

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of Part 90 of the Commission's)	
Rules to Provide for Flexible Use of the)	WT Docket No. 05-62
896-901 MHz and 935-940 MHz Bands)	
Allotted to the Business and Industrial Land)	
Transportation Pool)	
)	
Oppositions and Petitions for Reconsideration)	DA 04-3013
of 900 MHz Band Freeze Notice)	

COMMENTS OF SOUTH CAROLINA PUBLIC SERVICE AUTHORITY

South Carolina Public Service Authority (“Authority”) hereby files these comments in response to the Notice of Proposed Rulemaking in the above-captioned proceeding.¹ As a current licensee for the 900 MHz frequencies that are available for business and industrial uses, Authority is directly affected by FCC proposals that would limit the future availability of these channels for its own use.

I. INTRODUCTION AND STATEMENT OF INTEREST.

Authority is a state-owned utility that directly serves more than 136,000 residential and commercial customers in Berkeley, Horry, and Georgetown counties and generates the electricity distributed to more than 615,000 customers in all 46 counties by the state's 20 electric cooperatives. With a diverse fuel and energy supply of coal, nuclear, oil, gas and hydro, Authority also supplies power to 34 large industries, the municipal utilities in Bamberg and Georgetown, and the Charleston Air Force Base.

¹ Notice of Proposed Rulemaking, FCC No. 05-31, 70 Fed. Reg. 13143 (2005) (“*Notice*” or “*NPRM*”).

In the mid-1990's, Authority realized that it required more advanced communications capabilities than its then-existing VHF and UHF collection of non-interoperable facilities could provide in order to ensure the unhampered provision of electrical power. In designing an improved communications network, Authority needed to take into account South Carolina's susceptibility to extreme environmental conditions, notably hurricanes and tornadoes. For example, when a hurricane hits South Carolina and large-scale power and water outages occur, Authority relies heavily on its communications systems to facilitate the timely restoration of these crucial services to the public. In addition, Authority's employees need reliable and efficient communications systems to relay information about emergency situations back to dispatchers and public safety personnel, as well as to enable crews in separate geographic areas across the state to communicate.

Under these design criteria, Authority ultimately received FCC authority to construct a 900 MHz trunked system utilizing 72 channel pairs distributed over 64 transmitter sites. At a cost of more than \$15 million, Authority completed construction of this network in 2002, in full compliance with its "slow-growth" authorization. The system now provides service to more than 2,300 mobile units to expedite the provision of utility service and to safeguard life and property in times of emergency.

Authority is an active member of the United Telecom Council ("UTC") and has therefore reviewed and participated in the development of comments prepared for submission in this docket by a coalition of private wireless trade associations and interests including UTC.² Authority fully supports those comments and urges the FCC to adopt final rules consistent with

² See Joint Comments, submitted by Association of American Railroads, American Petroleum Institute, MRFAC, Inc., National Association of Manufacturers, United Telecommunications Council, WT Docket No. 05-62, May 18, 2005.

the recommendations included therein. These additional comments are being submitted to highlight the importance of the 900 MHz band to Authority and its customers as well as to document the negative impact that the *NPRM's* proposals would have on Authority's operations.

II. THE *NPRM'S* PROPOSALS THREATEN TO UNDERMINE THE USEFULNESS OF AUTHORITY'S 900 MHz NETWORK.

A. Reallocating the 900 MHz Business and Industrial Channels to Commercial Use Will Strand Incumbent Operators at Existing Capacity Levels.

The Commission's proposal to reallocate all 199 channels in the 900 MHz band now available for business and industrial applications to commercial SMR use would freeze Authority's system at its present capacity and existing geographic footprint. This action, if adopted, would frustrate Authority's ability to expand its 900MHz trunked system to geographic areas already served by the Authority's electrical grid, but not presently within the Authority's trunked system.

As is the practice with most critical infrastructure industries (CII) entities, Authority sought authority to operate only in areas where it had an immediate need for service. Authority could not justify the expenditure of funds to build-out its network in areas where future needs are only speculative. Indeed, FCC rules and policies have long discouraged private wireless applicants from such actions and have instead required that applications specify facilities that are immediately needed.³ Authority, and all other existing 900 MHz private wireless licensees, should not now be frozen at their existing facilities and thus penalized for failing to file speculative applications. Authority therefore urges the Commission to preserve the ability of

³ See e.g., 47 C.F.R. § 90.127 of the FCC's Rules. While FCC rules allow applicants to receive extended implementation, such requests are typically limited to systems that are part of a coordinated or integrated wide-area system and require more than 12 months to plan, approve, fund purchase, construct and place in operation. See 47 C.F.R. § 90.629 of the FCC's Rules.

public utilities and other private wireless entities to acquire 900 MHz channels directly from the FCC on a site-specific, frequency coordinated basis.

B. The Commission’s Grandfathering Proposals are Inadequate.

Similarly, the Commission’s proposals to “grandfather” 900 MHz business and industrial systems at their existing coordinates and to permit modification of those facilities only if the grandfathered 40 dB μ V/m service contour is not extended in any direction would be a severe restriction on Authority’s ability to reconfigure its network in response to the shifting needs of its customers. Requiring incumbent licensees to maintain a constant 40 dB μ V/m contour would provide 900 MHz licensees with only minimal flexibility to adjust their coverage area and is inconsistent with similar FCC actions in other frequency bands. For example, Section 90.633 of the Commission’s rules allows grandfathered licensees operating on certain 800 MHz channels that were also reallocated for wide-area commercial SMR services to add, remove or modify transmitter sites so long as the original 22 dB μ V/m is not expanded and the station otherwise complies with the Commission’s spacing criteria.⁴

Allowing grandfathered licensees to modify facilities within their 22 dB μ V/m contour as opposed to their 40 dB μ V/m contour would provide much greater flexibility to relocate and reorient existing transmitting facilities. The Commission must recognize that 900 MHz licensees such as Authority are using their communications facilities to maintain critical infrastructures that are necessary to the health and welfare of the American public. It is not acceptable for this network to be threatened, for example, by the loss and relocation of an antenna tower that would require the extension of the original 40 dB μ V/m contour in some direction. While Authority would prefer to maintain the *status quo* for licensing on all 900 MHz business and industrial

⁴ 47 C.F.R. § 90.693(b).

channels, expansion of the grandfathering rights to the 22 dB μ V/m contour would significantly increase incumbent flexibility and is therefore a preferable solution to the proposals contained in the *Notice*.

C. The Commission’s Proposals will Result in Increased Interference to Authority’s 900 MHz System.

Recently, the FCC concluded a three-year proceeding addressing the interference to 800 MHz public safety and private wireless systems caused by cellular systems operated principally by Nextel Communications, Inc. (“Nextel”).⁵ In resolving that highly contentious proceeding, the Commission issued the following statement as one of its major findings:⁶

We must take the actions necessary to ensure that first responders—both public safety and CII personnel—have communications channels free of unacceptable interference and thereby suitable for mission-critical operations including rapid response to major incidents that threaten Homeland Security.

In part, this finding led the FCC to adopt rules that would segregate cellular commercial systems, which are typically comprised of low power and low antenna height base stations, from systems that are operated by public safety, CII and other private wireless users that are typified by high base station powers and antenna heights. In addition to segregating these different types of system architectures, the FCC also adopted interference protection standards that fully define the interference resolution responsibilities of cellular systems that degrade public safety and other non-cellular systems (including CII systems) beyond certain established thresholds.⁷

⁵ See *Improving Public Safety Communications in the 800 MHz Band*, WT Docket No. 02-55, *Report and Order*, 19 FCC Rcd 14,969 (2004) (*800 MHz Report and Order*). See also, *Supplemental Order and Order on Reconsideration*, WT Docket No. 02-55, 70 Fed. Reg. 6757 (2005).

⁶ *800 MHz Report and Order* at ¶13.

⁷ *Id.* at ¶19.

Within weeks after issuing this landmark decision, the Commission proposes to replicate the exact same interference on 900 MHz licensees by expanding commercial cellular uses within the band. There is absolutely no reason to expect that private wireless systems will not receive the same type of interference at 900 MHz that Nextel and other cellular carriers created at 800 MHz. In fact, it could be argued that the interleaving of cellular and traditional private land mobile systems is even greater at 900 MHz so, if Nextel fully incorporates these frequencies into its network, we can expect the interference situation to be even worse.

The only justification for expanding this co-habitation of architectures is that the FCC does not believe that its spectrum management obligations require them to protect CII systems from harmful interference caused by Nextel's cellular system. Authority respectfully submits that this position would be in violation of the Commission's existing rules. One of the fundamental principles governing Part 90 of the Commission's rules is codified at Section 90.173, which states that "all applicants and licensees shall cooperate in the selection and use of frequencies in order to reduce interference."⁸ In violation of this principle, Nextel has deployed its cellular technology in the 900 MHz band with full knowledge that it will cause interference to incumbent licensees. In November of 2001, Nextel informed the FCC that the reason for 800 MHz interference is that "[p]ublic safety and CMRS systems are operating essentially incompatible wireless system designs on adjacent, interleaved and mixed 800 MHz channels."⁹ After that very public pronouncement, which applies equally to CII and other private wireless systems in addition to public safety, Nextel constructed its 900 MHz cellular network knowing

⁸ 47 C.F.R. § 90.173(a) of the Commission's Rules.

⁹ See Letter from Regina M. Keeney, Counsel To Nextel Communications, Inc. to Magalie Roman Salas, Secretary, FCC, ET Docket No. 00-258, submitted Nov. 21, 2001 (*Nextel White Paper*) at 7.

the ramifications to the incumbent users.¹⁰ This is not cooperation in the shared use of spectrum. Perhaps, Nextel might legitimately argue that 800 MHz interference was unforeseen. It cannot argue the same point with respect to 900 MHz.

Commission precedent has long recognized that spectrum newcomers should bear the financial costs to remedy interference they cause to incumbent systems.¹¹ Nextel's commercial network should not take precedent over CII systems such as the system operated by the Authority, which the Commission has already determined should operate free of unacceptable interference.¹² At a minimum, therefore, the Commission should adopt the same interference protection criteria for 900 MHz systems that it adopted in the 800 MHz proceeding.

¹⁰ In a recent pleading submitted in the 800 MHz proceeding, Nextel conceded that it has been operating its 900 MHz iDen network since 2002, well after the submission of its interference "white paper". *See* Opposition and Comments of Nextel Communications, Inc. Regarding Petitions for Reconsideration, WT Docket No. 02-55, April 21, 2005, at 19.

¹¹ *See* 47 C.F.R. § 90.157 of the Commission's Rules. *See also*, Broadcast Corp. of Georgia (WVEU(TV)), 92 FCC 2d 910, (1982).

¹² *See* n. 6 *supra*.

III. CONCLUSION.

Authority's 900 MHz systems are integral to the provision of electrical utility service across South Carolina. The FCC's proposals in this proceeding threaten to undermine this mission by eliminating opportunities to expand system capacity and coverage where warranted. For these reasons, Authority urges the Commission to ensure that the interests of CII licensees and other private wireless users are fully addressed before promoting additional commercial use of the 900 MHz band.

Respectfully Submitted,

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