

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
THE NEW YORK HOSPITAL -)
CORNELL MEDICAL CENTER)
)
Petition for Permanent Waiver For)
Special Emergency Radio Service Paging)
Facilities on 453.025 MHz in the New York,)
New York Metropolitan Area)

ORDER

Adopted: March 19, 1998

Released: March 19, 1998

By the Chief, Wireless Telecommunications Bureau:

I. INTRODUCTION AND EXECUTIVE SUMMARY

1. We have before us a Petition for Permanent Waiver ("Waiver Petition") filed by New York Hospital-Cornell Medical Center ("NYH-CMC"). NYH-CMC requests that the Commission grandfather its existing Special Emergency Radio Service ("SERS")¹ paging system operating on 453.025 MHz in New York, New York.² NYH-CMC contends that it meets the Commission's criteria for permanent waiver of such systems. Based on the record in this proceeding, we conclude that NYH-CMC's Waiver Petition should be granted.

II. BACKGROUND

2. *Emergency Medical Radio Service Report and Order.* On January 14, 1993, the Commission established the Emergency Medical Radio Service ("EMRS") as a new Public Safety Radio Service ("PSRS").³ The EMRS was created as a discrete radio service to enhance the reliability of emergency

¹ Twenty private land mobile radio services recently were consolidated into two pools -- one for Public Safety (including SERS) and one for Industrial/Business. See Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket No. 92-235, *Second Report and Order*, 12 FCC Rcd 14307 (1997). Prior to consolidation, SERS was not a Public Safety service. Rather, SERS covered such categories as medical services, rescue organizations, veterinarians, persons with disabilities, disaster relief organizations, and school buses, and it comprised Subpart C of Part 90 of the Commission's Rules, 47 C.F.R. Part 90, Subpart C.

² Waiver Petition, filed October 1, 1997. NYH's authorized base station for 453.025 MHz is KNGM499.

³ In the Matter of Amendment of Part 90 of the Commission's Rules to Create the Emergency Medical Radio Service, PR Docket No. 91-72, *Report and Order*, 8 FCC Rcd 1454, 1455 (1993) (*EMRS Report and Order*).

medical radio communications by dedicating specific frequencies solely to life support related transmissions.⁴ The Commission reallocated 39 VHF and UHF frequencies for EMRS use,⁵ and limited eligibility to persons or entities who provide basic or advanced life support services on an ongoing basis.⁶ Four of these frequencies were in the 453 MHz band and were previously assigned for one-way paging operations under SERS.⁷ The International Municipal Signal Association and the International Association of Fire Chiefs, Inc. ("IMSA/IAFC") were designated as the joint certified frequency coordinator for the EMRS because of their previous experience coordinating emergency medical communications.⁸

3. In reassigning the four 453 MHz frequencies to the EMRS, the Commission recognized the concerns of existing SERS licensees on these channels and acknowledged that in certain situations an accommodation may be warranted to allow licensees to continue operating.⁹ Accordingly, it provided a process by which one-way medical paging systems operating on the subject frequencies may permanently remain on their existing frequencies through waiver of the Commission's Rules.¹⁰ Under this process, a paging system may be grandfathered if a licensee currently operating on a one-way paging channel demonstrates that: (1) adequate spectrum exists for emergency medical transmissions in its area of operation; (2) relocation of its medical paging system would not serve the public interest;¹¹ or (3) relocation would significantly disrupt public safety communications.¹² Licensees were provided a five-year period -- from January 14, 1993, through January 14, 1998, -- within which to request that their systems be grandfathered. Otherwise, licensees operating on these 453 MHz frequencies are required to cease one-way medical paging operations after January 14, 1998.¹³

4. *Memorandum Opinion and Order.* On February 8, 1996, the Commission released a *Memorandum Opinion and Order* reaffirming its decision to establish the EMRS and reallocate 39 SERS

⁴ *Id.*

⁵ *Id.* at 1458-60.

⁶ *Id.* at 1456.

⁷ *Id.* at 1457. The four frequencies are 453.025/.075/.125/.175 MHz. These frequencies previously were shared with the Local Government Service in the Public Safety Radio Services for highway call box operation. Highway call box operations existing on the adoption date of the *EMRS Report and Order* were indefinitely grandfathered. *Id.* at 1457, n.38.

⁸ *Id.* at 1460.

⁹ *Id.* at 1459.

¹⁰ *Id.*

¹¹ One method of meeting this criteria would be to demonstrate that there is no reasonable alternative channel for the subject paging system. *Id.*

¹² *Id.*

¹³ *Id.*

frequencies for emergency medical communications.¹⁴ The Commission stated that the record supported the need for additional spectrum for emergency medical use because the substantial increase in the demand for emergency medical service frequencies nationwide significantly overburdened existing frequencies. In carefully balancing the competing interests of various parties, the Commission concluded that the needs of emergency medical service providers warranted priority.¹⁵ Further, the Commission granted a request by ProNet, Inc. ("ProNet") to permanently waive mandatory reassignment of 453.125 MHz in the greater Chicago metropolitan area to EMRS.¹⁶ The Commission concluded that although ProNet was only required to meet one criterion, it met all the established criteria.¹⁷ ProNet demonstrated, with findings from a study of spectrum usage ("Trott Study I"), that existing emergency medical service channels in the Chicago area displayed virtually no congestion,¹⁸ and that its SERS system was intensely utilized.¹⁹ For instance, Trott Study I indicated that ProNet used 453.125 MHz to transmit paging messages 95 percent of the available time from 7:00 a.m. to 9:00 p.m. on a daily basis.²⁰ The Commission noted that ProNet's migration to another channel other than ProNet's would involve significant cost, and, because of ProNet's intense use of 453.125 MHz, such migration would likely cause disruption to public safety communications, *i.e.*, medical alert operations.²¹ Thus, the Commission concluded that relocation of ProNet's system would not serve the public interest.

5. *Waiver Petition.* On October 1, 1997, NYH-CMC filed its Waiver Petition seeking Commission action on an expedited basis.²² NYH-CMC currently operates a SERS paging station on 453.025 MHz that serves over 1,600 pagers used by physicians, nurses, and other hospital staff in the borough of Manhattan²³ in New York, New York.²⁴

¹⁴ In the Matter of Amendment of Part 90 of the Commission's Rules to Create the Emergency Medical Radio Service, PR Docket No. 91-72, *Memorandum Opinion and Order*, 11 FCC Rcd 1708, 1709 (1996) ("*EMRS MO&O*").

¹⁵ *Id.*

¹⁶ *Id.* at 1711.

¹⁷ *Id.*

¹⁸ *Id.* at 1710.

¹⁹ *Id.* at 1711.

²⁰ *Id.*

²¹ *Id.*

²² Waiver Petition at 1-2.

²³ The principal area of NYH-CMC's paging operation extends from 61st Street to 76th Street between the East River and First Avenue in the borough of Manhattan in New York City. *Id.* at 3 n.4.

²⁴ Waiver Petition at 1-2.

III. DISCUSSION

6. To obtain a waiver of the frequency reassignment implemented by the *EMRS Report and Order*, a petitioner is required to meet any one of three established criteria.²⁵ As discussed below, NYH-CMC has met the requisite showing as to whether its request should be granted.²⁶

7. *Relocation would significantly disrupt public safety communications.* We conclude that NYH-CMC has demonstrated that relocation of its system would significantly disrupt public safety communications. NYH-CMC currently operates a one-way SERS paging station serving its medical facilities, as well as other medical facilities in the vicinity. The system, comprised of one base station (KNGM499) and more than 1,600 pagers, has been operating on 453.025 MHz for 12 years.²⁷ NYH-CMC contends that its station carries approximately 10,000 pages each weekday and that during peak usage time, which is between 8 a.m. and 5 p.m., 1,000 pages are transmitted per hour.²⁸ According to NYH-CMC, the pagers are used by physicians, nurses, technicians, and other vital hospital staff to serve more than 250,000 patients each year.²⁹ NYH-CMC further contends that it employs its paging station for critical communications during medical emergencies involving potential loss of life, e.g., communication among cardiac arrest, trauma, and disaster response teams during medical emergencies.³⁰ According to NYH-CMC, the station also is used to summon attending physicians and "on-call" staff to attend acute and critical patients.³¹ NYH-CMC's paging station also serves to convey information regarding the condition of patients to physicians, nurses, and other medical staff.³² Thus, NYH-CMC argues that a significant percentage of the traffic on 453.025 MHz involves life-threatening emergencies. NYH-CMC also contends that relocation to another channel would make many routine medical matters into emergency situations because the process of changing the frequency of the base station and multiple pagers could render the system partially inoperable during the transition period.³³ We believe that granting NYH-CMC's waiver request to grandfather its paging system on 453.025 MHz would prevent interruption of these important communications because it would avoid the need to obtain new equipment and implement a process for switching to a new frequency. We, therefore, conclude that NYH-CMC has demonstrated that relocation of its paging system to a new frequency would significantly disrupt public safety communications.

²⁵ See para. 3 *supra*. In addition, the Commission has an obligation to seek out the public interest in particular matters and individualized situations. See *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C.Cir. 1969).

²⁶ For a discussion of the merits of ProNet's request for waiver, see *EMRS MO&O*, 11 FCC Rcd at 1711.

²⁷ Waiver Petition at 3.

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.* at 3-4.

³¹ *Id.* at 4.

³² *Id.*

³³ *Id.* at 11.

8. *Adequate spectrum exists for emergency medical transmissions.* Based on the record before us, we conclude that there is adequate spectrum available for entities engaged in providing emergency medical service in New York City. In support of its Waiver Petition, NYH-CMC offers the results of a study by Trott Communications Group, Inc. ("Trott Study II"), which provides an independent examination of frequency utilization on certain SERS, Business Radio Service (BRS) and EMRS channels in the New York metropolitan area.³⁴ Trott Study II indicates that during peak time periods, usage on ten pairs of existing paired UHF channels in the 460 MHz band ("MED channels") ranged from 41 to 48 percent, leaving more than 50 percent availability for usage of other EMRS users.³⁵ During other parts of the day, six of these frequencies had average use below 30 percent.³⁶ As a result, it appears that adequate spectrum remains to meet the communications needs of EMRS entities in New York City even with NYH-CMC's continued use of 453.025 MHz.

9. *Relocation would disserve the public interest because of a lack of reasonable alternatives.* From the record in this proceeding, it appears that migration of NYH-CMC's station to any alternative channel would result in degradation of service quality that is unacceptable for the critical communications carried on the system.³⁷ Trott Study II indicates that usage levels on other SERS and BRS frequencies considered as potential "replacement" channels for NYH-CMC's system are so high that this spectrum is insufficient to support the added volume of NYH-CMC's pages. For instance, the SERS medical paging frequencies are used on average between 44-48 percent of the available channel time, with peak usage levels of over 49 percent.³⁸ Also, the BRS channels are in use, on average, from 35 to 48 percent of the available channel time, with peak usage levels from 41 to 50 percent.³⁹ Therefore, NYH-CMC's use of one of the monitored SERS medical paging channels would result in peak usage levels of 90-92 percent.⁴⁰ Also, NYH-CMC's use of one of the monitored BRS channels would result in peak usage levels of 82-93 percent.⁴¹ NYH-CMC has demonstrated that if it were to operate on one of the available alternative channels, the channel would have such a heavy use that NYH-CMC's pages would frequently be blocked by other users.⁴² Therefore, by demonstrating that there is no reasonable alternative channel for its paging system, NYH-CMC substantiated its contention that relocation of the subject medical paging system would not be in the public interest.⁴³

³⁴ Trott Study II was commissioned by NYH-CMC and appears as Attachment 1 of the Waiver Petition. *Id.* at 6-7. Attachment 1 at 1.

³⁵ Waiver Petition at 7.

³⁶ *Id.*

³⁷ *Id.* at 8.

³⁸ *Id.* at 9.

³⁹ *Id.*

⁴⁰ *Id.* at 10.

⁴¹ *Id.*

⁴² *See id.* at 8-10.

⁴³ *See* para. 3 note 11, *supra.*

10. NYH-CMC further argues that modifying its station's equipment would be financially burdensome.⁴⁴ NYH-CMC asserts that migrating to a new frequency would constitute a major change, entailing a significant expenditure of funds and substantial logistical difficulties.⁴⁵ It estimates the cost of changing pagers and transmitters as approximately \$45,000 to \$420,000, depending on the frequency of the new channel.⁴⁶ NYH-CMC has also expended significant resources in planning for upgrades to its system. According to NYH-CMC, it currently is in the process of implementing an interface between the paging system and its clinical information system (CIS) that will enable the CIS to page hospital staff automatically when the condition of patients, as determined from physiological monitors, warrants medical attention.⁴⁷ Numerous hospital staff members are equipped with alphanumeric pagers and thus, with the interface, will be capable of receiving crucial descriptive information.⁴⁸ NYH-CMC also is considering other enhancements to its paging system, such as using pagers as a way for patients, from their hospital beds, to summon nurses as a complement to the traditional light signal at the nurses' desk.⁴⁹

11. We note that the Commission established the EMRS waiver criteria, in part, to accommodate SERS operations that would otherwise sustain significant conversion costs.⁵⁰ Based on NYH-CMC's stated associated costs and the resulting deflection of financial resources away from enhancement of current medical paging operations, together with the problems with a migration to another channel, we conclude that there are no reasonable alternatives to permitting NYH-CMC to continue to operate on 453.025 MHz, and that the public interest, therefore, would not be served by requiring the relocation of its paging system.

IV. CONCLUSION

12. In sum, we conclude that NYH-CMC has met the requirements established in the *EMRS Report and Order* for the permanent grandfathering of its SERS system. Therefore, we grant its request for permanent waiver and permit it to continue operating its medical paging system on 453.025 MHz in New York, New York. This action serves the public interest because NYH-CMC's migration to another paging frequency would pose unnecessary risks to essential medical paging communications without significant concomitant public interest benefits, and because adequate alternative spectrum for EMRS communications exists where NYH-CMC is operating its system.

⁴⁴ *Id.* at 11.

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ Waiver Petition at 4.

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *EMRS MO&O* at 1711.

V. ORDERING CLAUSES

13. Accordingly, IT IS ORDERED, pursuant to the authority of Sections 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r) and Sections 90.27(c)(19), 90.53(b)(26), 90.55 of the Commission's Rules, 47 C.F.R. §§ 90.27(c)(19), 90.53(b)(26), 90.55, that the Petition for Permanent Waiver filed by the New York Hospital - Cornell Medical Center to continue operating its paging station (KNGM499) on 453.025 MHz in New York, New York IS GRANTED.

14. This action is taken under delegated authority pursuant to Section 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

15. For further information concerning this *Order* contact Freda Lippert Thyden, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau, (202) 418-0627.

FEDERAL COMMUNICATIONS COMMISSION

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