carriers are still supporting analog systems in addition to or in lieu of digital systems, and thus are not deploying the most efficient technologies even today. According to AT&T, ". . . most cellular carriers . . . at this point . . . must continue to devote most spectrum to serving existing [analog] mobile customers." AT&T Comments at 6, n.12.[5]

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[5] Most providers of long distance services have long ago converted their analog microwave transmission facilities to digital microwave and converted again to fiber optics. In the highly competitive market of long distance services, long distance providers were faced with scores of competitors and did not enjoy the luxury and benefit of having just one

Some carriers, like GTE, only have approximately 25 % of their users on digital systems. Airtouch (now part of Verizon Wireless) is reported to have only 38.5 % of its users on digital networks. SBC is reported to have only 41%. See The Matrix-1Q00, Merrill Lynch Report dated June 20, 2000 at 2 appended here as Attachment B. In total it would appear that over half of the subscribers to broadband mobile services are still being served by analog networks. Id. at 2-3. This continued reliance on grossly inefficient technology is inexcusable at this point in time.

Admittedly, it is necessary for users to change out their handsets when moving to different technologies. But those moves could have been accomplished long ago if the carriers had been willing to address the root causes of spectrum shortages. For example, carriers could cease putting new subscribers on the network except when the subscribers use digital technologies. This simple act would have made a huge difference since carriers experience churn in their customer bases at a rate of 24-36% annually. This by itself also would have made a huge difference in the rate of transition to more efficient technologies, but most carriers have been unwilling to do this. As recently as yesterday, it was still possible to obtain an analog cellular phone and cellular service from many of these same carriers that are today crying spectral poverty.[6]

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competitor per market as wireless carriers did for twelve years. It was not until additional competitors entered the market that these incumbent carriers even began to significantly transition to digital technology. It is clear that if the same level of competition existed in the broadband mobile wireless market that existed in long distance, incumbent wireless carriers would have long ago completed the transition to more efficient technologies.

[6] For example, if we assume that 50% of the subscribers of a national wireless provider with 10 million total subscribers are analog and that the replacement cost of a digital handset is $100, it would cost that company $500 Million to fully upgrade its subscriber base to digital. If we also assume that this wireless provider has licenses covering 215 Million POPs, at the $70 per POP price paid by some bidders in the recent spectrum

Moreover, carriers could have easily been more proactive in transitioning existing customers to digital technologies. Sprint PCS in the Washington area demonstrated that shifts in technologies can be accomplished with an existing customer base, if the carrier has decided that it is important enough to its business plan. Sprint PCS, for example transitioned from GSM to CDMA even after it had a couple of years worth of subscribers on that system, and lived to tell about it.[7] Other carriers also need to transition to more efficient technologies, particularly before they are permitted access to more spectrum when their own inefficient conduct may be the root cause of the shortages they may be suffering.[8]

Carriers still using TDMA or GSM technologies are equally guilty of squandering spectrum. These carriers should be required to use spectrum far more efficiently before they are allowed to obtain more spectrum. In recent years, it has become crystal clear that CDMA technology is more efficient than TDMA, GSM or IDEN when used in a cellular configuration. Simply put, this is because of the ease of spectrum reuse. These latter technologies, which rely on Time Division Multiplexing, are very sensitive to interference and thus frequency reuse is hampered. Depending on a number of factors, these technologies require degree of spacing that

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auctions in the UK, it would cost a national wireless provider in excess of $15 Billion to acquire additional spectrum across its entire footprint. Obviously it's much less expensive to convert existing users to more efficient technologies than it is to acquire additional spectrum. Incumbent providers are willing to pay such high prices for additional spectrum as a means of eliminating future competition.

7 *See* Sprint sells GSM Wireless Infrastructure in Washington/Baltimore Area To Omnipoint after upgrading customers to newer CDMA technology, appended here as Attachment C.

8 AT&T also has demonstrated that it is possible to move an existing subscriber base from one technology to another. As NCMC understands it AT&T will begin moving the subscribers of a recent acquisition from CDMA to TDMA technology. NCMC believes that AT&T moved from the more efficient technology to the less spectrally efficient technology, but at least this demonstrates that moves such as these are achievable when the carrier has decided it is in its interest to do so.

varies from N= 4 or 7, where N is the frequency reuse factor. Conversely, CDMA allows the same frequency to be reused in every single cell, thus achieving a reuse factor of N=1. This means that CDMA is the far more efficient technology to deploy, based on the reuse factor alone.

Moreover, the combination of compression and error correcting technologies deployed in CDMA permit carriers to achieve extraordinary gains in capacity, making them superior to TDMA, GSM and IDEN. Revision A to IS 95, using a 13 kb vocoder, yields a 6 to 1 benefit over analog technology. The EVRC eight kb vocoder yields a 50% improvement over the 13 kb vocoder. This means that CDMA technology using EVRC vocoders yields a 10 times capacity increase over analog technology, and similar if not quite so dramatic increases over other digital technologies.[9] If the incumbent carriers were deploying this technology, NCMC submits they would not be demanding new spectrum today to satisfy either existing needs or to assist in the transition to 3G technologies.

Furthermore, carriers such as AT&T still have spectrum that is not being utilized at all. AT&T has acquired extensive D or E block licenses which they have yet to build out. This 10 to 20 MHz of spectrum is laying fallow even in their most heavily congested markets such as New York. *See* Attachment A. Due to a recent ruling, Nextel will also soon be able to purchase extensive amounts of 900 MHz spectrum from Geotek Communications to add to its existing capacity.

IV. SPECTRUM POLICY SHOULD NOT BE MODIFIED TO SUPPORT THE BAIL OUT OF ONE GROUP OF COMPETITORS OVER ANOTHER

In reducing the amount of spectrum made available to DEs in favor of large incumbent companies that did not participate in earlier spectrum auctions, the Commission is effectively bailing out one group of companies at the expense of another group. Most of the large incumbent carriers filing comments in this proceeding have vilified the "failures" of the C block licensees and decried the poor judgment of their management bidding in a manner that led to bankruptcy. The management of these large incumbent carriers did not adequately forecast their own needs for additional spectrum and are now faced with the prospect of not being competitive as a result of either using an inefficient technology, not having sufficient coverage, or, in their minds, having sufficient spectrum. NCMC fails to understand how bidding too aggressively for spectrum is a greater sin than not bidding at all and complaining after the fact.

V. CONCLUSION

For the above reasons, NCMC believes that the Commission should not change its existing Public Policy stance of allowing market forces to dictate success or failure in the marketplace. It is not in the best interest of the American consumer for the Commission to bail out private companies. The Commission would be putting itself in exactly that position if it stepped in to eliminate the eligibility requirements for the C and F Block based on alleged spectrum shortages of some carriers.

The choice is clear. The Commission should reaffirm its DE rules, and thereby both lay the groundwork for additional competition, and stimulate incumbents to be more efficient, both

by the creation of additional competition, and by implicitly requiring these carriers to put the spectrum they have to efficient use.

Respectfully submitted,

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