

little relevance to the immediate needs of protecting licensed operations that the Commission's focus on this issue should be no more than a passing nod of approval in the event that the means of interference resolution might, as a purely incidental effect, create a greater allocation of spectrum to public safety.

Petitioner's position is based on a simple issue of equity and administrative efficiency. The public safety community has come before the agency requesting remedial action for existing and expected interference to its use of the 800 MHz band. The Commission has responded with well articulated concern. However, it is another matter altogether for the public safety community to state, in effect, "while you are solving our problem at no cost to us, we will only support actions which turn this situation into an opportunity to obtain additional spectrum." In essence, some of the commenting public safety entities have advocated holding hostage their support of any proposal to correct the harmful interference unless additional spectrum is included in the resolution.³⁶ Such a position undermines the primary objective of this proceeding and weighs against any radical rebanding that might result. In sum, public safety operators need to be able to rely on their systems and the Commission should promote reliability, not additional spectrum allocation, unless such allocation is more happenstance than currency for cooperation.

Nor does SBT find persuasive commenting public safety entities' positions in support of the Nextel proposal based solely on those individual agencies' alleged needs without adequate regard to the devastating consequences on other affected 800 MHz operators. For examples, the State of Florida backs the Nextel plan, but gives no great consideration to the effect adoption of

³⁶ See, comments of Association of Public-Safety Communications Officials International, Inc. ("APCO") and the Forestry Conservation Communications Association ("FCCA").

that plan would have on local analog operators;³⁷ the City of New York takes a similar tack, reminding the Commission that funds for relocation must come from other than local public safety agencies;³⁸ and RCS supports Nextel's plan, primarily due to the additional spectrum which it might provide.³⁹ These types of comments beg the question of whether the commenting parties would support Nextel's proposal if it would not result in additional spectrum for public safety users. Neither SBT nor the Commission will know. However, although it is fully acceptable for a commenting party to give little consideration to a balancing of interests in the making of rules, the Commission is not provided that luxury. Instead, the agency is charged with a duty to recognize the effect of its actions on all interested persons and to avoid needless injury to persons who might suffer through no fault of their operations.

Other commenting public safety entities have not taken such a myopic approach to these matters. Several have advocated that any relocation should be performed by CMRS operators (specifically Nextel and cellular operators), not public safety entities and that such action is fully justified by the equities noted in this matter. In effect, those commenting parties would place the burden on those parties whose actions have necessitated any relocation, without causing disruption or cost for public safety entities. Indeed, one can logically and fairly argue that such action is appropriate to protect the future use of the band by public safety entities, and simultaneously free up greater use of the 800 MHz band by public safety and analog operators.

³⁷ See, comments of Florida at 2.

³⁸ See, comments of The City of New York at 3 and 8.

³⁹ See, comments of San Diego County – Imperial County Regional communications System (“RCS”).

both of which are desperate for additional channels for expansion of existing systems. Despite these suggestions, the public safety entities advocating CMRS relocation are divided on where to relocate CMRS operators, compare comments of Maui,⁴⁰ Austin,⁴¹ OCTO,⁴² and Hawaii,⁴³ each of which suggests a different alternative for relocating CMRS operators.

What public safety commenters appear to agree upon is the need for greater protection in the continued use of systems, a method for resolving long-term interference issues, a public safety band which is preferably contiguous to take advantage of new technologies, and, if possible, additional spectrum for future use and expansion of systems. Added to that list of desirable outcomes the Commission might add greater opportunity for future interoperability.

⁴⁰ See, comments of The County of Maui at 9-11.

⁴¹ See, comments of The City of Austin, Texas (“Austin”) at 2; where Austin believes that the Commission’s suggestions to move present and future cellular architecture systems from interleaved frequencies to spectrum above 1 GHz would not only be substantially effective, but also be logistically simple, and if the costs were borne by the cellular architecture licensee, fair.

⁴² See, comments of The Office of the Chief Technology Officer of the Government of the District of Columbia (“OCTO”) at 6 and 7; where OCTO believes that each of the alignment plans presented in the NPRM have merit, and all could be implemented at various levels of complexity and eventual benefit to the impacted parties. The OCTO plan achieves aggregation of Public Safety, B/ILT and Cellular SMR operators into simpler to manage allocation “Service Pools” that combines the services into groups to eliminate the interleaving and adjacent channel sharing in the current plan. OCTO’s plan contemplates minor frequency retuning of the B/ILT services incumbents at virtually no reduction of current channel allocation. Cellular SMR operator channels would also be aggregated into a common area of the band, and while these operators would be required to sacrifice some current channels, the plan will result in net benefit in service capacity due to the simplicity and technical benefits in frequency planning “Service Pool” channels. CMRS operators will also have greater flexibility to utilize additional channels that may now be unavailable due to interfering restrictions.

⁴³ See, comments of the State of Hawaii (“Hawaii”) wherein Hawaii proposes an alternative relocating the interference causing Motorola iDEN systems operated by Nextel and others with the provision of replacement spectrum in the 1990/2165 MHz band at zero cost where they clear their 800 MHz allocations in a timely manner.

To fulfill public safety's wish list, the Commission must focus on two specific areas for resolution: (1) the provision of greater protections against case-by-case incidents of harmful interference by cellularized operations to public safety's continued use of the 800 MHz band and (2) a rebanding proposal which is directed at creating long-term, interference-free operations for public safety operators. In order of immediate priority, SBT addresses these two overarching concerns.

Addressing Existing Interference

Despite the existence of the BPG, the incidents of harmful interference continue to crop up and the resolution of those matters continues to be problematic. The reasons are, fortunately, fully known and, in large measure, resolvable by the Commission. First, the Commission has incorrectly viewed these forms of interference as a type of radio phenomenon which its rules are not equipped to address. The appearance of this agency position has hampered greatly the ability of victims of harmful interference to demand immediate remedial action. In fact, these types of interference are fully actionable under 47 C.F.R. §§90.173 and 90.403 as extensions of the Commission's authority under 47 U.S.C. §333 and the Commission should demand that entities adhere not only to the requirement that facilities be operated with compliant equipment pursuant Subpart 2 of the agency's rules, and in accord with licenses issued under Parts 22 and 90; but that all licensees must further operate in a manner which affirmatively acts to avoid incidents of harmful interference. Only by correctly and squarely placing the burden of immediate resolution on interfering operators will the agency level again the playing field among all 800 MHz operators.

Under the present regime, a victim of harmful interference must wait endlessly (particularly when one measures time one emergency situation after another) while cellularized operations in proximity to the location of the harmful interference mull over the cause, source, and methods for resolution of any interference complaint, all the while repeating a maddening mantra that their operations “are in accord with the Commission’s Rules.” If this claim is true, and SBT strongly avers that it is not, then it should be made false by the actions of the Commission pursuant to this rule making. The relevant causes of desense and IM are both known, foreseeable, resolvable, and without just cause, while exacting disastrous effect. To allow interfering operators to shift the burden onto victims to prove that low-site cellularized operations are the source of the interference is akin to asking the passengers of the Titanic to identify the operator of the iceberg.

The BPG is a weak document with no codified application and no exacting standards for immediate resolution of a known problem.⁴⁴ It is more harmful than helpful as it provides little more than a placebo for the increasing spread of harmful interference that is symptomatic of corporate greed and not recognition of the obligations of licensees. As the Commission is politically adept to appreciate, when confronted with a public relations problem an entity might seek to support the appearance of cooperation, without the attendant obligation to invest in true corrective action. This is what Nextel has done in a temporary, past negotiated peace with public safety. eschewing substantive responsibility in favor of loose, poorly identified, easily ignored guidelines for cooperative resolution, without reference to rule or law. In this manner, the BPG has been rendered little more than a vehicle of propaganda to demonstrate Nextel’s illusory

⁴⁴ See, further discussion of BPG attached hereto.

efforts to employ the private 800 MHz band as it wishes, when it wishes, where it wishes, without regard to the consequences to public safety operators. In effect, the BPG has done more harm than good by promoting a placebo when truly substantive, timely remedial action is necessary, coupled with preventive measures, as well.

For example, the IM produced by a given facility operating alone can be measured by connecting a spectrum analyzer to the feedline running to the antenna. This is not a new or even interesting procedure, except that nowhere within the BPG is this procedure mentioned for the purpose of determining, in advance, whether a newly constructed or modified facility will produce unwanted and potentially harmful interference. Similarly, field measures can be made around the immediate area surrounding a new or modified facility to determine if mixing of cellular and Nextel signals might present harmful IM products. Since public safety channels being used in the area are fully known by reference to the Commission's data base, these relatively simple steps to assure that IM products are not present on the channels of locally operated public safety systems BEFORE harmful interference becomes a problem, seem to be a small price (far less than \$500 million) for a caring CMRS operator to take. That basic measures like these are not fully articulated within the BPG serves as an indictment of the intended use of that document.⁴⁵

What is necessary, therefore, is a method for resolution of harmful interference by mandating both preventive and remedial actions with particularity and immediacy, which actions may be directed by the Commission's field offices (if necessary) to impose on interfering CMRS

⁴⁵ In fact, cellularized operations often include operators' remote changes in frequency use on a regular basis, which is accomplished via software input. These changes may happen daily, without regard to the effect that each change may have on the rf environment.

operators a duty to act first to avoid the creation of harmful interference in accord with the Act and Rules; and second, to take ALL actions to resolve the interference immediately following detection, including any necessary temporary discontinuation of operations of a particular cell until such time as the problem might be resolved. In furtherance of this effort, SBT herein offers specific rule language which would provide the necessary guidance and impetus to operators to assure protection of public safety, and not unfavorably coincidentally, all other operations at 800 MHz.

Rebanding As a Long-Term Solution

As for long-term solutions in fulfillment of the second priority articulated by public safety operators, SBT supports public safety being given spectrum at 700 MHz, to occupy immediately if no broadcaster's authorized operation prevents same, or to migrate onto following the broadcaster's departure which SBT hopes will be sooner, *i.e.* 2006, rather than later. Although much has been made of the problems associated with this recommendation, which problems relate to the availability of equipment and the time associated with awaiting broadcaster relocation, SBT finds such arguments quite weak when viewed in practical terms.

Other rebanding proposals would take years to effect, including Nextel's, PWC's *nee* NAM's, UTC's, etc. and all variations thereof. Those rebanding efforts would be contentious, cumbersome, expensive, and, not unimportantly, unlikely to create a substantive long-term solution. Similarly, some commenting parties' recommendation that cellular systems be relocated is a multi-billion dollar exercise in finger pointing, rather than a realistic appreciation of costs and benefits. Other proposals that involve licensees receiving secondary status are

wholly inequitable. Proposals that seek to relocate non-public safety operators to either 700 or 900 MHz frequencies are similarly flawed, due mainly to the enormous cost associated with such a plan.

However, standing alone a broad brush statement that public safety move to 700 MHz is inadequate. There are other considerations as to who moves first, and where will necessary funding come from to accomplish the move. SBT proposes the following:

The NPSPAC channels should be auctioned, with entities awarded licenses with the condition that they will cause the relocation of all public safety entities (with winners bearing all associated reasonable costs) to 700 MHz channels upon the availability of that spectrum pursuant to the occupancy of broadcasters. Relocation will be upon the election of the incumbent public safety operators to the appropriate auction winner(s), but it must be accomplished no later than two years following the making available of spectrum at 700 MHz based on the licensing status of that spectrum. SBT proposes that the NPSPAC channels be auctioned in one by one (base/mobile) MHz blocks for operation across an MEA, e.g. 866-867 MHz as Block A, 867-868 as Block B, and 868-869 MHz as Block C (with the associated mobile bands). The winner of Block A would be responsible for relocating all public safety use within the General Category channels to the 700 MHz band. The winner of Block B would be responsible for relocating all public safety use within the interleaved channels and up to 861 MHz. The winner of Block C would be responsible for relocating all public safety use from the 861-869 MHz band, which includes the NPSPAC channels.

To further assure that funds are available for relocation, winning bidders would also place in an escrow account an amount equal to (\$10,000) per licensed channel per service area, as a

contingency. This money would be nonrefundable and be used to create the Public Safety Revitalization Fund (PSRF). That money would be employed in the event of a winning bidder's future bankruptcy (a possibility that is no longer remote) or for the purpose of dispute resolution between a winning bidder and an incumbent public safety entity, including for those other purposes outlined below. All relocation would be seamless. A panel made up of representatives of APCO, CTIA and a neutral, presiding party would handle the arbitration of relocation costs to be paid by auction winners to relocate public safety operators from the NPSPAC channels to unoccupied 700 MHz spectrum. The PSRF would remain in existence until 2012 or until the migration is completed, whichever occurs first. Any monies remaining in the fund upon the sunset date would be employed as a funding mechanism to promote interoperability efforts until exhausted. By adopting this path, the Commission employs a combined market-based approach and spectrum management approach to reach the greatest benefit.

SBT rejects suggestions that proceeds from the auction be employed for financing relocation because (i) this places the Commission in the unwanted position of playing "banker" and (ii) in effect, the attendant obligation upon a winning bidder to finance relocation will allow the market to decide what the costs might be and to make appropriate budgetary decisions in the placement of bids. Although this method might initially reduce the amount received by the U.S. Treasury from the auction, it will be far more cost effective over the long run than having the Commission manage directly the process.

SBT also notes that there is still considerable interest in the band to solve the underlying difficulties experienced by Nextel and the cellular carriers, *i.e.* increased minutes of usage (MOU) by subscribers of those services. The carriers' demand for additional spectrum to serve

the demands of customers whose use of cellular service continues to increase dramatically based on all MOU studies, demonstrates well that cellular operators covet use of the NPSPAC channels to solve their internal demand problems – those same problems which have spurred the ever increasing use of low-site systems in the first instance. Therefore, as an added bonus to this approach, the Commission resolves in part the root of the problem to the benefit of the affected cellular carriers.

Such an approach further satisfies many public safety operators' concerns regarding an assure method of funding.⁴⁶ Although primary funding would arise out of the winning bidder's obligation to fund relocation via a seamless transition, the PSRF would provide an insurance policy that might be employed in the event of necessity.

SBT avers that this type of financing is necessary for the purpose of conformity with existing statutory limitations on the Commission, which limits severely the Commission's ability to collect and distribute funds.⁴⁷ Although Title 47 does not require the Commission to engage in auctions which will raise the most money for the U.S. Treasury,⁴⁸ the Communications Act also does not allow the agency use auction receipts for any purpose and, instead, directs the agency to deposit those funds in the U.S. Treasury without any concurrent ability to withdraw or demand those funds in the future for the purpose of financing relocation. Accordingly, the only statutory

⁴⁶ For example, if this plan was employed for auctioning MEA 7, the contribution to the escrow account would be over \$24 million.

⁴⁷ See, *e.g.*, 47 U.S.C. §§ 158(a) & (e), 159(a) & (b), 202(c), 203(e), 205(b), 214(d), 219(b), 220(d), 254(d), 309(j), 362 & 386.

⁴⁸ 47 U.S.C.. § 309(j).

change which needs to be made (and such change appears wholly appropriate) is regarding the use of the available 700 MHz band for operation of public safety systems.⁴⁹

Broad Technical Solutions

Despite the proposed removal of public safety use to 700 MHz, there continues to exist a threat of interference to public safety, prior to migration, and other analog operators regardless of public safety's migration. Therefore, some greater protection of public safety and analog uses is appropriate. Some rather simple rules of operation would likely provide all necessary protection, when coupled with rules which provide greater testing of cellularized operation prior to commencing the provision of service from each new or modified cell.

First, no additional cells (repeaters employing greater than 20 channels to provide digital operations) should be constructed employing channels below 861 Ghz which antennas are situated at less than thirty (30) meters above ground level. All existing cells not meeting this prohibition would be grandfathered, provided however, operators of such cells must adhere strictly to the terms of operation included in the rules suggested herein.

This suggested rule would cause some immediate difficulties for cellularized operators' plans to construct additional facilities to meet increasing MOU per subscriber, however, the potential busy-outs of a few customers is a mere inconvenience compared to the devastating

⁴⁹ Congress recently noted the possibility of a 700MHz band solution to public safety interference when it passed the Auction Reform Act of 2002, which removed all deadlines with respect to the auctioning of upper 700 MHz band spectrum this year. *See*, Pub. L. No. 107-195, 116 Stat. 715, sec. 2(4) (2002), where Congress stated that the Commission should not hold the 700 MHz auction before the 800 MHz interference issues are resolved or a tenable plan has been conceived.

effect of harmful interference. The fact is that the problems experienced by public safety users entail a number of factors, but most of those sources of harmful interference are directly influenced by the height above ground of cellular operations. This one prevailing element in each case can be adjusted to provide needed relief. By removing the source of interference from ground level, the potential for producing interfering IM products and desensing of receivers is reduced as ground level field strength of undesired signals from the interfering cells is reduced by simply placing the cells at a greater distance from the affected receivers.

Second, all cells operating at less than 30 meters AGL may not employ downtilt antennas. This would include all cells without any grandfathering provision for existing cells that, if necessary, would be retrofitted following adoption of the rule to meet this new prohibition.

Again, some system redesign would be required, however, the inconvenience is little in comparison to the concurrent protection. By employing downtilt antennas, the cell operator directs the potentially offending signals to cause the main lobe, and thus the power density, toward the public safety receivers operating at ground level. Although the use of downtilt antennas may assist in system design, such efficiencies cannot be justified given the concurrent threat to public safety communications.

Third, all cells employing 800 MHz band frequencies and antennas situated less than thirty (30) meters above ground level must operate at no greater than 20 watts ERP. SBT would not oppose waivers of the above three limitations on a case-by-case basis for, say, remote and mountaintop sites, upon a showing that a waiver of any of the rules would not adversely effect use of the 800 MHz band by other licensed operators.

The presumption, which appears to be borne out by commenting parties, is that operators of offending cells often fail to adjust power levels downward for one reason or another. Thus, the cell is operated both in greater proximity to street level, with power levels that bombard the surrounding area with undesired signals that overload conventional receivers. This combination is, in large measure, the primary source of harmful interference. To eliminate this obvious source, the Commission need only impose height/power/antenna restrictions on cell operation which balance the need of cell operators against the overwhelming need of public safety and other users.

Although SBT does not believe that the above operational rules will eliminate or prevent all incidents of interference, the overall effect of imposing the height/power/antenna restrictions outlined above will go great distances toward reducing incidents of existing interference and prevent many new incidents from being created. In effect, the restrictions are intended to create a far safer environment for public safety and analog operators. When combined with those other rules suggested herein, SBT believes that the Commission will create a framework of safety and cooperation without radical rebanding efforts being made necessary.

By adoption of the rules suggested herein, the Commission will allow for an appropriate migration by public safety, financed by entities which will receive extremely valuable spectrum in exchange.

Use of Public Safety Channels Below 866 MHz Following Migration

All channels which are a portion of a geographic licensed system would become a portion of that geographic licensee's system in accord with 47 C.F.R. §90.683. Channels within the

B/I.T band which have not been auctioned would be available to non-geographic licensees on a first-come-first-served basis for the purpose of expansion of existing systems. Accordingly, only existing licensees within the 800 MHz band would be eligible to obtain additional spectrum to improve capacity of existing systems, provided however, no application should be accepted for greater than two additional channels per transmitter location.

SBT believes that auction winners should receive the benefit of their respective bargains with the Commission. However, non-auctioned spectrum should be used to provide necessary assistance to existing 800 MHz operators whose systems did not require a number of channels across a wide geographic area. Therefore, SBT proposes that the Commission distribute that spectrum across the widest number of needy licensees. Accordingly, the Commission's spectrum management would improve the value of geographic licensees' authorizations, while concurrently providing much needed assistance to site-based licensees.

By its proposals above, SBT has searched for ways to balance the responsibility for funding and operation against the need for growth and expansion of existing systems. SBT does not pretend that the suggestions made herein are without cost or inconvenience. To the contrary, the proposals require hard choices, compulsory cooperation, shared responsibility, and the creation of additional funding mechanisms. However, these proposals are an honest attempt to reduce the risks of harmful interference to highly manageable levels which can then be augmented with a case-by-case corrective actions, if necessary. And, at the same time, provide long term solutions for public safety operations and the future operations of all adversely affected users of the 800 MHz band.

Local Operators

Of the over two dozen local operators commenting in this proceeding, not one supported Nextel's relocation scheme and many were vehemently opposed to any such action.⁵⁰ Of greatest concern to local operators was the threat of being reduced to secondary status in future operations within the 800 MHz band. This proposal, which is a foundation of the Nextel's plan, was opposed in the strongest of terms by those licensees who might face such a dastardly fate.

Over 70% of the commenting operators spoke in favor of relocating public safety to the 700 MHz band, thus the Commission can see that among all commenting parties there is strong consensus that public safety should be encouraged to migrate to the new band. As this rule making unfolds, it becomes increasingly obvious that there is overwhelming support for public safety to employ the 700 MHz band as its new, permanent home.

Local operators joined with the vast majority of commenting parties in supporting those three actions which would lead toward vast reduction in the subject harmful interference: (1) adoption of strong rules which require remedial action by interfering operators; (2) relocation of public safety users to 700 MHz; and (3) a rejection of any obligation for non-interfering operators to bear the cost of any forced relocation from their use of the band. When taken in combination, it is apparent that the local operators have joined steadfastly with Industrial and CII users in a

⁵⁰ See, comments of C & M Communications, Inc; Fresno Mobile Radio, Inc.; Supreme Radio Communications, Inc; Jamestown Communications, Inc.; Small Business in Telecommunications ("SBT"); Preferred Communications Systems, Inc.; Access Spectrum, LLC; Motient Communications, Inc.; Professional Communications; Business Autophones, Inc.; Coupe Communications, Inc; Harmer Radio & Electronics, Inc.; Bossard Radio Service; Commercial Radio and Television, Inc.; Focus 2000 Communications; Skitronics, LLC; Ad Hoc Wireless Alliance; Danny Hampton; Western Communications, Inc.; Cascade Two-Way Radio; Fisher Wireless, Inc.; Island SMR, Inc.

wholesale rejection of Nextel's proposal as too costly and as applying too great a responsibility on operators whose systems have not and are not likely to ever cause interference to public safety operations.

If the proposals contained herein are adopted, including the migration of public safety users to 700 MHz, it is apparent that channels which were operated upon by public safety users would become available for relicensing to other users. These discrete channels would be most valuable to local SMR operators and B/ILT licensees seeking to expand their systems to meet increased customer and operational demand. SBT proposes that the Commission provide priority licensing of these channels for such purpose, rather than allowing the channels to be auctioned, which auctions, if entirely open, would surely result in Nextel's acquisition of every channel. The presumption of Nextel's dominance is neither fanciful nor unpredictable. The Commission need only review the results of previous 800 MHz auctions. Since Nextel would, under our proposals, be given an opportunity to increase and consolidate its use of the 800 MHz band by participating in auction of the NPSPAC channels, which channels would be of little interest to local SMR operators and B/ILT operators due to the threat of harmful interference from IM products produced by cellular A & B systems and Nextel systems,⁵¹ the channels vacated by public safety entities operating below 861 MHz, which have not been subject to previous auction, should be reserved for licensing by existing SMR and B/ILT operators for expanding existing service. In the alternative, SBT requests that all auctions be on a channel-by-channel basis for the subject frequencies and limited to existing local operators of 800 MHz systems and B/ILT

⁵¹ Nextel would also receive additional spectrum within the general category channels.

operators, who can show via engineering that they can employ the channel without denying incumbent cochannel operators of required protections in accord with 47 C.F.R. §90.621.

SBT agrees with the position taken by local operators, that non-interfering operators should not be made to bear the cost of relocation. Such a requirement is entirely inequitable and without justification. It also flies in the face of Commission promises made only a few short years ago, that local operators, especially those that have already suffered relocation pursuant to 47 C.F.R. §90.699, would be left in peace to operate their businesses upon their authorized channels. To impose new obligations on this beleaguered market segment is unacceptable and will push those operators toward ruin as customers lose faith with their service provider, whose system is subject to constant changes.

Therefore, SBT advocates that local operators not be required to move from their existing spectrum for any purpose related to this proceeding. Nothing in the record justifies such a move, including any effort to reband for the future protection of public safety users. Even if some rebanding proposal is adopted, the harmonious operation of public safety systems and local SMR operations is known and, thus, weighs heavily against any forced relocation of local operators to different spectrum or alternative channels.

The comments of local operators demonstrate that each is also threatened by operation of cellularized systems. SBT takes seriously this threat and proposes to reduce significantly the risk of interference via the height/power/antenna restrictions recommended herein, coupled with the suggested rules to encourage preventive and remedial action by interfering CMRS operators. Together these rules, if adopted, would provide the necessary protection and operational certainty craved by local operators and B/ILT operators to assure reliable operations in the future.

Finally, the Commission should note that local operators often provide communications services to local public safety entities. To attempt to divide rights, duties and obligations by use of inexact service designators employed in licensing, is to ignore an obvious lacuna of logic and equity. Local operators seek the same kind of relief which all adversely affected operators have sought through comments and for reasons equal to those other parties. All analog operators seek quiet enjoyment of the spectrum, free from entities which have not, to date, taken all steps reasonable and necessary to avoid and/or correct incidents of harmful interference.

Large Carriers

Among the large carriers commenting in this proceeding,⁵² an overwhelming number rejected outright Nextel's proposal as little more than a spectrum grab for insufficient value given to either the U.S. Treasury or to finance any remedial action to address the concerns of public safety operators. All stated a willingness to take necessary actions on a case-by-case basis to resolve harmful interference caused by operation of their respective systems. And an overwhelming number supported relocation of public safety operations to 700 MHz.⁵³ Employing a point-by-point analysis, it appears that a incident of great rarity has occurred – large carriers and small local operators agree on the salient points.

The large carriers are not in support of rebanding at 800 MHz below 869 MHz, except as

⁵² See, comments of Dobson Communications Corporation; United States Cellular Corporation (“US Cell”); Nextel Communications, Inc. (“Nextel”); Cingular Wireless LLC and Alltel Communications, Inc. (collectively, “Cingular Wireless”); AT&T Wireless Services, Inc. (“AT&T Wireless”); Verizon Wireless (“Verizon”); and Southern Linc.

⁵³ See, comments of AT&T Wireless at 8; Southern Linc; and Cingular at 18.

would occur due to relocation of public safety to 700 MHz. Unlike the noted exception, Nextel, large carriers agree that most incidents of harmful interference can be remedied if the interfering party presents sufficient willingness and cooperation to resolve incidents of interference after having taken sufficient preventive measures to avoid the initial creation of harmful interference by employing good engineering and design of cellularized systems.

SBT stands primarily in agreement with the large carriers which have commented in this proceeding, however, as stated *infra.*, SBT believes that some operational restrictions are required on large carriers' future operations to avoid the creation of harmful interference from low sites. Certainly, these restrictions must be imposed during any period during which public safety occupies the NPSPAC channels. But SBT would resist any lifting of those restrictions in the immediate future, as IM products produced by non-public safety entities might still be created from low site systems.⁵⁴

The above stated, SBT stands ready to cooperate fully in any future discussions or comments regarding reasonable adjustment of the proposed height/power/antenna restrictions that would avoid undue impact on existing cellularized operations, while continuing to provide necessary protections to potentially adversely affected operators.

⁵⁴ A lifting of restrictions upon A & B cellular sites following a migration of public safety from the NPSPAC channels would appear to be appropriate.

Nextel

SBT will attempt to be cognizant of the obligation to offer constructive comments to this proceeding and will avoid vitriol, in favor of cogent analysis, regardless of the highly critical nature of the following comments regarding Nextel's past performance and suggested proposals. SBT fully recognizes that Nextel is within its rights and obligation to its shareholders to present arguments and suggestions which are wholly advantageous to itself, even if at the expense of others and fairness. We do not specifically fault Nextel for taking such positions in and of themselves. We must, however, take issue with the disingenuous nature of some of Nextel's past comments and actions, and its unwillingness to participate in any discussion which suggests that Nextel's operations are the primary source of the interference being discussed in this rule making. Additionally, as stated *infra.*, SBT strongly avers that Nextel's interfering, low-site operations are not in accord with rule or law, no interpretation of which would allow an operator to rely on authority via licensing and type acceptance to excuse wholesale distribution of interference upon innocent operators. Such a position is fully contrary to the very nature of spectrum management and the core basis for creation of the Commission in the first instance.

As a foundation for SBT's discussion, we direct the Commission's attention to the fact that the type of interference suffered by public safety and other analog operators has been fully recognized, anticipated, and was entirely foreseeable by Nextel. Yet, despite this knowledge, Nextel has moved forward with impunity to occupy the subject band and employ a system design which is injurious to the reliable operations of public safety systems. For years, Nextel has been the subject of complaints from local operators, B/ILT users, and public safety licensees for its creation of harmful interference of each type noted in this proceeding. Nextel's typical response

to such complaints is a combination of denial, feigned incredulousness, inadequate testing, delayed response, challenges to the affected system operator, reliance upon its licenses and type acceptance as weak support for its alleged legal imprimatur to wreak havoc on the ether, and ultimately, delayed responses to public safety complaints which result in minor adjustments to its system or no response to local SMR operators. All the while Nextel blames non-digital receiver operation, again and again and again... as though the characteristics of these receivers is or was an unknown fact to Nextel prior to its commencement of operation of the offending low-site cell.

That Nextel is the primary source of the harmful interference suffered by commenting parties which reported problems with their systems, is a matter of record in this proceeding. All protest to the contrary lodged by Nextel in its comments should be summarily rejected by the Commission as without support or factual basis. Why Nextel causes these problems has also been explored in comments, including its use of low-site architecture and hybrid combiners, a well documented source of spurious emissions which effect is and was also known to Nextel.

Nextel, therefore, is the primary source of the anxiety and lack of reliability of public safety and other affected systems. Nextel knows this to be true, the same way all of the commenting parties know this to be true. Having created by its own unilateral and irresponsible acts the uncertainty for future operations of analog systems within the 800 MHz band, Nextel's proposals are even more incredible in the audacity of its suggestions. That Nextel has lured some public safety commenters to its cause is unfortunate in the extreme. It appears that Nextel has created the threat and now chooses to be rewarded for its creation of the threat by making a deal with public safety victims to act in a concerted manner which is highly disadvantageous to other, innocent analog operators.

Employing questionable timing for the filing of its “White Paper,” Nextel recommends that its actions be viewed as an unfortunate byproduct of operations, which byproduct requires the cooperation and resources of the industry and the Commission to solve. This position would be more palatable if Nextel had unknowingly acted or if Nextel’s activities in the past had demonstrated a record of doing what is necessary to both avoid and remedy those incidents of interference which all interested parties are now put to the task of resolving.

SBT further reminds the Commission of Nextel’s statements made within *In the Matter of Wireless Telecommunications Bureau Seeks Comment on FCI 900, Inc.’s Request For 3-Year Extension of 900 MHz Band Construction Requirements, Before the Commercial Wireless Division, Policy and Rules Branch*, DA 01-121, released January 18, 2001 (“Nextel’s Request”). In that matter, Nextel Communications, Inc. requested an extension of time for construction of 900 MHz SMR systems based on its stated intention to bring to the market a frequency agile operation, employing both 800 and 900 MHz channels to deliver voice and data services. Seeking special treatment by waiver, Nextel argued that it required additional time because its supplier of the equipment, Motorola, had not performed in a timely manner to design and make available the equipment to deploy this, apparently illusory, system. The Commission stated that Nextel sought the subject waiver, “because equipment is not yet available to integrate its 900 MHz MTA licensed spectrum into its existing nationwide 800 MHz [system],”⁵⁵ and that Nextel, to procure that waiver stated that “Nextel will construct the above-described expanded band 800/900 MHz nationwide iDEN network whether or not it receives the relief requested herein,”⁵⁶

⁵⁵ Nextel’s Request at 2.

⁵⁶ *Id.* at 3.

to “promote the provision of additional competitive wireless services to the public.”⁵⁷ As further evidence of the relevance of that matter on the instant proceeding, Nextel claimed within its request that it would employ the \$20 million that it would have spent on timely construction of 900 MHz SMR facilities to deploy “pico-cell” technology to resolve interference issues related to the reliable operation of 800 MHz public safety systems. *Id.*

It is apparent by the statements made by Nextel in this proceeding that it no longer views the use of pico-cell technology as a viable method to resolve harmful interference and SBT strongly doubts that any such application of that technology for such purposes would ever have been possible since such technology was neither available nor applicable to the purposes claimed by Nextel in its request for waiver, nor was it ever designed to be applied to any uses within the 800 MHz band. It would further appear that Nextel did not spend the claimed \$20 million for such technology. It is also obvious that Nextel has long abandoned its thoughts regarding deployment of a 800/900 MHz system since it is willing to employ its 900 MHz channels as unconstructed trading stock in this proceeding, rather than bringing an allegedly competitive service to the market. But although nothing within Nextel’s request for waiver has proved to be accurate or even supported by a veneer of plausibility, and not a single promise made therein has been kept or even attempted, Nextel has not done the honorable act of reminding the Commission of the basis for the extension of construction deadlines and, instead, hastens today to throw up as quickly as possible analog 900 MHz SMR facilities in an attempt to secure those licenses for its purposes in leveraging those licenses into a sweetheart spectrum deal within this

⁵⁷ *Id.* at 9.

proceeding. Just as Nextel's earlier request for waiver was a sham, its position within this proceeding is an extension of that earlier misrepresentation.

The above discussion of Nextel's granted waiver and the statements relied upon by the Commission in granting that waiver speak to an issue which has not been adequately considered within the comments in this proceeding. Nextel's position presupposes that it holds title to substantial amounts of 700, 800 and 900 MHz channels, a portion of which would be employed in a channel swap to facilitate rebanding. Yet, no where within this proceeding is there any proof of Nextel's claims.

There Is No Evidence That Nextel Can Deliver

Nextel has claimed rights to substantial blocks of 800 MHz channels which would be employed for relocating public safety. This statement is not accurate. It ignores the channels which are licensed to Nextel Partners, Inc., an entity in which Nextel Communications, Inc. is a minority shareholder. A review of the Commission's data base shows clearly that Nextel Partners is a substantial holder of spectrum which would be required to facilitate Nextel Communications, Inc.'s radical rebanding plan. Yet, Nextel Partners has not even participated nor endorsed its minority shareholder's statements made within this rule making. Nextel Partners did not even file comments in this proceeding. Therefore, Nextel Communications, Inc.'s claims regarding its ability to deliver necessary 800 MHz spectrum for any proposed rebanding are without authority, wholly speculative, and provide no basis for adoption of its radical rebanding ideas.

It is doubtful whether Nextel Communications, Inc. holds exclusively within any market those blocks of 800 MHz spectrum which it proposes to swap. A review of the Commission's data base clearly demonstrates Nextel Communications, Inc.'s dominant position, but it does not prove that Nextel Communications, Inc. has got the goods. All frequency bands show that incumbents continue to operate legitimate systems from the Upper 200 channels, clear down to the General Category frequencies. Nextel Communications, Inc.'s long sewn patchwork quilt of channels continues to be just that and it is this cobbling together of channels across the 800 MHz band for operation of a low-site cellular system that is one of the primary causes of that interference suffered by 800 MHz operators.

Nextel's claims regarding its authority at 700 MHz is similarly specious. Nextel accepted that non-nationwide authority with the specific condition subsequent that its use of the band would include its fulfilling the obligation of a band manager, while timely constructing facilities that would employ the channels for Nextel Communications, Inc.'s own use. Nextel's White Paper and its comments within this proceeding act as an anticipatory repudiation of those obligations, thus rendering Nextel no longer eligible to serve as a band manager and, therefore, no longer qualified to hold the subject 700 MHz licenses. In sum, Nextel has stated in its comments within this proceeding that it no longer wants the band manager job. The Commission should recognize its disappointed intentions in granting those licenses to Nextel and summarily cancel Nextel's authority without further consideration. Certainly, Nextel has done nothing to

serve the public interest in operating on those channels or facilitating other persons operation on those channels.⁵⁸

Finally, with regard to the 700 MHz spectrum held by Nextel, it appears that Nextel is trying to obtain some form of credit for its willingness to return spectrum, despite the fact that Nextel's authorization (which is only in 40 markets) only allows it to operate on half of the spectrum, employing the remainder for third party uses. Accordingly, Nextel's offer is to trade half and receive the whole of the credit.

The above considered, Nextel is attempting to trade only highly questionable title to that spectrum necessary to facilitate its strategy, for clear title to contiguous spectrum within the 800 MHz band and 10 MHz at higher frequencies. Before the Commission might equitably consider this strange and radical idea, it must first engage in due diligence to determine whether Nextel's offer contains any adequate consideration for the valuable spectrum and other accommodations Nextel seeks. SBT invites the Commission's due diligence to determine whether Nextel's claims are even remotely supportable, or whether Nextel has again offered illusory claims of consideration which ring hollow like its claims within its request for waiver of the construction deadline for its 900 MHz SMR facilities. In sum, the Commission was already fooled in granting Nextel's 900 MHz waiver request and should not allow itself to be duped again.

⁵⁸ Compare, those yeoman's efforts expended by Access Spectrum to urge production of equipment at 700 MHz, having recently declared victory in the type acceptance of Motorola equipment that will operate on that spectru.

Nextel's Demand For 10 MHz

Absent what would be deemed, in effect, clear and marketable title to the spectrum which Nextel has offered to swap for receipt of cleared spectrum above 1.9 GHz, Nextel's suggestion that it receive the requested 10 MHz must be viewed as a bad deal for the Commission, the U.S. Treasury, and the industry. This bizarre request is without precedent and it comes too close to resembling a type of payoff for Nextel's participation in resolving a problem of Nextel's own making. Although Nextel has attempted to characterize the proffered deal as reasonable consideration for its participation in its own, carefully tailored rebanding scheme; Nextel's suggestion misses an essential issue underlying this matter. Nextel would be rewarded for its creation of harmful interference to public safety systems.

Nearly all parties commenting in this proceeding have rejected Nextel's suggestion as unworkable or inequitable. Some of these comments are wholly understandable, as they reflect on the fact that Nextel has not been a good spectrum neighbor at 800 MHz and its system should not be allowed to repeat its record within a new band.⁵⁹ SBT both appreciates and agrees with this analysis. Having leveraged its use of the 800 MHz band to drive other operators to seek asylum away from Nextel's spectrum-polluting operations, licensees and users of other bands do not desire to attempt to live "next door" to Nextel within other bands.

Nextel's claim of entitlement to use of the 10 MHz pursuant to rebanding is misplaced. Rather, Nextel's machinations, if adopted, would result in Nextel's receiving extremely valuable and scarce spectrum resources for a mere \$500 million and some patchwork of licenses at 800

⁵⁹ See, comments of Avaya, ARRL, RadioSoft, Motorola, API, APTA, AMTA, AAR, CTIA, SIA, IACP, NAM.

MHz, while simultaneously receiving a block of contiguous spectrum at 800 MHz. Nextel's offer to throw in its 700 and 900 MHz licenses is also not convincing to seal the deal. As Nextel has pointed out, 700 MHz equipment is only in the early stages of development and, as noted above, its 900 MHz spectrum is of limited, if any, value to Nextel. One can quite easily see how this deal makes sense for Nextel. What one cannot see is how this deal makes sense for anyone else, including the public.

Perhaps most vexing is the element that keeps returning in any analysis of Nextel's plan – that Nextel would receive preferential treatment due to its failure to protect reliable operations of public safety systems. This inequitable potential result is contrary to any rational application of law or the policies of the agency which require that interfering parties take steps to resolve interference, which steps do not require further public or private assistance. Certainly, Nextel cannot point to another analogous situation wherein an interfering party was rewarded for having disrupted communications.

SBT, thus, joins with those other commenting parties that have rejected Nextel's demand for 10 MHz of spectrum above 1 Ghz and urge the Commission to not give in to this unusual demand. There exists no basis for such a spectrum give-away and the consideration offered by Nextel is illusory and insufficient.

The \$500 Million Contribution

Application of simple math and the reports of commenting parties demonstrates that this portion of Nextel's offer is insufficient for the purposes proposed. Even under Nextel's radical rebanding proposal, the cost to public safety entities of participation is likely to be at least three

times as much money as Nextel has stated that it is willing to donate. If one adds the cost to B/I.T and SMR operators, the \$500 million⁶⁰ falls far short of the enormous costs which would be suffered by persons that Nextel does not even believe require any assistance or compensation. Yet, Nextel would have these licensees bear the cost of relocation or rebanding, which none has stated is desirable for any purpose and which all admit would be solely for the purpose of shunting Nextel's operation onto a separate piece of the 800 MHz spectrum. One must be struck with the obvious question, how did Nextel's creation of interference result in economic liability for non-interfering parties?

In its request for waiver of the construction deadline for its 900 MHz SMR facilities, Nextel alluded to its ability to expend \$20 million to solve interference problems to public safety systems. The Commission should, therefore, provide Nextel the ability to make good on its earlier claim and direct Nextel to employ the offered \$500 million toward correcting its problem on its own motion and subject to specific guidelines and deadlines. Besides, one is struck with the very real possibility that a proper application of the \$500 million by Nextel would have on its operation in furtherance of the goals of this proceeding. SBT considers the following:

\$500 million could fully finance the following:

- Replacing all hybrid combiners used by Nextel which have been identified as a source of the subject interference: Est. \$100 million
- Personnel time to test all cell sites with antennas located less than 30 meters above ground, to determine the presence of harmful IM products and sideband

⁶⁰ How this money would be collected, secured, and doled out to the few lucky recipients is yet unknown.

noise, and to engage in such remedial action as might be required: Est. \$200 million

- Creation of a central response team to coordinate rapidly all reported incidents of harmful interference: Est. \$5 million
- Internal funding of equipment replacement for public safety entities employing older mobile units which evidence a comparatively high level of susceptibility to interference from digital operations: Est. \$100 million
- Creation of a liason/education function to better inform public safety technicians about the means of detecting and reporting interference, and the sources of same: Est. \$10 million.

If Nextel was sincere in its offer of assistance and diligence in resolving its interference problem, the \$500 million would be better and more efficiently spent in those manners outlined above. It is noted, of course, that Nextel does not receive a contiguous block of spectrum above 1 GHz in consideration for these expenditures. Rather, Nextel receives two things that may or may not affect the corporation's bottom line: (a) the company will be moving to comply with its obligation to avoid and correct interference and (b) the company would be taking those steps which are necessary to avoid creating unnecessary threats to the safety of life and property which public safety's use is designed to promote. SBT avers that Nextel has not taken this superficially unprofitable road for obvious reasons, the deal serves only the public and not Nextel's profits.

SBT urges the Commission to reject Nextel's proposals as borne of opportunism of the basest kind. Nextel's statements are those of a company that has been caught dealing from the bottom of the deck and that seeks to cover its sleight of hand by kicking over the table and

grabbing the money (spectrum). We believe that it is time for the Commission (the House) to restore the game in accord with the rules that were laid down when all the players took their seats.

Specifically, SBT respectfully requests that the Commission cancel Nextel's licenses at 900 MHz for failure to construct in a timely manner and to deal with required candor in accepting that waiver granted by the Commission, by setting aside the grant of waiver as having been based on Nextel's false claims, which have not been corrected by Nextel in accord with 47 C.F.R. §§ 1.17 & 1.65; cancel Nextel's licenses at 700 MHz for its repudiation of all obligations related to serving as a band manager, including its stated intention not to construct facilities on that spectrum for its own use; direct Nextel to take all steps necessary to move in compliance with its obligation to avoid the creation of harmful interference to all licensees within the 800 MHz band; and to take all such other actions as are desirable and necessary in accord with the rule sections proposed herein.