problem.[45] Based on the pervasive disruption and enormous monetary and intangible costs associated with realignment, the FCC should not entertain the possibility of realignment unless it is definitively shown that it would adequately remedy interference to Public Safety users. To the extent that this showing is made, any realignment should be strictly circumscribed to avoid unnecessarily affecting other parties -- particularly utility licensees that are neither causing nor experiencing this interference. In this regard, the FCC should not reallocate I/LT, Business or General Category spectrum absent a *compelling* showing that this represents the best means of addressing Public Safety interference in light of the associated costs and consequences. If the FCC decides to pursue reallocation, it should do so solely at the expense of the cost-causer, which at this point, appears to be primarily Nextel.

B. Realignment Would be Severely Disruptive to Users of the 800 MHz Band

A realignment of the spectrum at 800 MHz would have extraordinary consequences for the licensees currently using that band.

1. Disruption to 800 MHz Users Generally

Nextel's plan would completely relocate I/LT and Business users out of the 800 MHz band. As a result, new equipment would be required to establish operations in the new band, potentially rendering billions of dollars worth of equipment utterly useless. In addition, licensees would be required to undertake costly, labor-intensive modification to their systems and purchase new equipment.

[45] *NPRM* at ¶ 27.

A move to 700 MHz is infeasible for most utility operators, and particularly for Entergy. First, it is unclear if adequate equipment is even available for use in this band. Further, Nextel's offer of its 700 MHz holdings is completely hollow for Entergy, as Nextel does not have any 700 MHz spectrum across much of Louisiana and Arkansas, which represent a large portion of Entergy's operations.

Relocation to 900 MHz would likely require the construction of numerous additional sites to account for the differing propagation characteristics of that band. Entergy alone would require an additional 80 new sites in the 900 MHz band to even attempt to replicate its current coverage, and would have to relocate at least 20 sites. Even with an in-band relocation, the costs and disruption would be significant, as most users would have to modify each of their transmitter sites and to recall thousands of their vehicular and portable units from the field to retune them.

2. Realignment Would be Particularly Disruptive to Utilities, Which Should be Accorded Heightened Protection by the FCC

In comparison to most I/LT and Business licensees, the above considerations would be greatly magnified for utilities. The hard-dollar financial implications of such a change for a utility with an extensive wide-area system would be extraordinary. Utilities operate extensive systems that track their service territory. Entergy believes that utilities likely comprise the largest class of Business and I/LT licensees in the 800 MHz band, and that their typical operating territories are larger than most other Business and I/LT licensees. Utilities require a large number of sites and the acquisition and use of large numbers of vehicular and portable units. Furthermore, the internal resources required in terms of utility man-hours and system downtime would add considerably to the overall cost of either an out-of band or an in-band relocation.

Spanning 130,000 square miles and covering the better part of Arkansas, Louisiana, Western Mississippi and parts of Texas, Entergy's highly sophisticated system represents an investment of over 100 man-years and $70 million. Entergy's 170 antenna sites and 8,000 mobile units enable a variety of mission critical communications across a wide area. Relocating such a vast system to another band would easily require the expenditure of $100 million and another 100 man-years. Reengineering to another band could take up to an entire year. The re-licensing process itself could take anywhere from 16 to 22 months. Selecting and acquiring replacement equipment (assuming equipment was even available) would likely take at least 6 months. Installing and testing a new system in another band would also require 500 man-weeks for new base station facilities and 32,000 man-hours for new mobile units.

Even retuning within the 800 MHz band would be extraordinarily burdensome. Entergy estimates that it would require upwards of 30,000 man-hours to reengineer the system, retune stationary sites and touch and retune each mobile unit. The required Frequency coordination and preparation of license applications would involve an estimated 30 weeks each.

As the suppliers of electricity and other energy products and services to the public, utilities have a unique role in the functioning of modern society and can ill-afford massive disruptions of their communications systems. Virtually every aspect of modern life depends upon the ability of utilities to carry out their functions in a safe and efficient manner. The FCC is well aware of the vital role that land mobile communications plays in utility functions. Congress has long recognized this as well:

> In managing spectrum, the FCC . . . first should attempt to meet the requirements of those radio users which render important services to large groups of the American public, such as governmental entities and utilities, rather than the requirements of those users which would render benefits to relatively small groups.[46]

More recently, Congress has taken specific steps to protect utilities from the disruption, cost and uncertainty associated with the auction of spectrum. The 1997 Balanced Budget Act amended Section 309(j) of the Communications Act to require the Commission to award mutually exclusive applications for initial licenses or permits using competitive bidding procedures, except with regard to three discrete exemptions, one of which is pertinent here.[47] Specifically, the Balanced Budget Act amended Section 309(j)(2) of the Communication Act to read, in relevant part:

> (2) EXEMPTIONS—The competitive bidding authority granted by this subsection shall not apply to licenses or construction permits issued by the Commission—
>
> > (A) for Public Safety radio services, *including private internal radio services used* by State and local governments and *non-government entities* and including emergency road services provided by not-for-profit organizations, that—
> >
> > > (i) are used to protect the safety of life, health, or property; and
> > >
> > > (ii) are not made commercially available to the public; [48]

The House Conference Report to the 1997 Budget Act stated that "the exemption from competitive bidding authority for 'Public Safety radio services' includes 'private internal radio services' used by *utilities*, railroads, metropolitan transit systems, pipelines, private ambulances,

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[46] S. Rep. No. 191, 97th Cong., 2d Sess. (1982), *reprinted in* 1982 U.S.C.C.A.N. 2237, 2250.

[47] Balanced Budget Act, § 3001 et seq., Pub. L. No. 105-33, Title III, 111 Stat. 251, 258 (1997).

[48] 47 U.S.C. § 309(j)(2) (emphasis added).

and volunteer fire departments."[49] Thus, Congress clearly recognizes that utilities must have access to spectrum to promote Public Safety.

The importance of utilities to national security is well established. For example, the 2001 Department of Commerce Appropriations Act required NTIA to report to Congress on the current and future use of spectrum by energy, water, and railroad service providers to protect and maintain the Nation's critical infrastructure.[50] In its Report, NTIA concluded that utilities provide essential public services and are vital components of the Nation's critical infrastructure. Any "system disruptions that are not quickly restored pose potential threats not only to Public Safety, but also to the Nation's economic security."[51] The NTIA Report cautioned that a disruption in a power generating station's control computer could be "just as devastating" to the Nation's economy as the September 11, 2001 terrorist attacks.[52] Furthermore, the President's Commission on Critical Infrastructure Protection was established because certain critical infrastructures, such as electrical power systems, are "so vital that their incapacity or destruction would have a debilitating impact."[53] Our Nation's "economic prosperity, and quality of life have long depended on the essential services" that utilities provide.[54]

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[49] House Conf. Rep. No. 105-217, 105th Cong., 1st Sess., at 572 (1997) reprinted in 1997 U.S.C.C.A.N. 176, 192 (emphasis added).

[50] *See* Federal Funding, Fiscal Year 2001, Pub. L. No. 106-553, 114 Stat. 2762, 2762A-73 (2000).

[51] Marshall W. Ross and Jeng F. Mao, Current and Future Spectrum Use by the Energy, Water, and Railroad Industries, Response to Title II of the Departments of Commerce, Justice, State, the Judiciary and Related Agencies Appropriations Act, Pub. L. No. 106-553, U.S Dep't of Commerce, National Telecommunications and Information Administration (Jan. 30, 2002) ("*NTIA Report*").

[52] *Id.*

[53] Exec. Order No. 13010, 61 Fed. Reg. 37347 (July 17, 1996).

[54] President's Commission on Critical Infrastructure Protections, Critical Foundations - Protecting America's Infrastructures at ix (October 1997).

This is particularly important in light of recent events. In Afghanistan, the United States discovered that terrorists had diagrams of American nuclear power plants and public water facilities.[55] Although no specific plans to attack a utility were discovered, the fact that terrorists had these plans clearly indicates that utilities are an inviting target. If the unthinkable occurred, large segments of the population could be put at risk and the economy could be devastated.[56]

In light of these factors, the FCC should be particularly circumspect in connection with any measures that might impose unnecessary costs or disruption on utilities' communications systems, which support the safety and security of this critical national infrastructure.

C. The FCC Should Not Reallocate an Entire Band to Resolve a Problem That Appears to be Caused by One Entity

There is no dispute that the interference described in Nextel's White Paper appears to be predominantly the result of Nextel's operations. However, Nextel would enjoy windfall benefits under its proposal, including access to significant additional, unencumbered and valuable contiguous spectrum. Conversely, the numerous remaining users of the 800 MHz band, who have no demonstrated involvement in the interference caused to Public Safety operators, would suffer significant hardship. Based on this extraordinary imbalance in the relative impact on the interested parties, Nextel's proposal should be viewed as a highly suspect "remedy" to a problem of its own creation.

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[55] David Johnston and James Risen, *Seized Afghan Files Show Intent, Not Plans*, N.Y. TIMES, Feb. 1, 2002, at A13.

[56] A recent column in the Washington Times by Robert Charles, counsel and staff director to the U.S. House National Security Subcommittee from 1995 to 1999, discussed the likelihood of utilities being "the next primary terrorist target" and the potential effects of terrorist attacks on utilities. Robert Charles, *Priority Required for Protecting Utilities*, WASHINGTON TIMES, Mar. 4, 2002, at A17.

D. The Reallocation Plans are Imprudent and Fatally Flawed

In the Emerging Technologies proceeding cited by Nextel in the White Paper, the FCC recognized that the "band clearing" method applied in the 1970s was no longer a viable method for reallocation.[57] Even in 1992, spectrum was much more heavily used than was the case in the 1970s and, as a result, the FCC concluded that any plan for the use of the congested spectrum between 1.85 and 2.2 GHz would have to include "specific provisions for minimizing impact on existing services."[58] The FCC ultimately adopted rules concerning the relocation of incumbents from the 2 GHz band that provided for wholly compensated relocation by the cost-causer or up to 10 years of primary status before the incumbents would be reduced to secondary status.[59] Thus, in light of contemporary spectrum use patterns, the FCC has previously rejected the band clearing that Nextel's proposal would establish. The FCC should not now employ such an approach.

In recent years, the FCC has frequently sought means to minimize disruption in proceedings involving the relocation of incumbent licensees,[60] the grandfathering of existing operations,[61] and the relaxation of technical and operational restrictions.[62] In particular, when

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[57] 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).

[58] Id.

[59] *See, e.g.*, 47 C.F.R. §§ 101.69-101.81.

[60] *See* 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 FCC Rcd 12315, 12352 ¶ 109 ("consider[ing] it essential that the [relocation] process not disrupt the communications services provided by the existing 2 GHz fixed microwave operations") (2000) ("*MSS Second Report and Order*").

[61] *See* 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

determining whether to relocate licensees, the FCC has historically attempted to limit disruption to the greatest extent possible.

The FCC often conducts an in-depth 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 third generation wireless services, the FCC examined several different bands, issuing an *Interim Report* in November 2000 and a *Final Report* in March 2001.[63] After reviewing the 2500-2690 MHz band, the FCC discarded any plan to relocate incumbent licensees either within the band or to replacement spectrum.[64] While the FCC found that a partial reallocation would "cause severe disruptions to ITFS/MMDS incumbents if they were forced to vacate a segment of the band," it noted that relocating

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Docket No. 98-237, RM-9411, WT Docket No. 00-32, *First Report and Order and Second Notice of Proposed Rulemaking*, 15 FCC Rcd 20488, 20500 ¶ 25 (2000).

[62] *See* 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 FCC 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 FCC Rcd 11956, 11967 ¶ 26 (2000) ("limiting [the 928/956 MHz] bands to a particular type of service could unnecessarily disrupt incumbent operations").

[63] *See* 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 FCC Rcd 22310 (2000).

[64] *See* 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-Satellite Service, ET Docket No. 00-258, RM-9911, *First Report and Order and Memorandum Opinion and Order*, 16 FCC Rcd 17222 ¶ 11, 28 (2001) ("*2500-2690 MHz First Report and Order*").

incumbents to another band would likely impose *even greater problems*.[65] Thus, to minimize disruption to incumbent licensees, the FCC adopted the less intrusive option of adding a mobile allocation to the band.[66]

In the event that the FCC determines that the last resort option of band realignment is required, an in-depth study would be particularly necessary prior to any realignment of the 800 MHz band. Using empirical evidence obtained through such a study, the FCC could narrowly tailor a solution to the Public Safety interference problem that may not require a relocation of every licensee on the band.

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.[67] Because of the cost and disruption that relocation would impose on the incumbent licensees, the FCC grandfathered these operations and permitted licensees to negotiate for voluntary relocation.[68] Thus, as suggested previously, the FCC can find less disruptive market-driven relocation plans to employ rather than mandatory relocation.

Even in situations where the FCC ultimately decides to relocate incumbent licensees, it is careful to avoid unnecessary disruption to innocent licensees. In the 2 GHz MSS relocation proceeding, the FCC concluded that it was "essential not to disrupt fixed microwave services" in

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[65] *See* id. at ¶ 28.

[66] *See* id. at ¶ 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").

[67] *See* 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 FCC Rcd 20488, 20500 ¶ 25 (2000).

[68] *See* id.

those bands.[69] Although the FCC ultimately adopted relocation rules for this band, it nevertheless required MSS licensees and incumbent licensees to share the 2165-2200 MHz band whenever sharing was technically feasible.[70] MSS licensees have no obligation to relocate incumbent licensees unless and until the incumbent licensee causes harmful interference to, or receives harmful interference from, MSS operations.[71] The FCC measures the potential for interference using the criteria and methodologies set forth in a technical service bulletin published by the Telecommunications Industry Association ("TIA").[72] If potential or actual interference exists, however, the FCC requires incumbent licensees to participate in frequency coordination *before* it will compel MSS licensees to relocate the incumbent licensee's system.[73] Thus, no relocation will occur until (1) an analysis based on the technical service bulletin identifies the potential existence of interference, and (2) the parties complete frequency

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[69] *See MSS Second Report and Order*, 15 FCC 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 FCC Rcd 6589, 6594, 6597 ¶ 13, 21 (1993); *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 FCC Rcd 8825, 8924 (1996) (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").

[70] *See MSS Second Report and Order*, 15 FCC Rcd at 12341 ¶ 78; In the Matter of 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 FCC Rcd 7388, 7406-07 ¶ 42 (1997) ("*MSS First Report and Order*").

[71] *See MSS Second Report and Order*, 15 FCC Rcd at 12341 ¶ 78.

[72] *See id.*; In the Matter of 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 95-18, *Memorandum Opinion and Order and Third Notice of Proposed Rulemaking and Order*, 13 FCC Rcd 23949, 23961-62 ¶ 27-28 (1998) ("*MSS MO&O*"). The technical service bulletin, TSB-86, is the result of a collaboration of fixed microwave service and MSS engineers. *See MSS Second Report and Order*, 15 FCC Rcd at 12341 ¶ 78.

[73] *See MSS Second Report and Order*, 15 FCC Rcd at 12341 ¶ 78.

coordination.[74] 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. The FCC should employ a similar measured and logical approach in the current situation, and refrain from adopting an unnecessary and wasteful relocation scheme in its zeal to find a quick solution.

Three proposals were outlined in the NPRM: one from Nextel, one from the National Association of Manufacturers, and one by the FCC itself. As explained below, none of these reallocation proposals would provide sufficient public benefit to justify the tremendous disruption and expense that would be caused.

1. The Nextel Plan is Overly Broad, Complicated and Expensive

There is absolutely no recent FCC precedent that would support Nextel's concept of an unfunded, wholesale and mandatory relocation of an entire class of innocent users to a new spectrum band. Under Nextel's plan, nearly all of the incumbent licensees in the 800 MHz band would be evicted from their current spectrum homes. The plan would allocate 20 MHz of contiguous spectrum at the lower end of the 800 MHz band for Public Safety licensees, while placing Digital SMR systems at the upper portion of the band and moving Business, I/LT, and analog SMR completely out of the band. Nextel has offered to relinquish its spectrum in the 700 MHz Guard Band and the 900 MHz band as replacement spectrum for these evicted Business, I/LT, and analog SMR licensees, in exchange for which Nextel would conveniently receive 10 MHz of contiguous and highly desirable spectrum in the current MSS allocation at 2 GHz. While Nextel also offered to contribute up to $500 million for the relocation of Public Safety

[74] *See id.*

licensees, all other displaced licensees would have to relocate at their own expense. In addition to uprooting every licensee in the band, the Nextel Plan would also grant Nextel itself, *a significant source of interference*, the easiest escape route by allowing it merely to retune its equipment to another part of the 800 MHz band.

The Nextel Plan would also impose tremendous expense on incumbent licensees. Although Nextel offered up to $500 million to relocate the Public Safety licensees, these funds would not even begin to cover all of Public Safety's relocation costs. In addition, Nextel has not offered to reimburse any of the expense of relocating the displaced Business, I/LT, and non-cellular SMR incumbent licensees. This is patently unreasonable. The innocent 800 MHz licensees should not be forced to involuntarily bankroll Nextel's attempts to clean up its own problem.

For Entergy's part, this plan is entirely economically infeasible. In addition to losing its $70 million investment, Entergy would be required to put up an additional $100 million to rebuild its own network while also being forced to contribute to any shortfall in the expenses incurred by Public Safety entities. Quite simply, Entergy would not be able to absorb this expense, and it should not be required to do so.

a. The FCC Has a Duty to Minimize Costs and Disruptions

The Commission has a responsibility to measure the cost of compliance with its mandates against any benefits gained.[75] Since the 1970's, the FCC has also sought to recognize the

[75] For example, FCC Chairman Powell recently recognized this problem in addressing the issue of formulating a coherent national policy on broadband deployment. He stated: "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

continuing trend in government to avoid imposing requirements that may have inflationary consequences on private industry.[76] Congress has formally recognized this problem, and the general need to avoid unwarranted, excessive costs upon local, State and tribal governments and the private sector.[77] The Unfunded Mandates Reform Act ("UMRA"), for example, was enacted to respond to growing concerns that the federal government was imposing enforceable duties on other levels of government and the private sector without adequately considering the nonfederal costs that would result from complying with those duties. 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 will impose a direct cost of $50 million on another governmental entity or $100 million on any private sector entity. While the FCC, as an independent agency, is not technically subject to its provisions, the guidelines established by the UMRA are instructive and illustrate the extraordinary nature of the costs that the realignment proposals would entail.

Additional guidance with respect to Congressional concern over the impact that agency action can have on private industry can be found in the Regulatory Flexibility Act ("RFA"), the Contract with America Advancement Act of 1996 ("CWAAA"), and the Small Business

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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. (October 25, 2001) (As prepared for delivery) *available at* http://www.fcc.gov/Speeches/Powell/2001/spmkp110.html (last visited April 15, 2002).

[76] 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 FCC2d 207 (1975).

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

Regulatory Enforcement Fairness Act ("SBREFA").[78] The guidelines established by these Acts emphasize the importance of the Commission's consideration of the economic impact its regulations can have on small businesses, and indeed, on all businesses generally.[79] The CWAAA provides that a "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 that must be filed when a rule falls under the "major rule" definition. A major rule includes those rules that a) would have an annual impact on the economy of $100 million or more, b) would produce a major increase in costs or prices for consumers, individual industries, Federal, State or local government agencies, or geographic regions, or c) would have a significant adverse effect on competition, employment, investment, productivity or innovation.[80] The language and requirements of these Acts vividly illustrate the concern that Congress and the public have to avoid agency decision making that fails to address adequately the ramifications of its actions and to consider fully more cost effective alternatives.

The scope of the costs and effects possibly implicated by a widespread relocation of 800 MHz licensee 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

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[78] *See* 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.

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

[80] 5 U.S.C. § 801(a)(3).

compensation could be in the billions of dollars, and would drastically impact the electric utility industry and other essential components of the economy. In fact, a complete relocation could cost upwards of $100 million dollars to Entergy alone, affecting a dramatic shift in the way it is able to do business. The FCC must not take steps that would impose the extraordinary costs associated with reallocation on uninvolved licensees. 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.

b. Funds To Cover Relocation Costs Are Not Guaranteed to All Affected Parties

As discussed above, the FCC has avoided relocation where possible and, where is was not, has provided for compensation to relocated parties. Accordingly, to the extent that the FCC implements a realignment to remedy Public Safety interference, it must provide for full compensation to incumbents that are not contributing to the problem. Furthermore, any reallocation in this context must require the party causing relocation to reimburse the affected parties. Specifically, the relocation of I/LT and Business entities out of, or within, the 800 MHz band should be conditioned upon the payment of relocation costs in advance by the cost causing entity.

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 scraping to

recoup even a small portion of their investments.[81] 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 be uncertain. As such, should the FCC adopt a relocation plan, such plan must guarantee funding to *all* licensees being evicted in order to guard against an unforeseen bankruptcy, merger or other financial change. Funds must be placed in escrow *prior* to relocation or otherwise guaranteed, and replenished as necessary to ensure payment to all displaced licensees. In the case of Entergy, for example, utility ratepayers could be left to subsidize Nextel's radio network if Entergy is forced to relocate without adequate provision to guarantee compensation.

The Nextel Plan is also a wasteful approach to resolving interference problems suffered by Public Safety licensees. The relocation proposal advanced by the Nextel Plan would force incumbent licensees to move extensive, rule-compliant systems that have been meticulously engineered and coordinated over many years, to a new band. The costs to these users, and to the economy as a whole, would produce no net gains for the public.

The Nextel Plan is also unacceptable because it proposes a mandatory relocation, rather than a market-driven voluntary relocation, of incumbent licensees. As discussed above, a logical, market-based plan would require licensees to pursue technical solutions to interference or voluntarily negotiate relocation. Under such a plan, the spectrum would naturally move towards its most valued purpose. The FCC has favored voluntary or good faith mandatory negotiations in the past as a means to clear spectrum of interference problems, and the same

[81] *See, e.g.*, Flag Telecom Files for Bankruptcy, Reuters, April 12, 2002 *available at* http://asia.news.yahoo.com/020412/reuters/asia-99858.html (last visited April 29, 2002); Steven

approach has merit in this context. The FCC should therefore reject Nextel's plan as an needless, draconian measure that would impose unnecessary costs on unoffending Business, I/LT, and non-cellular SMR incumbent licensees.

c. Any Replacement Spectrum Must be Comparable

Under Nextel's extreme plan, incumbent Business, I/LT, and non-cellular SMR licensees face the added problem of the unavailability of spectrum in the 700 MHz and 900 MHz bands. As discussed previously, the 700 MHz band is not available in all areas (particularly in Entergy's service area) and the 900 MHz band is already congested. While Nextel proposes to house some displaced 800 MHz licensees on Nextel's spectrum in these bands, it provides no guarantee that it could offer adequate replacement spectrum for all displaced incumbent licensees. This is particularly true for Entergy, because Nextel does not possess 700 MHz spectrum across large swaths of Arkansas and Louisiana, which compromise a large part of Entergy's territory.

In the Emerging Technologies proceeding, the FCC recognized the importance of reallocating spectrum in a logical, methodical manner, and the necessity of spectrum comparability. It directed the Office of Engineering and Technology ("OET") to study possible spectrum homes for these new operations and to recommended potential replacement spectrum for incumbent licensees on those bands. [82] To locate replacement spectrum bands, the OET emphasized two factors: (1) the technical requirements of the existing services (including

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Pearlstein, *Fiber-Optic Overdose Racks Up Casualties*, WASHINGTON POST, May 2, 2002, at A01.

[82] *See* Office of Engineering and Technologies, Creating New Technology Bands for Emerging Telecommunications Technology, FCC/OET TS92-1 at 12-28 §§ 4.0-4.5 (Jan. 1992), *available at* http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=1008300002.

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.[83]

In addition to finding comparable spectrum, replacement facilities must also be comparable. To guide the parties during the voluntary and mandatory negotiation periods as well as the involuntary relocation period in the ET proceeding, the FCC adopted rules governing the comparability of replacement facilities. "Comparable facilities" are those that are "equal to or superior to existing facilities,"[84] measured by communications throughput, system reliability, and operating costs.[85]

The principles set forth in the 2 GHz relocation proceeding are also instructive as 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 by the auction winners.[86] The FCC also applied a variation on the 2 GHz relocation

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[83] *See* id. at 12 § 4.1.

[84] 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 FCC Rcd 6589, 6591 ¶ 5 (1993) ("*Emerging Technologies Third Report and Order*").

[85] *See* 47 C.F.R. §§ 101.73(d), 101.75(b); Amendment to the Commission's Rules Regarding a Plan for Sharing Costs of Microwave Relocation, WT Docket No. 95-157, RM-8643, *First Report and Order and Further Notice of Proposed Rulemaking*, 11 FCC Rcd 8825, 8840 ¶ 27 (1995).

[86] *See* 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 FCC Rcd 1463, 1503-1510 ¶ 73-79 (1995).

rules to the in-band relocation of Fixed Satellite Services in the 18 GHz band.[87] Because the 2 GHz model appears particularly suited to the relocation of incumbent licensees both within the band and to replacement spectrum, if realignment is found to be absolutely necessary the FCC should apply these factors to any realignment of the 800 MHz band.

(1) 700 MHz and 900 MHz Bands are not Comparable

In the *NPRM*, the FCC has requested comment on Nextel's suggestion that Business and I/LT licenses should be forced to relocate to the 700 MHz "Guard Bands" or the 900 MHz band. Entergy believes that 700 MHz and 900 MHz bands are clearly inadequate as replacement spectrum for Entergy for at least three reasons: (1) the technical restrictions preclude high-quality operations; (2) sufficient spectrum is not available; and (3) the bands fail to meet the 2 GHz test for comparability.

(a) 700 MHz Guard Band Block B

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 architectures. If the FCC were to relocate these licensees to the 700 MHz Guard Band, it could prevent these licensees from converting to more spectrum-efficient and versatile digital systems in the future. Given the FCC's preference for promoting spectrum efficiency and permitting versatile use, this result is unacceptable.

[87] *See* 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 FCC Rcd 13430, 13468-70 ¶ 79-84 (2000).

Further, the 700 MHz Guard Band does not offer sufficient spectrum to accommodate existing services in the 800 MHz band. Although Nextel has proposed to relinquish its 700 MHz Guard band spectrum, Nextel lacks spectrum in nine of the fifty-two Major Economic Areas including substantial areas of Entergy's territory. 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.[88]

Because equipment is not available for the 700 MHz Guard Bands, it is impossible to assess whether incumbent licensees forced to relocate would be able to obtain comparable facilities. Thus, because the 700 MHz Guard Band is neither available nor comparable, it does not constitute suitable replacement spectrum for licensees who would be involuntarily compelled to vacate the 800 MHz band.

(b) 900 MHz

The 900 MHz band also fails to provide suitable replacement spectrum for displaced 800 MHz licensees. For example, channelization in the 900 MHz band is based on 12.5 kHz channels, whereas channels at 800 MHz are 25 kHz. Entergy's equipment at 800 MHz could not be modified to operate at 900 MHz or to use 12.5 kHz channels and would be rendered

[88] *See* 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. *See* 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 FCC Rcd 5299, 5346-47 ¶ 112-114 (2000) (adopting protection rules for television broadcast services)

essentially useless. In addition, displaced 800 MHz licensees would suffer at the 900 MHz band because the separation between transmit and receive frequencies is narrower. In the 800 MHz band, transmit and receive frequencies are separated by 45 MHz, which allows high-quality service over wide areas at low cost. By contrast, to have the same high-quality service in the 900 MHz band, a licensee must purchase more expensive equipment and completely change-out its system, which would constitute an extremely wasteful and expensive undertaking.

The 900 MHz band also does not offer sufficient spectrum to accommodate all of the potentially displaced systems at 800 MHz because Nextel does not possess nationwide 900 MHz spectrum. As with the 700 MHz Guard Band, because of Nextel's limited holdings in this band, the FCC should limit any relocation to those licensees experiencing or causing interference in the 800 MHz band.

The throughput and reliability of the 900 MHz band is also deficient compared to 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 as it could in its existing 25 kHz channel in the same amount of time. Thus, because the 900 MHz band is neither available nor comparable, it does not constitute suitable replacement spectrum for licensees that would be forced to relocate from the 800 MHz band under Nextel's proposal.

In sum, relocation to either 700 or 900 MHz would represent a huge step down from the capability and functionality of the 800 MHz band, and would be completely inadequate to the needs of any utility, and Entergy in particular.

(2) Relocation to 700 or 900 MHz Would Trigger a Licensee's Right to Just Compensation

It has been recognized that an FCC license is only a property right in a limited sense, which is subject to use restrictions by the agency.[89] The contemplated wholesale eviction of Business, I/LT and other licensees from the 800 MHz band, however, is not merely a restriction placed upon the license. It is a targeted and specific restriction on the *equipment* itself, which was purchased and is being lawfully used pursuant to that license. Regulating these licensees out of the 800 MHz band will 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, in effect, idled, compensation is owed under the Fifth Amendment.[90]

A taking may occur through physical invasion or regulation.[91] In the context of land use regulation, the Supreme Court has recognized that if a regulation destroys all economically viable use of the land or if the owner has been called upon "to leave his property economically idle," there is a compensable taking *per se*.[92] If the destruction is less than complete, the court engages in an essentially ad hoc factual inquiry that includes analysis of three factors: 1) the extent to which the governmental action interferes with distinct, investment backed expectations; 2) the character of the governmental action; 3) the extent of economic impact on the claimant.[93]

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

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

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

[92] *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).

[93] *Penn Cent.*, 438 U.S. at 124.

This three-part analysis also applies in the context of personality, such as the wireless equipment that would be at issue here.[94]

The mere fact that an industry or activity is heavily regulated does not mean that an investor can never form a reasonable expectation of a return on an investment.[95] Moreover, having established a particular regulatory scheme with specific parameters and history, the Fifth Amendment limits the actions that the government can take in regard to that regulatory scheme without compensating those who have reasonably relied upon that scheme.[96]

Entergy has been building and refining its 800 MHz network for over 10 years, during which time it has sought and received renewals of its FCC licenses. Today, its internal mobile communications system consists of approximately 8,000 mobile units and 170 antenna sites, representing an investment of approximately $70 million and 100 man-years of time and effort. Entergy has used its licensed frequencies according to the terms of the licenses and the rules of the FCC. It has sought and received renewals when necessary, and reasonably expects that it would be able to do so in the future. Realignment, if adopted, would affect all of Entergy's holdings in the 800 MHz band, and would simultaneously render all of its equipment valueless.

If required to relocate to the 700 or 900 MHz bands, Entergy estimates that it would cost approximately $100 million to replace its system, and would take upwards of 100 man-years of labor to bring a new system on-line. Further, its 800 MHz equipment would be reduced to de minimus salvage value only, and Entergy would be unable to derive any profitable economic benefit from what would remain. Diminution would be virtually total. On an industry wide

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

[95] *American Pelagic Fishing*, 49 Fed. Cl. at 50.

[96] *American Pelagic Fishing*, 49 Fed. Cl. at 50.

basis, this could amount to literally billions of dollars of loss in systems that had extensive usable lives, in addition to the costs of rebuilding the system.

The "character" of the governmental action has been cast in terms of whether the government physically appropriates the property or comes close to doing so.[97] Two other factors are also relevant: 1) whether the action is retroactive in effect and if so, the degree of retroactivity; and 2) whether the action is targeted to a particular individual.[98]

Reallocation would effectively revoke the licenses currently held by Entergy in the 800 MHz band and prohibit future uses by the current incumbents, and Entergy's equipment would be useless. The proposal targets Business and I/LT users and utilities in particular for relocation, even though those being forced to move are not responsible for the alleged problem. Action that is retroactive and targeted to a specific group supports the finding of a taking.[99]

d. Secondary Status in the 800 MHz Band Is Unacceptable

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 non-cellular SMR licensees to remain on the 800 MHz band as long as they operate on a secondary basis. This alternative is unacceptable for incumbent licensees in the Critical Infrastructure Industries, such as electric utilities, because of

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

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

[99] *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.").

the highly sensitive nature of their operations.[100] Utilities cannot accept the possibility that their mission critical communications may experience interference. The health and safety of Entergy's workers and its electric customers are too important to accept secondary status. Utility operations would be inconsistent with relocated Public Safety operations and secondary status would effectively constitute an eviction from the 800 MHz band.

e. The Nextel Plan Raises Significant Legal and Administrative Issues

Nextel's plan raises significant administrative and legal issues. For example, the FCC would have to resolve a number of legal questions regarding the FCC's authority to reallocate or "swap" spectrum among auctioned and non-auctioned services. In addition, the FCC would have to make numerous revisions to the Table of Allocations, including *every portion* of the 800 MHz band, the 700 MHz band, the 900 MHz band, the 2 GHz band, and any other bands from or to which displaced licensees must relocate under the Nextel Plan's daisy chain of relocation.

Nextel's proposed allocation in the 2 GHz plan is another example of the disruptive and unnecessarily complicated nature of its plan. Nextel's Plan would require the FCC to realign the 2 GHz band, and perhaps other bands, as well. This proposal implicates three ongoing rulemaking proceedings involving the 2 GHz band and raises international allocation concerns. Similar problems would also occur if the FCC provided Nextel with 10 MHz of spectrum on any other band. Utilities are particularly concerned with the impact of this part of Nextel's Plan on their fixed microwave operations in the 2 GHz band.

[100] The irony in this proposal is that the interference-causing entity – Nextel – would be given primary status, and licensees that are not even involved in the problem would be relegated to secondary status.

(1) 2 GHz Reallocations

Two ongoing FCC rulemakings concern advanced wireless services[101] and the ancillary terrestrial use of the 2 GHz band by MSS licensees.[102] The FCC has also adopted rules to reimburse utilities for the relocation of their fixed microwave services from the 2 GHz band.[103] Nextel's proposal would also disrupt the international allocation for advanced wireless services.

In the Advanced Wireless proceeding, the FCC proposed two approaches to reallocate between 10 and 14 MHz of spectrum in the 2 GHz MSS band for use by advanced wireless services.[104] This 10-14 MHz of spectrum represents the excess capacity that MSS licensees would not need to operate their systems and perhaps the spectrum abandoned by MSS licensees.[105] If the FCC reallocated 10 MHz in the 2 GHz band to Nextel, however, it would effectively foreclose the proposal to locate third generation services in this band. Alternatively,

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[101] *See* 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 FCC Rcd 16043 (2001) ("*Advanced Wireless Services MO&O and FNPRM*").

[102] *See* 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 FCC Rcd 15532 (2001) ("*Ancillary Terrestrial Wireless NPRM*").

[103] *See MSS Second Report and Order*, 15 FCC Rcd 12315.

[104] *See Advanced Wireless Services MO&O and FNPRM*, 16 FCC Rcd 16043 ¶ 24-27.

[105] *See id.*

it could force the FCC to repossess spectrum that MSS licensees need to operate their systems in order to satisfy the anticipated demand for third generation services.

Nextel's proposed reallocation of the 2 GHz band would also implicate the proceeding concerning the MSS licensees' ability to use a portion of their spectrum for terrestrial wireless services ancillary to their satellite services. This proposal would enable MSS licensees to eliminate gaps in their service territories caused by natural or man-made obstacles interfering with their satellite signals. If Nextel were to obtain this spectrum, it could usurp the spectrum that MSS licensees have argued that they will need to implement these ancillary terrestrial services.

The Nextel Plan would also affect the relocation of incumbent Broadcast Auxiliary Service and Fixed Microwave Services licensees on the 2 GHz band. 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. Nextel admits that the FCC would have to develop a method of compensating the incumbent licensees prior to reallocating the requested 10 MHz of spectrum to Nextel. Although Nextel asks that the FCC place its 10 MHz of spectrum at the top of the queue for resolution, the FCC took several years to develop its initial relocation policy and should treat all of the incumbent licensees and spectrum users similarly. If the FCC decides to reallocate this spectrum, it should clarify that Nextel would assume the responsibility of reimbursing fixed microwave licensees for their relocation costs.

Nextel's proposed reallocation of 10 MHz of spectrum from the 2 GHz band for its own use also raises issues of international concern. The spectrum that Nextel would like to obtain is located in the 2020-2025 MHz and 2170-2175 MHz portions of the 2 GHz band. However, the International Telecommunications Union ("ITU") allocated that particular spectrum for third

generation operations on a worldwide basis.[106] Particularly, the ITU allocated the 2170-2200 MHz portion of the band for Mobile Satellite Services on a primary basis for the satellite component of third generation operations and the 2010-2025 MHz portion of the band for MSS on a primary basis in Region 2, which includes Nextel's service territory in North America.[107]

(2) Other Spectrum Bands

The FCC has requested comment on alternate bands that could be allocated as replacement spectrum for Nextel. However, these allocations would present similar complications that cannot be justified by the minimal public interest benefits that would be created thereby.

The 1910-1930 MHz band is also not a suitable source of replacement spectrum for Nextel and other cellular-type, digital SMR licensees because it suffers from the same types of problems as the 2 GHz MSS band. The FCC previously allocated this spectrum to Unlicensed Personal Communications Services ("UPCS")[108] and also considered the band as a possible source of spectrum for third generation licensees or licensees displaced by third generation services in other bands.[109]

For the same reasons, the 2390-2400 MHz band would not provide sufficient replacement spectrum for Nextel and other cellular-type, digital SMR licensees. The FCC allocated this band

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[106] *See* ITU Radio Regulation S5.388.

[107] *See* ITU-R Resolution 212 (Rev. WRC-97); ITU-R Resolution 716 (Rev. WRC-2000).

[108] *See* In the Matter of Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, *Memorandum Opinion and Order*, 9 FCC Rcd 4957, 5037 (1994).

[109] *See Advanced Wireless Services MO&O and FNPRM*, 16 FCC Rcd at 16047-48, 16047 n.22.

to the Amateur Radio Service on a primary basis and to UPCS on a secondary basis,[110] rejecting the use of wide area, high power, fixed and mobile stations on this band.[111] The FCC has also proposed allocating this band for third generation advanced wireless services. Because this spectrum band is unpaired, the FCC would have to allocate spectrum in another band to Nextel and cellular-type, digital SMR licensees. Thus, Nextel's interference with Public Safety licensees in the 800 MHz band would potentially spread to an incredible number of licensees in a number of other bands.

(3) Granting Nextel 10 MHz Of Spectrum In The 2 GHz Band Would Be Contrary To The Public Interest And 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 for free and deprive other parties of any opportunity to apply for the spectrum themselves. Nextel would have the Commission ignore established spectrum allocation principles for the sole purpose of enriching a single company. As such, Nextel's proposal is nothing more than a spectrum grab that would be blatantly contrary to the public interest and that would undermine sound spectrum policy.

As discussed above, the specific frequency blocks Nextel is seeking - 2020-2025 and 2170-2175 MHz - are currently used by Broadcast Auxiliary Service ("BAS") and Fixed Service ("FS") licensees.[112] However, the FCC has allocated this spectrum to Mobile-Satellite Service

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[110] *See Advanced Wireless Services MO&O and FNPRM*, 16 FCC Rcd at 16048-49; *see also*, In re 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 FCC Rcd 4769, 4779-80 ¶ 16-17 (1995).

[111] *See Advanced Wireless Services MO&O and FNPRM*, 16 FCC Rcd at 16049.

[112] *Nextel White Paper* at 29 and 56.

("MSS") licensees.[113] Additionally, the Commission recently proposed to further reallocate a portion of the spectrum to advanced mobile and fixed terrestrial wireless services ("advanced wireless services")[114] in response to a petition by the Cellular Telecommunications & Internet Association ("CTIA").[115] Given these multiple competing interests, the 2 GHz spectrum requested by Nextel is highly desirable, would result in mutually exclusive applications if the Commission made it generally available, and should not be allocated for the exclusive use of one entity.

As evidenced by recent statements by Chairman Michael Powell and Commissioner Kathleen Abernathy regarding the Multichannel Video Distribution and Data Service ("MVDDS"), the FCC recognizes that an exclusive spectrum allocation such as the one Nextel has proposed would be contrary to Congressional and FCC policy:

> Many have claimed that Northpoint deserves a nationwide 500 MHz terrestrial license for free based on its regulatory and technical efforts to make this service a reality. We sympathize with the sentiments that underlie these claims. There is little question that had it not been for Northpoint, the MVDDS service would not be ready to move forward today. . . . While we understand the equitable basis for Northpoint's claims, we cannot support that equitable concern trumping the auction regime Congress created in the statute, or the value of allowing other competitors to vie for a chance to offer service to the public.[116]

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[113] *See* Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, IB docket No. 99-81, *Report and Order*, 15 FCC Rcd 16127 (2000).

[114] 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, ET Docket No. 00-258, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 16 FCC Rcd 16043 (2001).

[115] In re Establishment of Policies and Service Rules for the Mobile-Satellite Service in the 2 GHz Band, Letter to Chairman Michael Powell by AT&T Wireless Services, Cingular Wireless, Sprint PCS, and Verizon Wireless, IB Docket 99-81 (June 13, 2001).

[116] FCC Affirms MVDDS Authorization and Adopts Service Rules for the 12.2-12.7 GHz Band, News Release, ET Docket No. 98-206, Joint Statement of Chairman Michael Powell and Commissioner Kathleen Abernathy at 2 (Apr. 23, 2002).

Chairman Powell's and Commissioner Abernathy's statement vividly illustrates the importance the Commission places on giving all eligible parties the opportunity to apply for highly desirable spectrum.[117]

2. NAM and FCC Realignment Plans are Deficient

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 non-cellular SMR systems in the 800 MHz band. In particular, these plans would jeopardize incumbent ability to access replacement spectrum at 800 MHz, without any corresponding benefit.

The NAM plan would adversely affect incumbent licensees in the 800 MHz band that operate Business, I/LT, and non-cellular SMR systems by limiting their operations to the 811-816/856-861 MHz band, even though they have not been identified as a source of interference. Although the NAM Plan would not require the relocation of as many incumbent licensees as the Nextel Plan, it is still overly broad because 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, potentially affecting thousands of innocent licensees.

The FCC Plan would not require *all* Business, I/LT, and SMR licensees to relocate, but it would require relocation by substantial number of incumbent licensees. This relocation would impose significant expense on incumbent licensees because of the necessary equipment re-tuning

[117] In the MVDDS proceeding, the Commission denied an exclusive spectrum grant to Northpoint even though it was instrumental in bringing to fruition the technology that would use the spectrum. In contrast, Nextel has done nothing to foster the provision of service in the 2 GHz band.

or replacement. The FCC's plan suffers from the same infirmities as Nextel's plan with respect to the complexities and expense of either relocating, replacing, or retuning equipment on a large scale. Affected transmission equipment would include repeater units, which are basic narrowband hardware and are incapable of being retuned. The antennas, combiners, and preselectors are also tuned to a specific part of the 800 MHz band. Licensees could not retune the transmitter finals and receiver front ends and would have to change the associated software programs and support equipment, which run the dispatch systems. Retuning would also require considerable cooperation from all affected parties.

The complicated changes necessitated by the in-band relocation proposed by the NAM and FCC Plans would require incumbent licensees to incur tremendous costs. While the cost of retuning or replacing their equipment would be high, a recall of their mobile equipment to implement such a change-out would also cause incumbent licensees to expend several man-hours per radio. Incumbent licensees may also have to renegotiate or modify site leases and management agreements in the event that they are not able to replace this spectrum at the precise locations where they are currently licensed. 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's Plan are extraordinary, especially in light of the fact that the incumbent licensees affected by the Plan are not the source of interference to the Public Safety licensees.

In addition to the expense of retuning or replacing the equipment, in-band relocation is also wasteful because it would impose unnecessary or duplicative expenses on incumbent licensees. The NAM Plan would force incumbent licensees to move their coordinated and compliant systems, which are not causing any interference to Public Safety licensees, to a new

portion of the 800 MHz band where they would have to engage in re-coordination procedures based on the operations of different co-channel and adjacent channel licensees. This 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, as discussed previously, such a disruption of essential communications is unacceptable.

Neither the NAM plan nor the FCC plan offers details on the funding or cost allocation associated with such a massive relocation. Furthermore, the FCC does not address assignments in the General Category. It also neglects to discuss the impact to Public Safety if SMR systems using cellular architecture operate on the Business or I/LT frequencies. Although the FCC Plan would require the mandatory relocation of many incumbent licensees, it offers no details about the allocation of costs or the logistics of the transition. The FCC Plan 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 its impact on Public Safety systems operating on the NPSPAC channels adjacent to the cellular bands, and NAM neglects to explain the timing or logistics of the proposed band realignment. In the absence of clear, workable provisions to cover these issues these central issues, the NAM plan and FCC plans are incomplete and unreasonable alternatives.

In exchange for the burden of relocation, and any associated costs it would impose, incumbent Business, I/LT, and non-cellular SMR licensees would receive no discernable benefits. As mentioned before, the incumbent Business, I/LT, and SMR 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 and the proposed mandatory relocation is to reduce interference, it should only involve the entities causing or

receiving interference. Thus, any relocation plan that involves the relocation of incumbent licensees who do not cause interference to Public Safety licensees is fatally over-inclusive.

As with the Nextel plan, the NAM and FCC Plans are overly broad. In response to an interference problem primarily caused by Nextel, they would affect a substantial number of incumbent licensees. The vast majority of these licensees currently operate in compliance with the FCC's rules *and* do not cause interference to Public Safety licensees. Any proposed relocation of licensees should only involve those licensees that consistently cause interference problems, *i.e.* Nextel. Because they affect a substantial number of incumbent Business, I/LT, and SMR licensees, the NAM and FCC plans are not narrowly drafted to impose undue burdens on other users of the 800 MHz band.

VI. THE BUSINESS AND I/LT POOLS SHOULD NOT BE COMBINED

The FCC should deny PCIA's request for a consolidation of the Business and I/LT Pools in the 800 MHz and 900 MHz bands. Consolidation of these Pools is contrary to the public interest because it would hinder access to spectrum by critical infrastructure industries, thus endangering the efficient operation of their Public Safety/public service communications systems.

In an analogous situation, the Wireless Telecommunications Bureau froze the filing of applications for inter-category sharing on private mobile radio service frequencies in the 806-821/851-866 MHz band to stem the rapid depletion of Public Safety frequencies in that band.[118] Under the FCC's rules at that time, an entity that was eligible for the Business or I/LT Pools could obtain a license in the Public Safety category if the channel was vacant and no available

channels remained in that entity's category.[119] Because of rule changes affecting another category of licensees, the Wireless Telecommunications Bureau noted that "there has been a dramatic increase in the number of Business and I/LT entities filing applications for inter-category sharing to use Public Safety channels in the 806-821/851-866 MHz bands."[120] To protect the future radio spectrum resources of these Public Safety entities, the Wireless Telecommunications Bureau concluded that it would immediately freeze inter-category sharing of these licenses.[121]

I/LT spectrum at 800 MHz is available to entities that can meet the relatively specific eligibility requirements associated with the I/LT category,[122] which include engaging in activities in support of critical infrastructure. Eligibility for Business Category spectrum, on the other hand, is quite broad, extending to any entities engaged in commercial activities.[123] Consolidation of the Business and I/LT pools would essentially lead to the elimination of the remaining 800 MHz I/LT spectrum, thus denying utilities any flexibility with regard to the expansion or modification of their system. This is the type of harm that the intercategory sharing freeze was designed to prevent, and it should not be permitted with regard to this critical spectrum resource.

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[118] *See* In re Inter-Category Sharing of Private Mobile Radio Frequencies in the 806-821/851-866 MHz Bands, *Order*, 10 FCC Rcd 7350, 7352 ¶ 7 (1995) ("*Inter-Category Freeze Order*").

[119] *See* 47 C.F.R. § 90.621(g)(1) (1994).

[120] *Inter-Category Freeze Order*, 10 FCC Rcd at 7352 ¶ 5.

[121] *See id.* at ¶ 7.

[122] *See* 47 C.F.R. § 90.617(b).

[123] *See* 47 C.F.R. § 90.35(b).

VII. CONCLUSION

Entergy agrees that eliminating interference to Public Safety systems is a laudable and important goal. Radical band reallocation, however, is not the answer. The current proposals are over-broad and fail to adequately address the problem they are purporting to solve. Further, the proposals outlined in the *NPRM* would have devastating consequences for utility users of the 800 MHz band and Entergy in particular, and could compromise their ability to maintain and protect the nation's vital electric infrastructure. Rather, a simple, market-based solution offers the best alternative for the Commission to alleviate harmful interference without harshly and unnecessarily impacting licensees that are not directly involved or responsible for the interference problem.

WHEREFORE, THE PREMISES CONSIDERED, Entergy respectfully requests that the Commission consider these Comments and proceed in a manner consistent with the views expressed herein.

Respectfully submitted,

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Dated: May 6, 2002

CERTIFICATE OF SERVICE

I, Christine S. Biso, do hereby certify that on this 6th day of May 2002, a copy of the foregoing "Comments for Entergy Corporation and Entergy Services, Inc." was mailed via U.S. Mail, postage prepaid to each of the following:

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