

While Nextel offered to contribute up to \$500 million for the relocation of Public Safety licensees, all other displaced licensees would have to relocate at their own expense and help fund the relocation of Public Safety licensees.⁶⁸

1. The FCC Has a Duty To Minimize Costs and Disruptions

The Nextel Plan directly conflicts with the FCC's duty to minimize costs and disruptions because it would relocate not merely a minimal number of affected licensees, but almost every licensee on the band. The mandatory relocation would impose substantial costs on incumbent licensees, regardless of their degree of involvement in the Public Safety interference problem.

a. The FCC Should Avoid Unfunded Mandates

When crafting mandates, the FCC has a responsibility to measure the cost of compliance against any resulting benefits.⁶⁹ Since the 1970s, the FCC has sought to adhere to the continuing trend in government of avoiding requirements that may have inflationary consequences on private industry.⁷⁰ Congress has formally recognized this trend as well as the general need to

⁶⁸ *Id.* at 40, 42-46.

⁶⁹ For example, FCC Chairman Powell recently recognized this problem in addressing the issue of formulating a coherent national policy on broadband deployment. He stated that: "Government sometimes, resting on hubris I suppose, has a tendency to have inflated confidence in its ability to make, force or demand a result against the will of a market participant. The government sometimes acts like an indignant customer demanding to be served, but who has no intention of paying. We place orders for public policy widgets and expect them to be delivered at provider expense. This in some ways is like an unfunded mandate." Remarks of Michael K. Powell, Chairman, Federal Communications Commission at the National Summit on Broadband Deployment, Washington, D.C. (Oct. 25, 2001) (As prepared for delivery) *available at* <http://www.fcc.gov/Speeches/Powell/2001/spmkp110.html> (last visited Apr. 15, 2002).

⁷⁰ In re Amendment of Part 76 of the Commission's Rules and Regulations Relative to Postponing or Canceling the March 31, 1977 Date by which Major Market Cable Television Systems Existing Prior to March 31, 1972 Must be in Compliance with Section 76.251(a)(1)-(a)(8). Docket No 20363, *Report and Order*, 54 F.C.C.2d 207 (1975).

avoid unwarranted, excessive costs upon the private sector and local, State, and tribal governments.⁷¹

For example, the Unfunded Mandates Reform Act ("UMRA") responded to growing concerns that the federal government was imposing enforceable duties on other levels of government and the private sector without adequately considering the non-federal costs that would result from complying with those duties.⁷² The UMRA requires the Congressional Budget Office to evaluate the cost of each bill or joint resolution submitted to Committee and to report back to Congress on those bills that would impose a direct cost of \$50 million on another governmental entity or \$100 million on any private sector entity.⁷³ While the FCC, as an independent agency, is not technically subject to the UMRA's provisions, the guidelines established by this legislation are instructive and suggest that the FCC should pay close attention to the costs associated with the Nextel Plan.

Congress further emphasized the importance of avoiding unnecessary economic impacts on private industry through administrative agency actions in the Regulatory Flexibility Act ("RFA"), the Contract with America Advancement Act of 1996 ("CWAAA"), and the Small Business Regulatory Enforcement Fairness Act ("SBREFA").⁷⁴ The CWAAA provides that a

⁷¹ Unfunded Mandates Reform Act, Pub. L. No. 104-4, 109 Stat. 48 (1996).

⁷² *Id.*

⁷³ *Id.*

⁷⁴ Regulatory Flexibility Act, 5 U.S.C. §§ 601-612, *amended by* the Contract with America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) ("CWAAA") (codified in relevant part at 5 U.S.C. §§ 801-808). Title II of the CWAAA is the SBREFA. Recent reports by the Small Business Association Office of Advocacy identify the FCC as one of the least compliant agencies in fulfilling their statutory mandate under the amended RFA. Agency Compliance with the Small Business Regulatory Enforcement Fairness Act (SBREFA) Before the U.S. House of Representatives Committee on Small Business, 107th Cong. (Mar. 6, 2002) (Testimony of Thomas M. Sullivan, Chief Counsel for Advocacy, Office of Advocacy, U.S. Small Business Administration); U.S. Small Business Administration Office of Advocacy,

"major rule" cannot take effect until 60 days after the later of the rule's publication in the Federal Register or the submission by the agency of a report to Congress.⁷⁵ A rule is major if it (1) would have an annual impact on the economy of \$100 million or more, (2) would produce a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions, or (3) would have a significant adverse effect on competition, employment, investment, productivity, or innovation.⁷⁶ The language and requirements of these statutes vividly illustrate the concern that Congress and the public have concerning agency decisionmaking that fails to address the ramifications of its actions adequately and to consider more cost effective alternatives fully.

The scope of the costs and effects possibly implicated by a widespread relocation of 800 MHz licensees to other bands could far exceed even that which was contemplated in the CWAAA, the RFA, or the UMRA. Projected costs to those licensees forced to relocate without compensation could reach into the billions of dollars and would drastically impact the electric utility industry and other essential components of the economy. In any event, the unreimbursed costs would affect a dramatic shift in the manner in which a utility conducts business.

The FCC must minimize the costs that any reallocation would inevitably have on those licensees required to relocate. To do otherwise would be patently arbitrary and capricious and would fly in the face of the government-wide focus on avoiding these types of massive and costly regulations.

Annual Report of the Chief Counsel for Advocacy on Implementation of the Regulatory Flexibility Act, Fiscal Year 2001 at 35-38 (Feb. 2002).

⁷⁵ 5 U.S.C. § 801(a)(3)

⁷⁶ *Id.* § 804(2).

b. The Nextel Proposal Is Inconsistent with the FCC's Prior Treatment of Band Allocations

No recent FCC precedent supports Nextel's mandatory relocation of an entire class of users to a new spectrum band. Significantly, in the Emerging Technologies proceeding cited by Nextel in its *White Paper*, the FCC recognized the need for a different approach to spectrum allocations than the "band clearing" method applied in the 1970s.⁷⁷ The FCC noted that spectrum was much more heavily used than it was in the 1970s and, as a result, concluded that any plan for the use of the congested spectrum in the 2 GHz band would have to include "specific provisions for minimizing impact on existing services."⁷⁸ Although the FCC ultimately adopted rules concerning the relocation of incumbents from the 2 GHz band, it required the Emerging Technologies cost-causer to reimburse their relocations costs or, alternatively, permitted these incumbents to retain primary status on this band for up to 10 years.⁷⁹ Thus, the FCC has previously rejected the band clearing that Nextel's proposal would establish in light of contemporary spectrum use patterns. The FCC should not now employ such an outdated approach as a means to provide unique benefits to a class consisting of one.

In recent years, the FCC has frequently sought means to minimize disruption in proceedings involving the relocation of incumbent licensees,⁸⁰ the grandfathering of existing

⁷⁷ In re Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, ET Docket No. 92-9, *Notice of Proposed Rulemaking*, 7 FCC Rcd 1542, 1543 (1992).

⁷⁸ *Id.*

⁷⁹ *E.g.*, 47 C.F.R. §§ 101.69 through 101.81.

⁸⁰ In re Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, ET Docket No. 95-18, *Second Report and Order and Second Memorandum Opinion and Order*, 15 F.C.C. Rcd. 12315, 12352 ¶ 109 (2000) ("consider[ing] it essential that the [relocation] process not disrupt the communications services provided by the existing 2 GHz fixed microwave operations") [hereinafter *MSS Second Report and Order*].

operations,⁸¹ and the relaxation of technical and operational restrictions.⁸² In particular, when deciding whether to relocate licensees, the FCC historically attempts to limit disruption to the greatest extent possible by conducting a thorough study, adopting technical restrictions, or permitting voluntary relocation.

As mentioned above in Section II, the FCC typically conducts an exhaustive study of the band at issue before proposing a relocation in order to determine if such drastic action would cause excessive disruption for existing licensees. For example, to find spectrum suitable for advanced wireless services, the FCC examined several different bands.⁸³ After reviewing the 2500-2690 MHz band, the FCC discarded any plan to relocate incumbent licensees either within the band or to a replacement band.⁸⁴ While the FCC found that a partial reallocation would

⁸¹ In re Amendment of the Commission's Rules with regard to the 3650-3700 MHz Government Transfer Band; The 4.9 GHz Band Transferred from Federal Government Use, ET Docket No. 98-237, RM-9411, WT Docket No. 00-32, *First Report and Order and Second Notice of Proposed Rulemaking*, 15 F.C.C. Rcd. 20488, 20500 ¶ 25 (2000) [hereinafter *3650-3700 MHz FSS First Report and Order*].

⁸² In re Amendment of the Commission's Rules Concerning Maritime Communications; Petition for Rule Making Filed by Regionet Wireless License, LLC; PR Docket No. 92-257, RM-9664, *Fourth Report and Order and Third Further Notice of Proposed Rule Making*, 15 F.C.C. Rcd. 22585, 22615 ¶ 62 (2000) ("We tentatively conclude that disrupting incumbent operations and imposing transition costs in order to simplify Commission procedures would not be in the public interest"); In re Amendment of the Commission's Rules Regarding Multiple Address Systems, WT Docket No. 97-81, *Report and Order*, 15 F.C.C. Rcd. 11956, 11967 ¶ 26 (2000) ("limiting [the 928/956 MHz] bands to a particular type of service could unnecessarily disrupt incumbent operations").

⁸³ Office of Engineering and Technology, et al., *Spectrum Study of the 2500-2690 MHz Band: The Potential for Accommodating Third Generation Wireless Systems*, ET Docket No. 00-258, *Final Report* (rel. Mar. 2001); Office of Engineering and Technology, et al., *Spectrum Study of the 2500-2690 MHz Band: The Potential for Accommodating Third Generation Wireless Systems*, ET Docket No. 00-232, *Interim Report*, 15 F.C.C. Rcd. 22310 (2000).

⁸⁴ In re Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems; Amendment of the U.S. Table of Frequency Allocations to Designate the 2500-2520/2670-2690 MHz Frequency Bands for the Mobile-

"cause severe disruptions to ITFS/MMDS incumbents if they were forced to vacate a segment of the band," it noted that relocating incumbents to another band would likely impose even greater problems.⁸⁵ Thus, to minimize disruption to incumbent licensees, the FCC adopted the less intrusive option of adding a mobile allocation to the band.⁸⁶

The FCC also rejected mandatory relocation procedures in the 3650-3700 MHz Fixed Satellite Service ("FSS") band because the licensees could employ technical restrictions to avoid interference problems.⁸⁷ Because of the cost and disruption that relocation would impose on incumbent licensees, the FCC grandfathered these operations and permitted new and incumbent licensees to negotiate for voluntary relocation.⁸⁸

Thus, the FCC typically conducts an in-depth study of the band in question and researches its options thoroughly before adopting a relocation plan. The FCC also attempts to implement less disruptive mechanisms, such as technical solutions or market-based approaches, instead of mandating relocation. The FCC should adopt the same approach in this docket.

c. The FCC Should Relocate Only Those Licensees Affected by Interference

Even in situations in which the FCC ultimately decides to relocate incumbent licensees, it is careful to avoid unnecessary disruption. In the 2 GHz MSS relocation proceeding, the FCC

Satellite Service, ET Docket No. 00-258, RM-9911, *First Report and Order and Memorandum Opinion and Order*, 16 F.C.C. Rcd. 17222 ¶ 11, 28 (2001).

⁸⁵ *Id.* ¶ 28.

⁸⁶ *Id.* ¶ 26-27 (reasoning that it could introduce mobile uses in this band without causing harmful interference, while "permitting mobile use of the band by new service providers would pose a very high risk of disrupting important fixed operations")

⁸⁷ *3650-3700 MHz FSS First Report and Order*, 15 F.C.C. Rcd. at 20500 ¶ 25.

⁸⁸ *Id.*

concluded that it was "essential not to disrupt fixed microwave services" in those bands.⁸⁹

Although the FCC adopted relocation rules for this band, no relocation will occur until (1) an analysis based on the technical service bulletin identifies the potential existence of interference for the particular licensees, and (2) the parties complete frequency coordination.⁹⁰ Thus, instead of adopting rules requiring the relocation of all licensees in the band, the FCC limited relocation to instances in which actual or potential interference rendered shared use of the spectrum band impossible.

2. Funds To Cover Relocation Costs Are Not Guaranteed

The Nextel Plan does not offer a feasible solution to the Public Safety interference problem because it would generate substantial relocation costs for incumbent licensees without providing adequate funding. Although Nextel offered \$500 million to relocate the Public Safety licensees, these funds would probably not even begin to cover all of their relocation costs.

In addition, Nextel has not offered to reimburse displaced Business, I/LT, and analog SMR incumbent licensees for their potentially enormous relocation costs. The FCC has previously required the reimbursement of licensees displaced as a result of interference problems. Under the 2 GHz relocation rules, an Emerging Technologies licensee must

⁸⁹ *MSS Second Report and Order*, 15 F.C.C. Rcd. at 12341 ¶ 78; In re Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, ET Docket No. 92-9, RM-7981, RM-8004, *Third Report and Order and Memorandum Opinion and Order*, 8 F.C.C. Rcd. 6589, 6594, 6597 ¶ 13, 21 (1993) [hereinafter *Emerging Technologies Third Report and Order*]; see also Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation, WT Docket No. 95-157, RM-8643, *First Report and Order and Further Notice of Proposed Rule Making*, 11 F.C.C. Rcd. 8825, 8924 (Separate Statement of Chairman Reed Hundt) (supporting the "expediting [of] the relocation of fixed microwave incumbents without causing any disruption or harm to incumbent operations") [hereinafter *PCS First Report and Order*].

⁹⁰ *Id.*

compensate licensees forced to move because of its interference.⁹¹ The FCC also required compensated relocation when it realigned the upper 200 channels in the 800 MHz band in 1995.⁹² The FCC should clarify that it would require the cost-causer, *i.e.*, Nextel, to assume the responsibility of providing guaranteed reimbursement payments to incumbent Business, I/LT, and analog SMR licensees for their relocation costs if they are evicted from this band.

Guaranteed funds are more important than ever as the once-strong telecommunications industry is now awash in a sea of bankruptcies. The telecommunications sector has seen seemingly invulnerable multibillion-dollar corporations slide quickly into insolvency. Global Crossing, McLeodUSA Inc., 360 Networks, Viatel Inc., and PSINet Inc., among others, have sought bankruptcy protection, leaving creditors scrapping to recoup even a small portion of their investments.⁹³ Unforeseen bankruptcy and financial difficulties of bidders in the recent PCS auctions also left a large tab unpaid and left valuable spectrum lying fallow. Mergers have also continued to be a prevalent force.

The future of the telecommunications industry continues to remain uncertain. To guard against an unforeseen bankruptcy, merger, or other financial change, the FCC must guarantee

⁹¹ 47 C.F.R. §§ 101.73, 101.75; In re Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, ET Docket No. 85-18, First Report and Order and Further Notice of Proposed Rulemaking, 12 F.C.C. Rcd. 7388, 7391 ¶ 6, 14, 29, 42 (1997) [hereinafter *MSS First Report and Order*]; *PCS First Report and Order*, 11 F.C.C. Rcd. at 8835 ¶ 16.

⁹² In re Amendment 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 322 of the Communications Act Regulatory Treatment of Mobile Services; Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, PR Docket No. 93-144; RM-8117, RM-8030, RM-8029, GN Docket No. 93-252, PP Docket No. 93-253, *First Report and Order*, *Eighth Report and Order*, and *Second Further Notice of Proposed Rulemaking*, 11 F.C.C. Rcd. 1463, 1503-1510 ¶ 73-79 (1995) [hereinafter *Upper 200 First Report and Order*].

⁹³ See, e.g., *Flag Telecom Files for Bankruptcy*, REUTERS, Apr. 12, 2002.

sufficient funding to all licensees evicted by a mandatory reallocation plan. The FCC should require the cost-causing entity to place funds in escrow, or otherwise guarantee reimbursement, *prior* to relocation and must ensure replenishment of those funds as necessary to ensure payment to all displaced licensees. In Delmarva and Atlantic's cases, any failure to guarantee adequate reimbursement funds could force utility ratepayers to subsidize Nextel's radio network.

The relocation proposal advanced by the Nextel Plan would force incumbent licensees to move their essential communications systems, which are not causing any interference to Public Safety licensees, to a new band where they would have to re-coordinate them on a different frequency according to the operations of different co-channel and adjacent channel licensees. The costs to these users, and to the economy as a whole, would produce no net gains for the public.

Moreover, Nextel suggests that Business and I/LT licensees should contribute funds toward relocation of Public Safety licensees.⁹⁴ Delmarva and Atlantic strenuously oppose this suggestion as a matter of law and of equity. First, the FCC has no authority to compel Business and I/LT licensees to contribute funds towards Public Safety relocation. Second, as a matter of equity, the FCC should hold Nextel responsible for correcting Public Safety interference as the cost-causer.

3. A Licensee Would Be Entitled to Just Compensation for the Regulatory Taking of Its Property

An FCC license is a property right only in a limited sense and is subject to use restrictions imposed by the agency.⁹⁵ The contemplated wholesale eviction of Business and I/LT licensees from the 800 MHz band, however, is not merely a use restriction placed upon the

⁹⁴ *Nextel White Paper*, *supra* note 5, at 41 n.54.

⁹⁵ *Sanders Brothers Radio Station v. FCC*, 309 U.S. 470 (1940).

license. Instead, it is a targeted and specific restriction on the *equipment* itself, which the licensee purchased and uses pursuant to the terms and conditions of its authorization. Regulating the Business and I/LT licensees out of the 800 MHz band would render their equipment virtually useless, with little or no salvage value. When the government, by regulation, so completely destroys the beneficial use of property that it is effectively idled, compensation is owed under the Fifth Amendment.⁹⁶

A Fifth Amendment taking may occur through physical invasion or regulation.⁹⁷ In the context of land use regulation, the Supreme Court recognized that a compensable taking *per se* exists if the regulation destroys all economically viable use of the land or if the owner has been called upon "to leave his property economically idle."⁹⁸ If the destruction is less than complete, however, the court engages in an essentially *ad hoc* factual inquiry that analyzes three factors: (1) the extent to which the governmental action interferes with distinct, investment-backed expectations; (2) the character of the governmental action; and (3) the extent of the economic impact on the claimant.⁹⁹ This three-part analysis also applies in the context of personality, such as the wireless equipment that would be at issue here.¹⁰⁰

The mere fact that the government heavily regulates an industry or activity does not mean that an investor could never form a reasonable expectation of a return on an investment.¹⁰¹

⁹⁶ *American Pelagic Fishing Co. v. United States*, 49 Fed. Cl. 36, 46 (2001).

⁹⁷ *Multi-channel TV Cable Co. v. Charlottesville Quality Cable Corp.*, 65 F.3d 1113, 1123 (4th Cir. 1995).

⁹⁸ *Lucas v. South Carolina Coast Council*, 505 U.S. 1003, 1019 (1992); *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104 (1978).

⁹⁹ *Penn Cent.*, 438 U.S. at 124.

¹⁰⁰ *Eastern Enterprises v. Apfel*, 524 U.S. 498 (1998); *Andrus v. Allard*, 444 U.S. 51 (1979).

¹⁰¹ *American Pelagic Fishing*, 49 Fed. Cl. at 50.

Moreover, having established a particular regulatory scheme with specific parameters and history, the Fifth Amendment limits the actions that the government can take to modify that regulatory scheme without compensating those who have reasonably relied upon that scheme.¹⁰²

The Nextel Plan would require the FCC to interfere with the financial expectations of Delmarva and Atlantic's shareholders. Delmarva and Atlantic have constructed internal communications systems on the 800 MHz band with the expectation that they could continue to use their systems in conjunction with the delivery of electric and gas services, thus generating a return on their investment. In addition, Delmarva and Atlantic had settled expectations that the regulation of the 800 MHz band would not change so drastically as to eliminate their previous investments. In the years since Delmarva and Atlantic acquired their licenses, they have operated in accordance with the terms and conditions of their authorizations. They have sought and received renewals, when necessary, and reasonably expected to do so in the future. Thus, realignment would dramatically alter the existing regulatory scheme, adversely affecting all of Delmarva and Atlantic's holdings in this band and contradicting their investment-backed expectations.

The second factor analyzes the character of the governmental action to determine whether the government physically appropriates the property or comes close to doing so.¹⁰³ Courts also examine whether, and to what extent, the action is retroactive in effect and whether the action targets a particular individual.¹⁰⁴

Reallocation would effectively revoke the licenses currently held in the 800 MHz band and prohibit future uses by the existing incumbents. The relocation proposal targets Business

¹⁰² *Id.*

¹⁰³ *American Pelagic Fishing*, 49 Fed. Cl. at 50; *Penn Cent.*, 438 U.S. at 124.

¹⁰⁴ *American Pelagic Fishing*, 49 Fed. Cl. at 50; *Eastern Enterprises*, 542 U.S. at 532-37.

and I/LT users, and utilities in particular, even though they are not responsible for the asserted interference problem. Action that is retroactive and targets a specific group supports the finding of a compensable taking.¹⁰⁵

Finally, this reallocation would have a massive economic impact on Delmarva and Atlantic. Their 800 MHz systems currently include a total of 2,223 mobile units, 56 control stations, and 36 mobile relay station sites, consisting of 145 transmitters. This infrastructure represents an investment of approximately \$32 million and dozens of man-years in time and effort. Because the transition would reduce the existing 800 MHz equipment to salvage value only, the licensees could not derive any profitable economic benefit from what would remain. Diminution would be virtually total. On an industry-wide basis, this could amount to literally billions of dollars of loss in systems that had extensive usable lives, and could cost even more to rebuild.

4. Regulated Entities Would Suffer Unique Hardships without Reimbursed Relocation

The operating expenses associated with relocation would be unrecoverable by utilities unless their state public service commission authorizes rates to be changed to recover such costs. Even then, because costs incurred outside a "test period" are generally excluded from recovery, the costs of relocation may be unrecoverable. Moreover, even "test period" costs may be denied recovery to the extent they are viewed as non-recurring, one-time costs.

Delmarva and Atlantic would have even more difficulty recovering their relocation costs than other utilities because they are subject to rate freezes as the result of Commission orders or state legislation relating to electric utility restructuring to promote retail competition or orders

¹⁰⁵ *American Pelagic Fishing*, 49 Fed. Cl. at 51 ("Without [any] evidence of responsibility [for the alleged problem], retroactively making the regulatory scheme unavailable to the plaintiff has no support. This retroactivity favors finding a taking.").

relating to a proposed merger with another utility. (The date that these rate freezes end varies by jurisdiction, ranging from 2005 to 2007). Thus, with minor exceptions not relevant here, Delmarva and Atlantic are locked into their current rates for the next few years, precluding any adjustments for relocation costs. In short, Delmarva, Atlantic, and utilities in general would suffer unique hardships in the event of a mandatory relocation, unless the cost-causing licensee reimburses their costs.

5. The 700 MHz and 900 MHz Bands Are too Uncertain or Limited to Provide Adequate Replacement Spectrum for Displaced Incumbent Licensees

The Nextel Plan suggested that the FCC force incumbent Business and I/LT licensees to relocate to the 700 MHz "Guard Bands" or to the 900 MHz band. However, the 700 MHz Guard Bands and the 900 MHz band would not provide adequate replacement spectrum for these licensees because the technical restrictions preclude high-quality operations, sufficient spectrum is not available, and the bands are not comparable to 800 MHz spectrum.

To determine the availability and comparability of replacement spectrum, the FCC should follow the rules set forth in the Emerging Technologies ("ET") Docket. In the FCC's reallocation of the 1850-1990 MHz, 2110-2150 MHz, and 2165-2200 MHz bands to ET Services, the FCC engaged in a deliberate search for available replacement spectrum for displaced licensees and established rules to ensure the comparability of that spectrum.

When the FCC recognized the importance of reallocating spectrum to the Emerging Technologies, it directed the Office of Engineering and Technology ("OET") to study possible spectrum homes for these operations.¹⁰⁶ In addition to identifying suitable spectrum for

¹⁰⁶ Office of Engineering and Technology, Creating New Technology Bands for Emerging Telecommunications Technology, FCC/OET TS92-1 (Jan. 1992), *available at* http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=1008300002.

emerging technologies, the OET also recommended potential replacement spectrum for incumbent licensees on those bands.¹⁰⁷ To locate replacement spectrum bands, the OET emphasized two factors: (1) the technical requirements of the existing services (including channel bandwidth) must accord with the technical characteristics of the replacement bands, and (2) the replacement bands must offer sufficient spectrum to accommodate the existing services.¹⁰⁸

To guide the parties during the voluntary and mandatory negotiation periods as well as the involuntary relocation period, the FCC adopted rules governing the comparability of replacement facilities. "Comparable facilities" are those that are "equal to or superior to existing facilities,"¹⁰⁹ measured by communications throughput, system reliability, and operating costs.¹¹⁰

The principles set forth in the 2 GHz relocation proceeding are applicable to the relocation of incumbent licensees in other spectrum bands, including the 800 MHz band, and to relocations within a band. When the FCC realigned the upper 200 channels in the 800 MHz band in 1995, it applied the 2 GHz relocation model, providing for compensated, negotiated relocation.¹¹¹ The FCC also applied a variation on the 2 GHz relocation rules to the in-band relocation of Fixed Satellite Services in the 18 GHz band.¹¹² Because the 2 GHz model appears

¹⁰⁷ *Id.* at 12-28 §§ 4.0-4.5.

¹⁰⁸ *Id.* at 12 § 4.1.

¹⁰⁹ *Emerging Technologies Third Report and Order*, 8 F.C.C. Rcd. at 6591 ¶ 5.

¹¹⁰ 47 C.F.R. §§ 101.73(d), 101.75(b); *PCS First Report and Order*, 11 F.C.C. Rcd. at 8840 ¶ 27.

¹¹¹ *Upper 200 First Report and Order*, 11 F.C.C. Rcd. at 1503-1510 ¶ 73-79.

¹¹² *In re Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use*, IB Docket No. 98-172, RM-9005; RM-9118, *Report and Order*, 15 F.C.C. Rcd. 13430, 13468-70 ¶ 79-84 (2000).

particularly suited to the relocation of incumbent licensees both within the band and to replacement bands, the FCC should apply the following factors to any realignment of the 800 MHz band.

a. The 700 MHz Guard Band B Is Not Adequate or Comparable Substitute Spectrum for the 800 MHz Band

The 700 MHz Guard Bands have stringent technical restrictions that differ significantly from the rules governing the 800 MHz band, including a total prohibition on cellular-type architecture. If the FCC were to relocate these licensees to the 700 MHz Guard Band, it could foreclose the potential for these licensees to convert to different system architectures.

In addition, the 700 MHz Guard Band does not offer sufficient spectrum to accommodate existing services in the 800 MHz band. Although Nextel proposed to relinquish its 700 MHz Guard Band spectrum to relocate displaced 800 MHz incumbent licensees, Nextel lacks spectrum in nine of the fifty-two Major Economic Areas. Because Nextel's holdings in the 700 MHz Guard Band could not satisfy the demands of *all* existing incumbent licensees, the FCC should only relocate those licensees experiencing or causing interference in the 800 MHz band. In addition, the 700 MHz Guard Band is unavailable in portions of the country because television broadcasters will occupy the spectrum until at least December 31, 2006.¹¹³

Because equipment is not yet available for the 700 MHz Guard Bands, the FCC could not accurately assess whether displaced incumbent licensees could obtain comparable facilities.

¹¹³ 47 U.S.C. § 309(j)(14). The FCC must extend the transition date on a market-by-market basis if one or more of the four largest network stations or affiliates have not converted to digital transmissions, digital-to-analog converter technology is not generally available, or 15% or more television households in the market do not receive a digital signal. *Id.* § 309(j)(14)(B); *see also* In re Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Second Report and Order*, 15 F.C.C. Rcd. 5299, 5346-47 ¶ 112-114 (2000) (adopting rules to protect television broadcast services)

Thus, because the 700 MHz Guard Band is neither available nor necessarily comparable, it would not constitute suitable replacement spectrum for licensees who might be forced to vacate the 800 MHz band.

b. The 900 MHz Band Does Not Provide Adequate Replacement Spectrum for Displaced 800 MHz Licensees

The 900 MHz band also fails to provide suitable replacement spectrum for displaced incumbent licensees in the 800 MHz band. For example, displaced 800 MHz licensees would suffer in the 900 MHz band because the separation between transmit and receive frequencies is not as great as it is in the 800 MHz band. In the 800 MHz band, the transmit and receive frequencies are separated by 45 MHz, allowing high-quality service over wide areas at low cost. In contrast, to have the same high-quality service in the 900 MHz band, a licensee must purchase more expensive equipment and completely change-out their systems, an extremely wasteful and expensive undertaking. In addition, the 900 MHz band is based on 12.5 kHz channels, while channels at 800 MHz are 25 kHz. Delmarva and Atlantic could not modify their existing 800 MHz systems to operate at 900 MHz or to use 12.5 kHz channels, thus forcing it to replace a total of approximately 2,223 mobile units and equipment at 56 control stations and 36 mobile relay stations (consisting of 145 transmitters).

The 900 MHz band also does not offer sufficient spectrum to accommodate all of the potentially displaced 800 MHz incumbent licensees because it already suffers from congestion. Although Nextel proposed to relinquish its spectrum in this band, it does not possess enough nationwide 900 MHz spectrum to satisfy all incumbent licensees. In addition, incumbent paging operations in this band effectively foreclose interference-free operations. Because of Nextel's limited holdings in this band, and the encumbered nature of the spectrum, the 900 MHz band is not an available source of spectrum for displaced 800 MHz licensees.

The throughput and reliability of the 900 MHz band is also not comparable to that of the 800 MHz band. Because the 900 MHz band offers only 12.5 kHz channels, an 800 MHz licensee could not transfer the same amount of data in the same amount of time as it could in its existing 25 kHz channels. Thus, because the 900 MHz band is neither available nor comparable, it does not constitute suitable replacement spectrum for incumbent licensees whom the FCC would force to relocate from the 800 MHz band under Nextel's Plan.

6. Secondary Status in the 800 MHz Band Is an Unacceptable Alternative, and Would Effectively Force Utilities to Vacate the Band

Nextel recognizes that its Plan suffers from several significant shortcomings with respect to the expense of relocation and the lack of replacement spectrum. To remedy these problems, it proposes to allow incumbent Business, I/LT, and analog SMR licensees to remain on the 800 MHz band as long as they operate on a secondary basis.¹¹⁴ This alternative is completely unacceptable for incumbent licensees in the Critical Infrastructure Industries, such as Delmarva and Atlantic, because of the sensitive nature of their operations.

As a secondary licensee, Delmarva and Atlantic would have to avoid interference to any primary licensee in the band and to accept interference from any primary licensee. Under Nextel's proposal, the only primary licensees in the 800 MHz band would be Public Safety and digital CMRS licensees.

As explained above, Delmarva and Atlantic provide electric and gas services to one million customers in a four-state area. Delmarva's and Atlantic's utility operations affect the lives of virtually everyone within their service territories. Without electricity and gas, other industrial and business operations simply cannot function. Utilities must simultaneously ensure

¹¹⁴ The sad irony in this proposal is that the interference-causing entity – Nextel – would receive primary status, while it would relegate uninvolved licensees to secondary status.

the safety of their crews working on the infrastructure and deliver the electricity and gas safely and efficiently to their customers. If any portion of Delmarva's and Atlantic's radio networks were subjected to interference, or if the utilities received an order to discontinue radio operations at a moment's notice, they would lose the ability to maintain their utility plants safely and effectively in the affected areas. Moreover, given the extensive and interconnected nature of Delmarva's and Atlantic's radio networks, it would take years to reconfigure their networks to achieve the same level of coverage. Thus, secondary status would effectively constitute an eviction from the 800 MHz band for utility licensees and should not receive serious consideration in this proceeding.

7. The Nextel Plan Raises a Number of Legal and Administrative Issues

The Nextel Plan would also raise several legal and administrative issues. Specifically, the FCC must address the appropriate allocation for the 2 GHz band, an issue which is currently pending in multiple proceedings. In addition, the FCC must resolve numerous legal questions concerning the FCC's authority to reallocate or "swap" spectrum among auctioned and non-auctioned services. The FCC would also have to make several revisions to the Table of Allocations, including the 700 MHz, the 800 MHz, the 900 MHz, and the 2 GHz bands, as well as any other bands from, or to, which displaced licensees must relocate as a result of Nextel's wide-ranging proposal.

a. Granting Nextel 10 MHz of Spectrum in the 2 GHz Band Would Not Serve the Public Interest and Would Undermine Sound Spectrum Policy

Nextel's request for 10 MHz of contiguous, nationwide spectrum in the 2 GHz band constitutes a brazen attempt to obtain highly valuable and desirable spectrum without participating in competitive bidding. This proposal also implicates several ongoing rulemaking

proceedings involving the 2 GHz band and raises international allocation concerns, inconveniencing uninvolved licensees and further complicating the FCC's goal of protecting Public Safety licensees from interference.

The FCC previously allocated the 2120-2125 MHz and 2170-2175 MHz spectrum requested by Nextel to the Mobile Satellite Service ("MSS").¹¹⁵ Despite the current allocation, the FCC currently has ongoing rulemaking proceedings concerning the introduction of advanced wireless services¹¹⁶ as well as terrestrial wireless services on this band.¹¹⁷ If the FCC reallocated 10 MHz in the 2 GHz band to Nextel, however, it would effectively foreclose the proposal to introduce advanced wireless services or terrestrial services in this band or would require the FCC to repossess spectrum reserved for MSS expansion in order to satisfy the anticipated demand for these services.

A reallocation of this spectrum would also grant Nextel an unfair competitive advantage over other advanced wireless service licensees by enabling it to circumvent the competitive

¹¹⁵ *MSS First Report and Order*, 12 F.C.C. Rcd. 7388.

¹¹⁶ In re Amendment of Part 2 of the Commission's Rules to Allocate Spectrum below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems; Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service; The Establishment of Policies and Service Rules for the Mobile-Satellite Service in the 2 GHz Band; Petition for Rule Making of the Wireless Information Networks Forum Concerning the Unlicensed Personal Communications Service; Petition for Rule Making of UTStarcom, Inc., Concerning the Unlicensed Personal Communications Service, ET Docket No. 00-258, ET Docket No. 95-18, IB Docket No. 99-81, RM-9498, RM-10024, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 16 F.C.C. Rcd. 16043 (2001) [hereinafter *Advanced Wireless Services MO&O and FNPRM*].

¹¹⁷ In re Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Band; Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile Satellite Service, IB Docket No. 01-85, ET Docket No. 95-18, *Notice of Proposed Rulemaking*, 16 F.C.C. Rcd. 15532 (2001) [hereinafter *Ancillary Terrestrial Wireless NPRM*].

bidding process. While other licensees would presumably have to spend millions, or even billions, to obtain suitable spectrum at auction, Nextel would acquire it in exchange for less valuable spectrum in an already congested band. This maneuver would require the FCC to ignore established spectrum allocation principles for the sole purpose of enriching a single company at the expense of fair competition. Thus, Nextel's proposal is nothing more than a spectrum grab that would blatantly contradict the public interest and would undermine sound spectrum policy.

Nextel also admits that its proposal would affect the continuing relocation of incumbent Broadcast Auxiliary Service and Fixed Microwave Services licensees from the 2 GHz band.¹¹⁸ Under the relocation rules adopted in the 2 GHz MSS proceeding, an MSS licensee must pay to relocate the incumbent licensee if the MSS operations would cause interference.¹¹⁹ The FCC should clarify that it will continue to treat all incumbent licensees in this band similarly by requiring the cost-causer, *i.e.*, Nextel, to assume the responsibility of reimbursing incumbent licensees for their relocation costs.

Nextel's proposed reallocation of 10 MHz of spectrum for its own use also raises issues of international concern. While Nextel requested the 2020-2025 MHz and 2170-2175 MHz portions of the 2 GHz band, the International Telecommunications Union ("ITU") already allocated that particular spectrum for advanced wireless operations on a worldwide basis.¹²⁰ In addition, the ITU designated the 2170-2200 MHz portion of the band for the MSS component of advanced wireless services.¹²¹ If the FCC reallocated this spectrum for Nextel's use, it may have

¹¹⁸ *Nextel White Paper*, *supra* note 5, at 29, 56.

¹¹⁹ 47 C.F.R. §§ 101.73, 101.75; *MSS First Report and Order*, 12 F.C.C. Rcd. at 7391 ¶ 6, 14, 29, 42.

¹²⁰ 47 C.F.R. § 2.106 S5.388 (citing ITU-R Resolution 212 (Rev. WRC-97)).

¹²¹ *Id.* § 2.106 S5.389A.

to deviate from the ITU's prescribed worldwide use of this spectrum and would provide Nextel with an unfair competitive advantage over other potential advanced wireless service providers in the 2 GHz or other spectrum bands.

b. Granting Spectrum in Other Bands Is also Contrary to the Public Interest and Sound Spectrum Policy

The 1910-1930 MHz and 2390-2400 MHz bands also do not constitute suitable replacement spectrum because they would present unjustifiable complications, especially given the minimal public interest benefits resulting from such a disruptive proposal. While the FCC allocated the 1910-1930 MHz band to Unlicensed Personal Communications Services,¹²² it allocated the 2390-2400 MHz band to the Amateur Radio Service on a primary basis and to UPCS on a secondary basis,¹²³ rejecting the use of wide-area, high-power, fixed and mobile stations on this band.¹²⁴ Despite the existing allocation, the FCC has mentioned these bands as a possible source of spectrum for advanced wireless services or for licensees displaced by the introduction of advanced wireless services in other bands.¹²⁵ Because of the importance of these bands to the implementation of advanced wireless services, reallocation of this spectrum to Nextel potentially would stifle the rollout of these services and would allow Nextel to circumvent the competitive bidding requirement, providing it with an unfair competitive advantage with respect to the provision of these services. Because the 1910-1930 MHz and

¹²² In re Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, *Memorandum Opinion and Order*, 9 F.C.C. Rcd. 4957, 5037 (1994).

¹²³ *Advanced Wireless Services MO&O and FNPRM*, 16 F.C.C. Rcd. at 16048-49; *see also* In the Matter of Allocation of Spectrum below 5 GHz Transferred from Federal Government Use, ET Docket No. 94-32, *First Report and Order and Second Notice of Proposed Rule Making*, 10 F.C.C. Rcd. 4769, 4779-80 ¶ 16-17 (1995).

¹²⁴ *Advanced Wireless Services MO&O and FNPRM*, 16 F.C.C. Rcd. at 16049.

¹²⁵ *Id.* at 16047-48, 16047 n.22.

2390-2400 MHz band are unpaired, the FCC would have to allocate spectrum in another band to Nextel, thus spreading the negative repercussions of Nextel's Public Safety interference to numerous unsuspecting licensees in several other bands. Finally, the FCC would have to devise a means by which Nextel would reimburse incumbent licensees for their relocation costs pursuant to the Emerging Technologies rules.

B. The NAM and FCC Realignment Plans Impose Undue Disruption and Expenses on Incumbent Licensees

Neither the NAM plan nor the FCC plan is an adequate solution to the interference problems created by Nextel because they impose undue burdens on incumbent licensees that operate Business, I/LT, and analog SMR systems in the 800 MHz band. In particular, these plans would unduly jeopardize incumbent licensees' ability to access replacement spectrum at 800 MHz, without any corresponding benefit.

Under the NAM plan, the FCC would assign Public Safety, Business/ILT/SMR, and Cellular Architecture Digital SMR licensees the following contiguous blocks of spectrum: (1) Public Safety 806-811/851-856 MHz; (2) Business/ILT/SMR 811-816/856-861 MHz; and (3) Cellular Architecture Digital SMR 816-824/861-869 MHz.¹²⁶ The FCC Plan proposes to remove the interleaving of Public Safety and SMR in the 809.75-816/854.75-861 MHz band to create three contiguous bands: (1) Public Safety 809.75-816/854.75-856.5 MHz; (2) Business and I/LT 811.5-814/856.5-859 MHz; and (3) SMR 814-816/859-861 MHz.¹²⁷ Although these plans are less objectionable than the Nextel plan because they only require in-band retuning, as opposed to relocation outside the 800 MHz band, they would have a disadvantageous impact on incumbent licensees in the band.

¹²⁶ Letter to Chairman Michael Powell by the National Association of Manufacturers (Dec. 21, 2001).

¹²⁷ *NPRM*, 17 F.C.C. Rcd. 4873 ¶ 26-28.

The NAM and FCC Plans are overly broad because they would affect a substantial number of incumbent licensees in response to an interference problem primarily caused by Nextel. Although the NAM Plan would not require the relocation of as many incumbent licensees as the Nextel Plan, it would require the relocation of all Business and I/LT licensees on General Category Channels or channels at 809.75-811/854.75-856 MHz, even though these licensees currently operate in compliance with the FCC's rules without causing interference to Public Safety licensees. Similarly, the FCC Plan would not require all Business, I/LT, and analog SMR licensees to relocate, but it would require relocation by substantial number of incumbent licensees. The FCC should reject these realignment proposals because they are not narrowly drafted to limit unnecessary burdens on other users of the 800 MHz band.

These proposed realignment plans would impose substantial costs on incumbent licensees by necessitating the retuning or replacement of equipment. Retuning efforts would cause numerous practical problems. The equipment used by many incumbent licensees could not be retuned to another part of the 800 MHz band or would require extensive modifications in order to operate on those frequencies, thus requiring replacement.

In addition, incumbent licensees would also have to replace, rather than retune, much of the transmission infrastructure. For example, the repeater units, antennas, combiners, and preselectors employed by many utilities are basic narrowband hardware that is tuned to a specific part of the 800 MHz band and could not function elsewhere. Licensees would also have to changeout the transmitter finals and receiver front ends as well as the associated software programs and support equipment that run their dispatch systems. Retuning would also require considerable cooperation from all affected parties in order to coordinate operations on the new frequencies.

These complicated changes would require incumbent licensees to incur tremendous costs. While the cost of retuning or replacing their equipment would be high, incumbent licensees may also have to renegotiate or modify site leases and management agreements in the event that they could not use the precise locations at which they currently hold licenses.

In-band relocation would also adversely affect the efficiency of operations designed to function at the specific authorized frequencies and could disrupt pending equipment purchases. The potential costs of the NAM and FCC Plans are extraordinary, especially in light of the fact that the incumbent licensees affected by the Plans are not the source of interference to the Public Safety licensees.

In-band relocation is also wasteful because it would impose unnecessary or duplicative expenses on incumbent licensees. The NAM Plan would force incumbent Business, I/LT, and analog SMR licensees to move their coordinated and compliant systems, which do not cause any interference to Public Safety licensees, to a new portion of the 800 MHz band where they would have re-coordinate their operations based on different co-channel and adjacent channel licensees. These numerous tasks associated with in-band relocation would also disrupt the operations of incumbent licensees for an undetermined amount of time. Because of the critical nature of utility operations, such a disruption of essential communications would be unacceptable.

Neither the NAM plan nor the FCC plan offer details on the funding or cost allocation associated with such a massive relocation. The NAM also neglects to explain the timing or logistics of the proposed in-band realignment. Furthermore, the FCC Plan does not address assignments in the General Category and fails to discuss the impact to Public Safety if low-site digital SMR systems operate on the Business or I/LT frequencies. Although the FCC Plan would require the mandatory relocation of many incumbent licensees, it provides no details about the

allocation of costs or the logistics of the transition and is unclear regarding whether it would require SMR systems using cellular architecture to vacate the Business or I/LT frequencies. Finally, the FCC Plan does not address the impact of the in-band relocation on Public Safety systems operating on the NPSPAC channels adjacent to the cellular bands. In the absence of clean, workable provisions to cover these issues these central issues, the NAM plan and FCC plans are not reasonable alternatives to reduce the interference suffered by certain Public Safety licensees in the 800 MHz band.

In exchange for the burden of relocation, and any associated costs it would impose, incumbent Business, I/LT, and analog SMR licensees would receive no discernable benefits. As mentioned before, these incumbent licensees operate in compliance with the FCC rules and have not received any interference complaints from Public Safety, or any other, licensees. Because the stated goal of this proceeding is to reduce interference, any mandatory relocation should only involve those entities who cause or receive interference. Thus, as mentioned above, any relocation plan that relocates incumbent licensees who do not cause interference to Public Safety licensees is overly broad.

VI. CONCLUSION

In conclusion, Delmarva and Atlantic assert that a case-by-case, market-based approach is sufficient to address any interference problems experienced by Public Safety licensees in the 800 MHz band. Any other interference resolution techniques, such as a realignment, would cause unnecessary disruption and impose excessive costs on uninvolved licensees in this band.

WHEREFORE, THE PREMISES CONSIDERED, Delmarva and Atlantic respectfully request that the FCC consider these comments and proceed in a manner consistent with the views expressed herein.

Respectfully submitted,

DELMARVA POWER & LIGHT AND
ATLANTIC CITY ELECTRIC COMPANY

By:



Shirley S. Fujimoto
Jeffrey L. Sheldon
Keith A. McCrickard*
McDermott, Will & Emery
600 13th Street, N.W.
Washington, D.C. 20005-3096
(202) 756-8000

Attorneys for Delmarva Power & Light and
Atlantic City Electric Company

*Admitted in Maryland Only

Dated: May 6, 2002

CERTIFICATE OF SERVICE

I, Christine S. Bisio, do hereby certify that on this 6th day of May 2002, a copy of the foregoing "Comments for Insert Name" was mailed via U.S. Mail, postage prepaid to each of the following:

Marlene H. Dortch (Original and 4 Copies)*
Secretary
Federal Communications Commission
445 12th Street, S.W.
Room TW-325
Washington, DC 20554

Michael J. Wilhelm
Federal Communications Commission
Wireless Telecommunications Bureau
Public Safety and Private Wireless Division,
Policy and Rules Branch
445 12th Street, S.W.
Washington, D.C. 20005

Hon. Michael K. Powell
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Qualex International*
Portals II
445 12th Street, S.W., Room CY-B402
Washington, D.C. 20554

Hon. Kathleen Q. Abernathy
Commissioner
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Hon. Michael J. Copps
Commissioner
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Hon. Kevin J. Martin
Commissioner
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

BY 
Christine S. Bisio

* Via Hand Delivery