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

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OFFICE OF SECRETARY

In the Matter of	)	
Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band	)	PR Docket No. 93-144 RM-8117, RM-8030 RM-8029
Implementation of Sections 3(n) and 332 of the Communications Act - Regulatory Treatment of Mobile Services	)	GN Docket No. 93-252
Implementation of Section 309(j) of the Communications Act - Competitive Bidding 800 MHz SMR	)	PP Docket No. 93-252

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To: The Commission

COMMENTS OF
INDUSTRIAL COMMUNICATIONS & ELECTRONICS, INC.

1. Industrial Communications & Electronics, Inc. ("IC&E"), by its attorneys, and in accordance with Section 1.415 of the Federal Communications Commission ("FCC" or "Commission") Rules and Regulations, respectfully submits the following Comments in the above-entitled proceeding.[1/] The instant Notice requests comment on certain aspects of mandatory relocation as adopted in the First Report and Order in this proceeding and on service

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[1/] First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rule Making, PR Docket No. 93-144, FCC 95-501, 10 FCC Rcd ___ (rel. Dec. 15, 1995)(¶¶ 9-142 "First Report and Order", ¶¶ 257-403 "Second FNPRM"). The Commission extended the deadline for filing comments in this proceeding from January 16, 1996 to February 15, 1996 by Order released January 16, 1996. Order, PR Docket No. 93-144, DA 96-18, 10 FCC Rcd ___ (rel. Jan. 16, 1996).

and competitive bidding rules for the "lower 80" Specialized Mobile Radio ("SMR") channels and General Category channels.

I. INTRODUCTION

A. IC&E's Interest in This Proceeding

2. IC&E is a wireless communications provider in a number of different FCC-licensed services with particular expertise in SMR, cellular and mobile communications services. The company has been engaged in the mobile telecommunications business for over nineteen years. It was established in 1975 by individuals with substantial experience in all facets of the land mobile radio industry. The company's activities are focused primarily in the New England and South Florida areas. It currently offers a full range of two-way and SMR equipment sales, antenna site management and maintenance activities, and is engaged in the provision of communications and telecommunications services.

3. IC&E received FCC authority to develop a wide-area digital SMR network utilizing its 800 MHz frequencies to better serve its New England customers and marketplace in 1993. It has spent the last three (3) years deploying significant financial investment and engineering resources in the development of this wide-area New England system.

4. Through the extensive and varied experience IC&E management has developed over the last twenty (20) years from both an operational and technical engineering standpoint, IC&E is uniquely qualified to comment on the issues in this Second FNPRM proceeding which will directly affect not only its wide-area system development, but also the continued operation of its existing traditional analog systems in New England. IC&E has reviewed and considered the Second FNPRM and wishes to emphasize for the Commission those key points which are

essential to ensure the fashioning of workable rules to facilitate the future use of the 800 MHz SMR spectrum.

B. First Report and Order

5. In the First Report and Order, the FCC adopted final service and competitive bidding rules for the "upper 10 MHz block" of 800 MHz Specialized Mobile Radio ("SMR") spectrum. It established technical and operational rules for new licensees in the Upper 10 MHz block with service areas defined by the U.S. Department of Commerce Bureau of Economic Analysis Economic Areas ("EAs"), and defined the rights of incumbent SMR licensees already operating or authorized to operate on these channels.

6. Under the mandatory relocation scheme adopted in the First Report and Order[2/], incumbents and the EA licensee have a period of time to determine relocation issues on a voluntary basis. After the time has passed for voluntary negotiations, if such negotiations were unsuccessful, the EA licensee could request mandatory relocation, provided that sufficient spectrum is available and the incumbent receives "comparable facilities". The Second FNPRM seeks comment on certain aspects of the mandatory relocation plan adopted.

II. SECOND FURTHER NOTICE OF PROPOSED RULE MAKING

A. Definition of "System"

7. As the Commission has noted, the impact of wide-area licensing on incumbent licensees is a crucial issue in this proceeding.[3/] There are a large number of systems already authorized and operating in the 800 MHz band, particularly in major markets. Virtually all

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[2/] First Report and Order at ¶ 73.

[3/] First FNPRM at ¶ 32.

channels in major markets are either in use or under construction. A serious concern is to prevent the disruption and system redesign of licensees which have devoted substantial resources to planning and constructing integrated systems. Any provision for mandatory retuning must provide these licensees maximum protection.

8. The Commission should prohibit an EA licensee from selectively retuning an incumbent's frequencies. To allow an EA license winner to attempt to retune incumbents on a "selective" or "individual channel basis" would be disastrous. If any retuning is to be done by a EA licensee, total retuning must be done, and not "piecemeal retuning" of selected channels. The EA licensee should be required, at the option of the incumbent licensee(s), to retune all channels which comprise a licensee's integrated system. In this way, EA licensees will neither be able to cherry-pick particularly attractive channels, nor subject integrated system licensees to intolerable disruption by relocating only sufficient channels to render the incumbent licensee's frequency plan unworkable.

9. The Commission has recognized the potential impact of "cherry-picking" as demonstrated in the factors it delineated in defining "comparable facilities". The Second FNPRM proposes that a relocated incumbent would:

> (a) receive the same number of channels with the same bandwidth; (b) have the entire system relocated, not just those frequencies desired by a particular EA licensee; and, (c) once relocated, have a 40 dBu service contour that encompasses all of the territory covered by the 40 dBu contour of its original system.(emphasis added).[4/]

10. IC&E urges the FCC, in refining its definition of "comparable facilities" and in particular, in clarifying the definition of "system", to consider those underlying analog facilities

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[4/] Second FNPRM at ¶ 283.

identified as participating in an incumbent's wide-area system as well as the overlay digital grants collectively as a "system".

11. In this regard, the Commission should distinguish between those wide-area, "slow-growth" systems predicated on underlying constructed analog facilities which have authority to redeploy frequencies already in use from extended implementation authorizations which involve no operational facilities. Like other wide-area authorizations granted pursuant to waiver,[5/] IC&E's wide-area system is limited to the geographic area defined by the contiguous and overlapping service areas of IC&E's owned or managed stations that are constructed and operational.[6/] In the Fleet Call, Advanced and MRNE decisions, the Commission implicitly adopted a wide-area system analysis, including an "aggregate" system loading standard, and concluded that the spectrum involved was being fully and efficiently used. The FCC decided that, having justified exclusive use of the frequencies within the market boundaries, the public interest would be served if the same entity were permitted to derive further efficiencies from the spectrum through the implementation of advanced technologies and judicious frequency reuse. These wide-area, digital SMR networks are authorized and intended to function as an integrated

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[5/] See, In re Request of Fleet Call, Inc., Memorandum Opinion and Order, File No. LMK-90036, 6 FCC Rcd 1533 (1991)("Fleet Call Order") recon. dismissed, 6 FCC Rcd 6989 (1991); In re Request of American Mobile Data Communications, Inc., Memorandum Opinion and Order, 4 FCC Rcd 3802 (1989); Letter from Richard Shiben, Chief, Land Mobile and Microwave Division, Federal Communications Commission, dated April 13, 1992 to George Hertz, Advanced MobileComm of New England, Inc. granting waiver and other relief for the creation of an "Advanced Mobile Radio System" ("MRNE"); and Request for Rule Waiver of Advanced Radio Communication Services of Florida, Inc., filed July 15, 1991 ("Advanced").

[6/] Thus, IC&E's wide-area system is fully consistent with the Weisman letter. Letter from Ralph A. Haller, Chief, Private Radio Bureau, FCC to David E. Weisman, Attorney, Meyer, Faller, Weisman and Rosenberg (FCC No. 7310-13/1700A)(Dec. 23, 1992).

system linked by radio, wireline or fiber optic paths.

12. The FCC must recognize that active, successful, incumbent wide-area licensees like ICE&E have proceeded with system financing, equipment evaluation and the myriad other steps that necessarily precede system construction based on the extended implementation period approved by the Commission. To ensure the continued provision of service to its established customer base, IC&E has planned to maintain the existing stations in their current analog configuration until its wide-area system design has been completed and implemented.[7/] To allow an EA licensee to consider as a "system" only those frequencies associated with base stations currently operating and the mobiles which currently utilize them would result in the total disruption of an incumbent's wide-area licensee's channelization plan.

13. Planning for a wide-area ESMR requires maximum flexibility in channelization, including the ability to reuse channels, designate channels for signalling or control, and relocate channels within one's operating area. A retuning policy that does not include an integrated system approach is an invitation to anti-competitive activities at minimal cost and should not be considered. Therefore, in considering what constitutes "comparable facilities" the Commission must define "system" to include those underlying analog facilities identified as participating in a wide area system as well as the overlay digital grants.

B. Incumbent Co-Channel Protection Criteria

14. The Commission has already recognized that incumbents in all of the frequency

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[7/] The Commission's rules governing construction of SMR stations are intended to ensure that spectrum is placed in operation and used to satisfy customer needs on a timely basis. Because all of the frequencies associated with all of the underlying analog systems currently owned or managed by IC&E's principals in the applicable market have already been placed in operation and are currently serving customers, IC&E has satisfied that objective.

bands under consideration must be afforded an adequate degree of protection from co-channel interference. Thus, the FCC has explicitly affirmed that facilities, whether licensed on a site-by-site basis or pursuant to geographic licensing procedures, will remain entitled to full interference protection as currently prescribed in the Commission's rules.[8/]

15. IC&E submits that this aspect of the SMR regulatory framework may require further consideration. First, the Company urges the Commission to include in the definition of "comparability" for retuning purposes a requirement that the retuned frequencies have co-channel separation as least as good as that of the original frequencies, or preferably the full seventy-mile co-channel protection. Additionally, while not specifically raised in this proceeding, IC&E remains concerned about the continued adequacy of the existing interference rules as the landscape of this spectrum changes. Those protection criteria were developed in an environment in which a single SMR station was likely to have one, or at most a few, co-channel facilities in adjacent geographic areas. Even those criteria were eroded over the years as the FCC permitted the licensing of "short-spaced" facilities in relatively close proximity to existing stations.

16. Now, to the extent some industry operators implement more cellular-like system configurations, we can expect to see the proliferation of multiple, relatively low-power, low-antenna height stations that effectively will surround existing stations. Instead of one or a handful of co-channel facilities, operational systems will have to contend with the as yet undetermined interference generated by cellular-like systems. It is only reasonable to assume that the interference problems experienced today will be exacerbated as such systems are fully

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[8/] Second FNPRM at ¶ 283.

implemented.

17. IC&E does not raise this matter in an effort to deter the licensing of such systems. In fact, the Company itself is in the process of developing its wide-area system which will share these characteristics. It simply urges the Commission to remain vigilant as to the increased interference potential of these operations and open to the possibility that the co-channel protection criteria may require future modification to reflect this changed environment. IC&E anticipates that members of the SMR community will continue to cooperate in the resolution of such matters, as they have done so frequently in the past. However, to the extent such collaborative efforts are not universally successful, Commission intervention may be required.

V. CONCLUSION

WHEREFORE, IC&E respectfully requests that the Commission adopt rules in this proceeding in a manner consistent with these comments.

Respectfully submitted,

INDUSTRIAL COMMUNICATIONS & ELECTRONICS, INC.

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Dated: February 15, 1996

CERTIFICATE OF SERVICE

I, Katherine A. Baer, a secretary in the law offices of Lukas, McGowan, Nace & Gutierrez, Chartered, do hereby certify that I have on this 15th day of February, 1996, had a copy of the foregoing COMMENTS OF INDUSTRIAL COMMUNICATIONS & ELECTRONICS, INC. hand-delivered to the following:

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