DOCKET FILE COPY ORIGINAL

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Improving Public Safety Communications	)	
in the 800 MHz Band	)	
	)	**WT Docket No. 02-55**
Consolidating the 900 MHz Industrial/	)	
Land Transportation and Business Pool	)	
Channels	)	

TO: The Commission

COMMENTS OF SCANA CORPORATION

By: Carole C. Harris
Kirk S. Burgee
Erika E. Olsen
McDermott, Will & Emery
600 13th Street, N.W.
Washington, D.C. 20005-3096
(202) 756-8000

Attorneys for SCANA Corporation

Dated: May 6, 2002

TABLE OF CONTENTS

EXECUTIVE SUMMARY

SCANA supports the goal of protecting Public Safety from harmful interference. The idea of realigning the 800 MHz band, however, is not the right way to accomplish this. Rather, the FCC should adopt a market-based approach to solving the important issues that surround the problem of Public Safety interference. Such an approach would establish a framework of rules in which: 1) the FCC has defined parameters to facilitate the identification of facilities likely to cause interference to Public Safety systems; 2) the responsibilities of each party to resolve the interference are clear; 3) well-defined timeframes ensure swift resolution of interference; 4) parties may use a range of options to resolve interference issues; and 5) procedures for third-party arbitration of disputes minimize the FCC's involvement. This is the most efficient and practical means by which the FCC can ensure that Public Safety interference is eliminated, without engaging in a wasteful and unwarranted realignment in the 800 MHz band.

Further, the causes of Public Safety interference have not been fully evaluated, and must be more fully understood before a satisfactory remedy can be crafted. It has not even been shown that realignment would adequately alleviate those currently known sources of interference. For example, the FCC itself has noted that reallocations may not solve interference stemming from intermodulation.

Absent a compelling showing to the contrary, realignment should not be implemented. In the event that the FCC determines that the last resort of realignment is required, however, any plan implemented must be strictly circumscribed in order to avoid any unnecessary impact on, or disruption to, those entities that are neither causing nor suffering significantly from the interference in question. Incumbents must be given

comparable replacement spectrum, and relocation for *all* affected entities must be completely funded by the cost-causer.

Each of the plans currently proposed would be extraordinarily burdensome on 800 MHz users generally, and utilities in particular. Further, there is no recent FCC precedent that supports the notion of an unfunded, wholesale relocation of an entire class of users to a new spectrum band. Rather, Commission precedent recognizes the need to minimize impact on incumbents and to provide adequate funding and a transition mechanism if a move is found to be warranted *after* an in-depth study of the problem is conducted.

With respect to the plan proposed by Nextel, it is unnecessarily disruptive and fails to provide an adequate funding mechanism for displaced licensees. Under this plan, Business, I/LT and non-cellular SMR face the added problem of the unavailability of spectrum at 700 and 900 MHz. Further, the 700 and 900 MHz spectrum offered by Nextel is not comparable to the current 800 MHz allocation in functionality or geographic availability.

The NAM and FCC plans are equally problematic. Both are overly broad and fail to provide a viable funding scheme. The FCC plan is also vague and wholly deficient in accounting for logistics of any required transition. Further, it does not even address the Public Safety systems operating on the NPSPAC channels.

Finally, the FCC should not consolidate the Business and I/LT pools. It would hinder access to spectrum by critical infrastructure entities and endanger the efficient operation of their public safety/public service communications systems.

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Improving Public Safety Communications in the 800 MHz Band	)	
	)	**WT Docket No. 02-55**
Consolidating the 900 MHz Industrial/ Land Transportation and Business Pool Channels	)	

TO: The Commission

COMMENTS OF SCANA CORPORATION

Pursuant to Section 1.415 of the FCC's Rules, SCANA Corporation ("SCANA") hereby submits its Comments on the *Notice of Proposed Rule Making (NPRM)* in the above-captioned matter.[1] As explained herein, SCANA shares the FCC's concern that land mobile radio systems used to support Public Safety operations should not be subject to harmful interference. The proposals under consideration in this proceeding, however, represent a highly inefficient and wasteful approach to addressing this important issue. SCANA believes that a market-driven approach, utilizing many of the existing aspects of FCC spectrum regulation, will be more effective, and therefore is clearly preferable to realignment or other sweeping changes to the

[1] In re Improving Public Safety Communications in the 800 MHz Band, Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55, *Notice of Proposed Rule Making*, FCC 02-81 (rel. March 15, 2002). The *NPRM* was published in the Federal Register on April 5, 2002, 67 Fed. Reg.16351. ("*NPRM*")

current framework. SCANA supports solutions that are designed to mitigate interference risk effectively and with the least cost and disruption to all potentially affected parties.

I. INTRODUCTION

A. Background

The FCC initiated this rulemaking to address the issue of interference to Public Safety systems operating at 800 MHz. Reports of such interference in recent years prompted the FCC in April 2000 to organize the Commercial/Public Safety Interference Task Force. This task force, which was comprised of representatives of Public Safety licensees, cellular carriers, Nextel and Motorola, ultimately published a set of survey responses in November 2000 and a "Best Practices Guide" in December 2000.[2] The published survey responses, numbering 36, generally indicated that Public Safety users have experienced higher than expected levels of interference in the immediate vicinity (*e.g.*, within 1,000-4,000 feet) of certain cell sites at which Nextel and/or cellular carriers have 800 MHz transmitting equipment.[3]

More recently, Nextel Communications, Inc. submitted to the FCC a proposal that Nextel contends will address Public Safety interference issue. Key elements of the proposal include:

- Removal of Business and Industrial/Land Transportation systems from the 800 MHz band;
- Reallocation of Public Safety channels at 800 MHz;

---

[2] Avoiding Interference Between Public Safety Wireless Communications Systems and Commercial Wireless Communications Systems at 800 MHz - A Best Practices Guide (Dec. 2000) ("*Best Practices Guide*").

- Imposition of assessments against all non-Public Safety users of the 800 MHz band, including cellular licensees, for reimbursement of Public Safety's relocation costs;
- Assignment to Nextel of additional spectrum in the 2.1 GHz band for its own operations.

In its proposal, Nextel acknowledged that much of the inference to which these measures were directed was attributable to Nextel itself.[4] The FCC has now requested comment on Nextel's proposal, as well as other proposals referenced in the NPRM and the issues associated with Public Safety interference generally.

B. SCANA's Interest in the Proceeding

SCANA is a $5 billion energy-based holding company whose business includes regulated electric and natural gas utility operations and other energy-related businesses. SCANA serves a collective base of approximately 800,000 customers over a 21,000 square mile service territory. SCANA's principal subsidiary, South Carolina Electric & Gas Company ("SCE&G"), is South Carolina's largest utility. SCE&G provides electric service to more than 502,000 customers in the central, southern, and southwestern portions of the state. It is the state's largest retail supplier of natural gas as well, with more than 250,000 customers throughout a 19,000-square-mile service area.

South Carolina Pipeline Corporation, another SCANA subsidiary, is engaged in the purchase, transmission and sale of natural gas to commercial, industrial and wholesale

[3] SCANA understands that, as of the week ending May 3, 2002, the number of responses had reached approximately 90.

customers. Similarly, Public Service Company of North Carolina, provides natural gas to approximately 300,000 customers in North Carolina.

SCANA Communications, Inc. ("SCI") provides the SCANA corporate family, the State of South Carolina and various local Public Safety entities with safe, dependable, and efficient communications, through its non-profit, cost-shared 800 MHz land mobile radio system. This system was proposed following the extensive damage caused by Hurricane Hugo in 1989 and is designed to provide seamless and reliable wireless communications to SCE&G in support of its utility operations and to Public Safety agencies. Specifically, the system is designed to facilitate the coordination of Public Safety responses to natural disasters affecting multiple jurisdictions, such as hurricanes and tornadoes. During natural disasters, Public Safety agencies need to communicate and coordinate with SCE&G's repair crews. Accordingly, wireless communications are of the utmost importance, particularly given that severe weather can incapacitate wireline communications. SCI designed the 800 MHz system to meet the increasing communications requirements of all the users and to handle SCE&G's extensive customer service dispatch operations.

Currently, the system is shared with over one hundred Power or Public Safety eligibles. SCANA holds 66 licenses in the I/LT Radio Service, authorizing the use of 92 different I/LT and Business Frequencies and approximately 13,956 mobile, portable, and control units. In addition to its land mobile radio system, SCANA is also able to facilitate its utility operations by using

---

[4] "Promoting Public Safety Communications -- Realigning the 800 MHz Land Mobile Radio Band to Rectify Commercial Mobile Radio - Public Safety Interference and Allocate Additional Spectrum to Meet Critical Public Safety Needs," at 9, (November 21, 2001)("*White Paper*").

spectrum-dependent equipment for its Multiple Address System and point-to-point microwave. These services operate in the 48, 150, 800 and 900 MHz bands, and on the 2 and 6 GHz bands.

SCANA expended tens of millions of dollars and countless man hours on its land mobile system. As such, SCANA has a wealth of institutional experience in the technical matters relating to 800 MHz land mobile operations, which enables SCANA to offer these comments from a highly informed perspective.

II. THE PROBLEM OF PUBLIC SAFETY INTERFERENCE AT 800 MHZ MUST BE MORE FULLY UNDERSTOOD

As set forth above, SCANA recognizes that virtually any level of interference to Public Safety operations must be addressed. Indeed, numerous Public Safety entities throughout the State of South Carolina share the use of SCANA's system, and SCANA has significant experience in dealing with their unique needs. To date, however, there is insufficient evidence of a pervasive interference problem. Even Nextel, the proponent of an extraordinarily costly and disruptive "solution" to the problem, fails to provide any meaningful quantification of its scope. In light of the apparent success of case-by-case measures to address the interference that has arisen, broadly targeted remedies cannot be justified.

In the *NPRM*, the Commission places significant weight on the *Best Practices Guide*, published by the Commercial/Public Safety Interference Task Force in December 2000. The *Best Practices Guide* was recently supplemented by an "Interference Technical Appendix (Issue 1.41)" published by Motorola in February 2002.[5] The *Best Practices Guide* and Interference

[5] Motorola, Interference Technical Appendix, Issue 1.41 44 (Feb. 2002), *available at* http://www.motorola.com/cgiss/docs/Interference_Technical_Appendix.pdf [hereinafter *Interference Technical Appendix*].

Technical Appendix go into significant detail on the apparent causes of interference to Public Safety licensees, including: the relative power levels affecting Public Safety receivers proximate to low-site transmitters, the lack of frequency selectivity by Public Safety receivers, the proximity of Public Safety channels to CMRS channels, CMRS intermodulation products and sideband noise, and Public Safety receiver overload. As set forth more fully below, SCANA believes that each of these can be remedied in an efficient manner through the use of case-by-case technical approaches while band realignment is an inefficient, and probably ineffectual answer.

III. THE FCC SHOULD ADOPT MEASURES TO FACILITATE MARKET-BASED RESOLUTION OF CASES OF HARMFUL INTERFERENCE

SCANA, along with a number of other 800 MHz incumbents, endorses the adoption of a market driven approach to the problem of Public Safety interference. The FCC has increasingly relied on deregulatory, market driven approaches to issues falling within its jurisdiction.[6] By establishing a framework in which parties have a direct stake in the cost of their actions, the FCC has assured economically efficient behavior. When appropriate regulatory ground rules are established, parties acting in their own self interest will be motivated to minimize costs and seek out efficient outcomes. In this case, there is no question that Public Safety operations must be protected from interference. Nextel's proposal would impose the costs of Nextel-caused interference broadly across a wide variety of entities that have no role in the creation of, and thus

[6] *See, e.g.*, In Re Amendment of the Commission's Rules with regard to the 3650-3700 MHz Government Transfer Band; ET Docket No. 98-237; RM-9411; Docket No. 00-32; *First Report and Order and Second Notice of Proposed Rulemaking*; 15 FCC Rcd 20488 (2000).

ability to control, those costs. This is a patently flawed approach. Not only is it unfair to the uninvolved parties, it is inefficient.

Nextel may enjoy competitive benefits by requiring Business and I/LT users to vacate the 800 MHz band, and Public Safety would no doubt prefer additional spectrum allocations and a funding mechanism for new radio systems. The current proceeding, however, has been initiated to resolve allegations of interference between Nextel's low-site digital transmitters and existing Public Safety systems. The injection of additional issues related to Public Safety allocations or Nextel's entitlement to additional spectrum is likely to delay ultimate resolution of the more critical interference issues which have been raised by the Public Safety community.

A. Principles That Should Be Used in Crafting Public Safety Interference-Reducing Rules

SCANA believes, along with other 800 MHz incumbents, that any rules that are adopted to resolve Public Safety interference should: (1) define harmful interference and the events that would trigger a resolution procedure; (2) clarify the rights and responsibilities of each party; (3) avoid limiting or mandating possible remedies; (4) ensure prompt resolution of Public Safety interference complaints with only minimal FCC involvement; and (5) avoid impacting licensees not directly involved in the interference problem. Each of these principles is discussed herein.

1. Rules Should Define Harmful Interference and Triggering Events

For purposes of resolving conflicts between stations licensed under Part 90, "harmful interference" is defined as "any emission, radiation, or induction which specifically degrades,

obstructs, or interrupts the service provided by such stations."[7] This is a functional definition that is not dependent on any arbitrary signal levels or carrier/interference ratios. While additional certainty would be provided by such standards, they are not necessary to resolve complaints between licensees. Rather, the first step in resolving interference is to define triggering events that would establish the responsibility of the digital system licensee to cooperate with the Public Safety licensee in resolving the interference.

2. Rules Should Clarify Rights and Responsibilities of Each Party

In the 800 MHz band, resolution of interference problems is the responsibility of the specific licensees causing and receiving the interference. Under Section 90.173 of the FCC's rules, "all applicants and licensees shall cooperate in the selection and use of frequencies in order to reduce interference" through mutually satisfactory arrangements.[8] If the licensees are unable to reach an agreement, however, the FCC "may impose restrictions[,] including specifying the transmitter power, antenna height, or area or hours of operation of the stations concerned."[9] Section 90.403(e) contains a similar rule on interference mitigation, requiring all licensees to

---

[7] 47 C.F.R. §90.7 (2001).

[8] 47 C.F.R. § 90.173(b) (2001). The FCC's Best Practices Guide also counsels commercial licensees and public safety agencies to collaborate and share responsibility for avoiding interference.

[9] *Id.* In some instances under Part 90, the FCC has announced that it would employ a "first-in-time" principle by which the last licensee to commence operations would have to resolve any interference. *See* In re Amendment of Parts 2, 22, and 90 of the Commission's Rules to Allocate Spectrum in the 928-941 MHz and to Establish Other Rules, Policies, and Procedures for One-Way Paging Stations in the Domestic Public Land Mobile Service and the Private Land Mobile Radio Services, GEN Docket No. 80-183, RM-2365, RM-3047, RM-3068, *Second Report and Order*, 91 F.C.C.2d 1214, 1223 ¶ 32 (1982).

"take reasonable precautions to avoid causing harmful interference."[10] As a last resort, the FCC noted that it may relocate the interfering licensee.[11]

Thus, in the 800 MHz band, the interfering party has the primary responsibility to prevent the occurrence of harmful interference. If interference does occur, however, the FCC's rules set forth the appropriate order of interference mitigation: (1) mutual agreement between the affected licensees; (2) imposition of technical restrictions on the licensees; and (3) relocation of the offending licensee. Neither Section 90.173(b) nor Section 90.403(e) requires third-party licensees to participate in interference mitigation.

Nextel's status as the primary source of interference in the 800 MHz band is well documented in reports by Public Safety agencies as well as anecdotal evidence. For example, in its Project 39 Interim Report, APCO found that thirty of the forty-five Public Safety agencies reporting 800 MHz interference cited Nextel as the culprit.[12] Although Nextel has publicly admitted causing interference in only twelve states,[13] a survey conducted by the Portland Oregonian found that Public Safety operators in twenty-one states complained that Nextel caused

---

[10] *Id.* § 90.403(e).

[11] *See* In re Application of American Television of Utah, Inc. Salt Lake City, Utah; For a Television Construction Permit, File No. BPCT-790822KE, *Memorandum Opinion and Order*, 1984 FCC LEXIS 1530, *5 (1984) ("Generally, channel changes are used as a last resort where there is, or a petitioner has established a reasonable likelihood of interference, and where all efforts to filter out such interference fails.").

[12] *See* APCO, Project 39: Interference to Public Safety 800 MHz Radio Systems, Interim Report to the FCC (Dec. 24, 2001), *available at* http://www.apco911.org/afc/project_39/interim_report.pdf.

[13] The Portland Oregonian reported that Nextel conceded that it caused interference in Arizona, California, Colorado, Florida, Louisiana, Maryland, New Jersey, New York, North Carolina, Ohio, Oregon, and Washington. *See* Emily Tsao and Ryan Frank, *Emergency Calls Crowded Out the Stage for Problem*, OREGONIAN (Portland), Aug. 5, 2001, at A01.

substantial interference to their systems and that operators in five other states suspected that Nextel was their interference source.[14] In Phoenix, for example, the city's deputy information technology director stated that Nextel's "towers make our system look like Swiss cheese."[15] Overall, out of the twenty-eight states responding to the Oregonian's survey, twenty-six pinpointed Nextel as the actual or potential source of the harmful interference.[16] The Chief of the Wireless Bureau has also stated that Nextel was the likely cause of the interference to Public Safety licensees in the 800 MHz band.[17] Thus, any rules that are adopted in this proceeding should ensure that only the parties causing the interference to Public Safety are obligated to participate in the solution.

3. The FCC Should Not Limit Licensees' Options for Addressing an Interference Situation

By allowing parties the maximum flexibility in developing a solution to interference, the FCC will help to assure that the most efficient means are selected. For example, SCANA has had considerable success with using mutual coordination of frequencies as a means of addressing CMRS interference. This approach would not be practical in many instances and SCANA

---

[14] *See* id.

[15] See Ryan Frank and Emily Tsao, *Nextel Frees Police Airwaves: The Company Reduces Cell-Phone Interference that Blocked Fire and Police Radios in Portland, But Other Cities Still Face Problems*, OREGONIAN (Portland), Jan. 6, 2002, at B01.

[16] Since the date of this survey, more than six months ago, new interference problems involving Nextel have arisen, including several complaints from New Jersey public safety agencies. *See* Jacob Quinn Sanders, *Upgrade Near for Emergency Radio System; Montco Will Vote Next Week. Cell-Phone Signals Have Been Hampering Some Transmissions*, PHILA. INQUIRER, Mar. 15, 2002.

anticipates that technical solutions will play a significant role much of the time. In this regard, the *Best Practices Guide* and Motorola's "Interference Technical Appendix (Issue 1.41)" contain numerous technical solutions that can either alleviate to an acceptable level or even completely eliminate interference in specific situations. These include:

- Checking antenna systems to confirm they are operating in accordance with specifications;[18]
- Decreasing low-site system transmitter power;[19]
- Avoiding transmission on frequencies known to result in harmful intermodulation products;[20]
- Increasing Public Safety signal strength;[21]
- Utilizing receivers that have intermodulation specifications of 74 dBs or higher, which are much more immune to interference caused by intermodulation than receivers with less than 74 dBs;[22]
- Utilizing receivers that receive a narrow range of frequencies;
- Changing receiver antennas to reduce antenna gain;
- Modifying low-site transmit antennas, such as by increasing the center of radiation to increase local site isolation or eliminating down-tilt;[23]

---

[17] *See* Allyson Vaughan, *FCC Tackles 800 MHz Interference Problems*, WIRELESS WEEK, Mar. 18, 2002, at 4 (citing Tom Sugrue, Chief of the Wireless Bureau, as agreeing that the cause of the interference is "more on the Nextel side").

[18] Interference Technical Appendix to the Best Practices Guide, Motorola, Motorola, p. 44 (Issue 1.41, Feb. 2002).

[19] Id.

[20] Id.

[21] Id.

[22] Interference Technical Appendix to the Best Practices Guide, Motorola, Motorola, p. 44 (Issue 1.41, Feb. 2002).

[23] Id.

- Adding filters to low-site transmitters (there are reportedly a variety of filters that digital licensees can use for this purpose);[24]
- Using cavity combiners instead of hybrid combiners to reduce the amount of sideband energy;[25]
- Enacting additional restrictions on sideband emissions by low site licensees;
- Increasing low-site system antenna heights.

This list is only illustrative of the variety of options that are currently recognized as helpful in remediating interference; SCANA anticipates that further options will develop as parties seek increasingly efficient and effective ways to address interference. As set forth above, the involved parties should not be limited to these or any other technical solutions. Alternate avenues, such as securing a new channel for the affected licensee, might makes the most sense in a given case.

It is important to note that many of the solutions listed above are relatively simple and inexpensive to implement. Furthermore, under a market driven approach, these or other remedial measures would only be applied, and costs incurred, in situations involving interference. Under the Nextel proposal and others, in contrast, every licensee of a given class would be forced indiscriminately to incur extensive costs. As such, Nextel's plan is an unnecessarily unwieldy response to the problem at hand.

---

[24] *Best Practices Guide* at 13.

[25] Interference Technical Appendix to the Best Practices Guide, Motorola, Motorola, pp. 43-44 (Issue 1.41, Feb. 2002).

4. Rules Should Avoid Impacting Licensees Not Directly Involved in the Interference Problem

In the *White Paper,* Nextel claims that "[i]ncident-by-incident, after-the-fact interference remediation will inevitably fail to protect fully [Public Safety personnel] and fail to keep pace with the evolving communications needs of both Public Safety and commercial communications providers."[26] Nextel also contends that relying on technical solutions would result in an "ongoing burden" and "spectral constraints" on commercial carriers (it describes neither the alleged burden nor constraints in any detail).[27] The Nextel White Paper, however, is ambiguous on the point of whether technical approaches will be effective. Nextel represents in the White Paper that it has considered a variety of alternatives to reallocation as means of resolving interference.[28] With regard to these alternatives, Nextel concludes:

> None of these alternatives effectively achieves the essential public interest objective of correcting the fundamental cause of CMRS - public safety interference at 800 MHz *while making a significant amount of near-term spectrum available for enhanced and expanded public safety communications networks.*[29]

On its face, this provision reveals that Nextel rejected the use of alternatives to reallocation because they do not also involve additional spectrum for public safety. As noted above, the FCC should not let the issue of allocating additional spectrum to Public Safety entities cloud the issue of Public Safety interference that should drive this proceeding.

---

[26] *Nextel White Paper* at 23.

[27] *Nextel White Paper* at 24.

[28] Nextel White Paper at 30-31.

[29] *Id.* at 31.

Resolution of Public Safety interference does not necessarily require disruption to other licensees in the 800 MHz band, and the FCC should adopt rules that limit their impact to only those entities that are causing or experiencing interference.

B. Recommendations

Applying the foregoing principles to the types of interference Nextel is causing to Public Safety licensees in the 800 MHz band, SCANA recommends the adoption of the following market-based approach.

1. Establish Threshold Parameters to Facilitate the Identification of Facilities That Might Be Causing Interference to Public Safety Systems

One of the challenges facing an entity experiencing interference is identifying the potential source(s) of the interference. This is particularly problematic in the case of systems such as Nextel's, since individual transmitter locations might not be individually licensed and therefore cannot be identified in the FCC's licensing database.

It appears that the primary indicator of an interference potential is a high field strength in the immediate vicinity of a digital transmitter. It further appears that such high field strengths are typically associated with digital transmitter sites having relatively low antennas and multiple transmit frequencies. Therefore, one means of helping to identify potential interference sources would be to require all 800 MHz digital system licensees to list in a national database the locations of all transmit locations with antenna heights less than 200 feet AGL.[30] Because this

[30] An alternative approach would be to develop a database of sites at which a calculated or measured field strength exceeds certain levels within a fixed distance from the antenna structure.

database would not be used for frequency coordination, *per se*, the only fields which would be required in the database would be (1) licensee name; (2) licensee contact information; and (3) geographic coordinates of the antenna structure. Further, to ensure that the database would only be used for purposes of interference resolution, access would be limited and an independent third party, such as a frequency coordinator, would administer the database.

In order to establish basic responsibilities for interference resolution, the FCC's rules could require that any licensee of a digital 800 MHz system with a low-site transmitter (i.e., less than 200 feet AGL) that is located within one mile of the location at which interference is experienced would have an obligation to eliminate that interference or demonstrate that it is not causing it. In this manner, a Public Safety licensee could more readily identify potential interference sources, and would have rights to compel the cooperation of these licensees in resolving the situation.

2. Clarify Responsibility of Interfering Licensee(s) to Eliminate Interference to Public Safety Systems

Once the potential sources of interference to a Public Safety system are identified, the Rules should establish the responsibility of a licensee determined potentially to be causing harmful interference to a Public Safety system to take steps to eliminate the interference. At the same time, the Public Safety licensee should have a corresponding obligation to cooperate with the interferor in implementing the most cost-effective solution that will resolve the problem. Such a corresponding obligation is necessary to eliminate the potential for an interference case to

---

However, this approach to identifying potential interference sources would be difficult to administer and enforce.

be used as an opportunity to compel system "upgrades" or additional benefits that go beyond what is necessary to resolve the interference.

3. Establish Timeframes to Ensure Prompt Resolution

Interference to a Public Safety radio system should be corrected promptly. To ensure prompt resolution of interference cases, SCANA recommends that the FCC establish specific timeframes within which parties must respond. For example, to ensure prompt initiation of discussions, the rules could provide that a licensee that is identified by a Public Safety licensee as a potential source of harmful interference must communicate with the Public Safety complainant within ten (10) business days of receiving a written notice from the Public Safety licensee which generally describes the nature of the interference and the location in which the interference is received.[31] Within this 10-day period, the respondent licensee would be required to identify personnel who will be responsible for working with the Public Safety licensee to analyze the situation and, if necessary, to implement corrective measures.

Further, to ensure that the parties work promptly toward a solution, the Rules should provide that either party may initiate binding arbitration, as described below, if an agreement is not reached within 60 days after the Public Safety licensee's written notice of interference. To the extent the parties are working cooperatively toward a solution, arbitration would not be necessary. However, the availability of this option will give either party a right to seek a final resolution of the issue if the voluntary negotiations are not proceeding at a suitable pace.

---

[31] In emergency situations where severe interference poses an immediate threat to safety of life, a digital system licensee receiving notice that it is a potential source of interference should have a duty to respond immediately and to assist in resolving the interference as soon as possible.

4. Allow Parties to Use a Range of Options to Resolve Interference

As noted above, a number of different techniques have been identified to resolve Public Safety interference at 800 MHz. Moreover, as more experience is gained in analyzing these cases, additional solutions will undoubtedly be found. Therefore, the rules should not arbitrarily limit the types of solutions that parties may employ in resolving these cases, but should allow a range of options.

For example, parties should be free to install new or modified equipment at the site of the interference-causing transmitter or in the Public Safety complainant's radio system. Parties should be free to alter signal ratios, such as by reducing the interfering signal in the interference area or increasing the Public Safety signal in the area (such as through an increase in transmitter power or installation of a signal booster). As a last resort, the interfering licensee must terminate operation on the offending frequencies.

To the extent a change of frequency would mitigate the interference, the parties should be permitted to enter a voluntary agreement providing for relocation of the Public Safety licensee's radio system to other frequencies in the 800 MHz band or another band.[32] The Commission should liberally waive the eligibility rules to permit relicensing of digital systems in the NPSPAC channels as part of a voluntary frequency swap with a Public Safety licensee to resolve an interference case.[33] Voluntary frequency swaps with non-Public Safety licensees should also be permitted to resolve Public Safety interference disputes. However, the FCC should also make

[32] For example, voluntary relocation to Public Safety allocations at 700 MHz would appear to be an ideal solution.

[33] Waiver of eligibility should be limited to resolving a *bona fide* interference case, and not for a wholesale reallocation of channels.

clear that these licensees, who are not party to the interference dispute, are under no obligation to negotiate or to engage in arbitration.

5. Adopt Procedures for Third-Party Arbitration of Disputes to Minimize FCC Involvement

SCANA believes that alternative dispute resolution procedures, such as arbitration, could be used to resolve any interference disputes efficiently. The Commission has previously found that the use of alternative dispute resolution procedures can "help resolve disputes in a timely fashion" if negotiations between the parties fail.[34] The Commission has even adopted a policy statement, which "supports and encourages the use of alternative dispute resolution procedures in its administrative proceedings."[35] Congress has also strongly supported the use of alternative dispute resolution procedures to resolve administrative proceedings.[36]

The Commission has previously used arbitration to resolve disputes concerning the price of home run wiring[37] and a competitive local exchange carrier's requests for interconnection,

---

[34] In the Matter of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band; Implementation of Sections 3(n) and 332 of the Communications Act -- Regulatory Treatment of Mobile Services; Implementation of Sections 309(j) and 332 of the Communications Act -- Competitive Bidding, PR Docket No. 93-144; GN Docket No. 93-252; PP Docket No. 93-253; RM-8117; RM-8030; RM-8029, *Second Report and Order*, 12 FCC Rcd 19080, 19125 (1997).

[35] 47 C.F.R. § 1.18; *See also,* In the Matter of Use of Alternative Dispute Resolution Procedures in Commission Proceedings in which the Commission is a Party, GC Docket No. 91-119, *Initial Policy Statement and Order*, 6 FCC Rcd 5669 (1997).

[36] *See* Pub. L. 101-552, 104 Stat. 2739 (Nov. 15, 1990), *reauthorized under* Pub. L. 104-320, 110 Stat. 3870 (Oct. 19, 1996) (codified as amended at 5 U.S.C. §§ 571-583).

[37] 47 C.F.R. § 76.804(a) (2001).

services, and network elements.[38] Similarly, in this case, the Commission could prescribe arbitration to resolve disputes concerning harmful interference.

Arbitration is an efficient and effective method for resolving disputes without overburdening the Commission's resources. Procedural rules could be tailored to promote quick resolution by experts with an understanding of the specific issues associated with the resolution of interference. For example, the arbitration rules for the pricing of home run wiring provide that the parties must select an arbitrator within seven days.[39] Similar deadlines in this context could permit interference disputes to be resolved promptly.

Arbitration will also encourage parties to resolve their differences through negotiations. Court cases are often resolved just before the trial begins because the parties are focused on the case and because the parties are uncertain how the case will be decided. Arbitration could provide a similar impetus for parties to settle interference disputes. The prospect of arbitration will provide an incentive for the parties to explore the circumstances surrounding the cause of interference within a definite period of time. This process is also likely to promote settlements, as the parties examine the bases for their respective positions. To provide an additional opportunity for settlement, the Commission could also provide a period for the parties to negotiate after the arbitration hearing. For example, the arbitrator would not be permitted to issue a decision until a few days after the hearing.[40]

---

[38] 47 C.F.R. § 51.807 (2001).

[39] 47 C.F.R. § 76.804(a)(3) (2001).

[40] *See, e.g.*, 47 C.F.R. § 51.807(d)(3) (2001) (the arbitrator is not permitted to issue a decision for fifteen days).

Arbitration will also conserve the resources of both parties because the arbitration procedures can be designed to be faster and more streamlined than the Commission's procedures. Indeed, the resolution of many disputes might only require a review of the parties' documentation, perhaps supplemented with field tests undertaken or directed by the arbitrator. This is particularly important to Public Safety licensees who often have a very limited budget. In addition, the Commission resources will also be conserved. The Commission can limit its role to implementing regulations that govern the appeal process and the standard of review. Regulations can also ensure that the arbitration is conducted efficiently by regulating: (1) how an arbitrator is selected; (2) how the arbitration hearing is conducted; (3) when the decision will be issued; and (4) that parties must participate in good faith or they will be penalized.

IV. BAND REALIGNMENT IS NOT THE SOLUTION TO PUBLIC SAFETY INTERFERENCE

A. Realignment Will Not Alleviate Currently Known Sources of Interference to Public Safety

There is an insufficient basis to undertake realignment of the bands allocated to I/LT and Business licensees as a solution to the problem of Public Safety interference. As noted above, intermodulation appears to be a chief source of the interference to Public Safety operations from the investigation of this problem that has been undertaken thus far.[41] As the FCC notes in the *NPRM*, however, there is significant question as to whether realignment will cure this problem.[42] Based on the pervasive disruption and monetary and intangible costs associated with realignment

[41] *Nextel White Paper* at 21.

[42] *NPRM* at ¶ 27.