

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

In the Matter of Application of)	
)	
COUNTY OF YORK, SOUTH CAROLINA)	FCC File No. 0002370314
)	
Request for Waiver of Section 90.210 of the Commission's Rules)	

ORDER

Adopted: August 21, 2006

Released: August 22, 2006

By the Chief, Public Safety and Critical Infrastructure Division, Wireless Telecommunications Bureau:

1. *Introduction.* We have before us an application and waiver request filed by the County of York, South Carolina (York).¹ York requests a waiver of Section 90.210 the Commission's Rules² to allow operation of equipment in the 821-824 and 866-869 MHz bands that complies with Emission Mask G instead of the required Emission Mask H.³ For the reasons set forth below, we grant York a temporary waiver of the rules to permit the specified operation. Specifically, we grant the waiver until 800 MHz band reconfiguration is complete in South Carolina.

2. *Background.* York currently operates a three-channel VHF public safety radio system that is severely congested and unable to accommodate additional users.⁴ In addition, the current system uses obsolete technology that cannot sustain advanced features such as high-speed mobile data communications.⁵ In order to accommodate its anticipated communications needs, York will replace the current system with a state-of-the-art 800 MHz digital trunked radio system.⁶ In 2005, it filed five applications for authorization to use a total of nineteen channels in the 821-824/866-869 MHz band (the National Public Safety Planning Advisory Committee (NPSPAC) band and two channels in the 806-821/851-866 MHz band (the non-NPSPAC band) at nine locations in York County.⁷ Five of the sites will carry trunked voice communications, and four will carry both trunked voice communications and high-speed mobile data communications. Four of the applications were granted between August 2005 and January 2006, with construction deadlines between August 2006 and January 2007.⁸ The fifth application is the instant matter.

¹ FCC File Number 0002370314.

² 47 C.F.R. § 90.210.

³ See attachment to FCC File Number 0002370314 (Waiver Request). York supplemented the Waiver Request on April 14, 2006 and July 31, 2006. See Letters dated April 7, 2006 and July 31, 2006 from Gary Loflin, Management Information Systems Director, York County to Michael J. Wilhelm, Chief, Public Safety and Critical Infrastructure Division (April Supplement and July Supplement, respectively).

⁴ See Waiver Request at 1.

⁵ *Id.* at 2.

⁶ *Id.*

⁷ See FCC File Numbers 0002245416 (filed July 19, 2005), 0002254009 (filed July 26, 2005), 0002298933 (filed Sept. 1, 2005), 0002370314 (filed Nov. 4, 2005), 0002417681 (filed Dec. 20, 2005).

⁸ See licenses for Stations WQDE619, WQDF568, WQDM338, and WQEF441.

3. The application requests authorization to use frequency 866.9125 MHz at Clover, South Carolina, and frequency 866.5626 MHz at Fort Mill, South Carolina for high-speed mobile data communications. York requests a waiver in connection with this application because it proposes to operate on these frequencies in compliance with Emission Mask G, while Section 90.210 requires operations on NPSPAC band channels to comply with the more stringent Emission Mask H.⁹ York proposes to operate in compliance with Emission Mask G in order to integrate these NPSPAC channels into the high-performance data system, which will operate in compliance with Emission Mask G on non-NPSPAC band channels. York asserts that the waiver is necessary because it has conducted an exhaustive search for additional channels in the 800 MHz Public Safety interleaved spectrum (809.75-816/854.75-861 MHz) and General Category Pool (806-809.75/851-854.75 MHz), and could not find any frequencies that were either unassigned or available for purchase or lease from the licensee.¹⁰ Moreover, York approached Nextel to determine if it could use some of its channels in the interleaved band and was informed that there were no additional channels available.¹¹ York also indicates that data operations that comply with the stricter Emission Mask H would have a much lower data throughput rate (19.2 kilobits per second (kbps), compared to 96 kbps for the proposed operations), and support fewer applications and users.¹² NPSPAC Regions 37 (South Carolina) and 31 (North Carolina) have approved the proposed operations.¹³

4. *Discussion.* To obtain a waiver of the Commission's Rules, a petitioner must demonstrate either that the underlying purpose of the rule(s) would not be served or would be frustrated by application to the present case and that grant of the waiver would be in the public interest;¹⁴ or that, in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.¹⁵ Based on the record before us, we believe that York has made the requisite showing for grant of a waiver on a temporary basis.

5. The emission masks adopted by the Commission are designed to permit reasonable and practical information transfer without the need for excessively expensive filtering requirements, while still providing acceptable adjacent channel protection.¹⁶ Emission Mask G is designed to protect against interference in the non-NPSPAC band, where the 25 kHz wide channels are spaced 25 kHz apart; the

⁹ See 47 C.F.R. § 90.210. The emission mask is the technical specification that limits the distribution of power of a radio transmitter as a function of frequency. The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, *First Report and Order and Third Notice of Proposed Rulemaking*, WT Docket No. 96-86, 14 FCC Rcd 152, 213 n.337 (1998). The emission mask is an important technical parameter that affects the efficient use of a frequency band by limiting emissions from one channel into adjacent channels. See 1998 Biennial Regulatory Review - 47 C.F.R. Part 90 - Private Land Mobile Radio Services, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 98-182, 15 FCC Rcd 16673, 16689 ¶ 33 (2000).

¹⁰ See July Supplement at 1.

¹¹ *Id.* at 1-2.

¹² *Id.* at 2-3.

¹³ See Letter dated July 7, 2005 from Harold Meacombs, Chairman, Region 31 to FCC (Region 31 Letter); Letter dated Aug. 3, 2005 from William Winn, Jr., Chairman, Region 37 to FCC (Region 37 Letters).

¹⁴ 47 C.F.R. § 1.925(b)(3)(i).

¹⁵ 47 C.F.R. § 1.925(b)(3)(ii).

¹⁶ See Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, *Report and Order and Further Notice of Proposed Rule Making*, PR Docket No. 92-235, 10 FCC Rcd 10076, 10117 ¶ 81 (1995).

more stringent Emission Mask H is designed to protect against adjacent channel interference in the NPSPAC band, where the 25 kHz wide channels are spaced 12.5 kHz apart. York acknowledges that operating with emission Mask G will increase the amount of radio frequency energy present in the adjacent NPSPAC channels.¹⁷ Indeed, we note that York's proposed operations would impact not only the two NPSPAC channels on which it would operate, but also the four adjacent channels for a total of six NPSPAC channels. Thus, it appears that permitting the proposed operations would not be consistent with the underlying purpose of the emission mask requirements,¹⁸ because it would result in inefficient use of limited NPSPAC spectrum.¹⁹

6. We conclude, however, that temporary relief is warranted under the second prong of the waiver standard. York has shown that deployment of compliant equipment would result in degradation of the data services that its law enforcement officers need, and which will further the public interest in efficient public safety communications.²⁰ In addition, York has demonstrated that there is currently no suitable alternative spectrum available to implement its needed data operations.

7. We note, however, that additional non-NPSPAC public safety channels—where Emission Mask G is permitted—are expected to become available after reconfiguration of the 800 MHz band.²¹ Therefore, rather than grant York County an indefinite waiver, we grant a temporary waiver of the emission mask requirements, to last until the 800 MHz band reconfiguration is completed in South Carolina.²² In the event that York County still cannot acquire channels where Emission Mask G is permitted after band reconfiguration, it may request an extension of the waiver.

8. *Ordering Clauses.* Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and 309(a) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 309(a), and Section 1.925 of the Commission's Rules, 47 C.F.R. § 1.925, that the waiver request filed by County of York, South Carolina in conjunction with application FCC File No. 0002370314 IS GRANTED IN PART to the extent indicated above, and CONDITIONED as follows: "Operation with Emission Mask G is permitted only until 800 MHz band reconfiguration is completed in South Carolina."

9. IT IS FURTHER ORDERED that application FCC File No. 0002370314 SHALL BE PROCESSED consistent with this *Order* and the Commission's Rules.

¹⁷ See Supplement at 3.

¹⁸ See *City of Emeryville, Order*, 19 FCC Rcd 6152, 6153 ¶¶ 4-5 (WTB PSCID 2004) (denying a request for waiver to operate on NPSPAC channels with a wider emission than permitted under Section 90.209 of the Commission's Rules), *recon. pending*.

¹⁹ The concurrence letters from Regions 31 and 37 indicate that they would avoid interference by "pay[ing] special attention to these channels when assigning [adjacent] channels near York County." Region 31 Letter at 1; Region 37 Letter at 1. We question whether the purpose of the rules would be served by not assigning adjacent channels in order to accommodate non-compliant operations.

²⁰ See April Supplement at 3.

²¹ In 2004, the Commission reconfigured the 800 MHz band to eliminate interference to public safety and other land mobile communication systems operating in the band. The band reconfiguration process is being overseen by a Transition Administrator, which has provided the Commission with a plan detailing when band reconfiguration will commence in each of the fifty-five 800 MHz NPSPAC regions. See *Improving Public Safety Communications in the 800 MHz Band, Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order*, WT Docket 02-55, 19 FCC Rcd 14969, 15052 ¶ 152 (2004).

²² South Carolina is scheduled to complete band reconfiguration by June 2008. See *Wireless Telecommunications Bureau Announces that 800 MHz Band Reconfiguration Will Commence January 3, 2006, in the NPSPAC Regions Assigned to Wave 3, Public Notice*, 20 FCC Rcd 19310 (WTB PSCID 2005).

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

FEDERAL COMMUNICATIONS COMMISSION

Michael J. Wilhelm
Chief, Public Safety and Critical Infrastructure Division
Wireless Telecommunications Bureau