

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

In the Matter of Application of)	
)	
CENTRAL PUGET SOUND REGIONAL)	File No. 0001865881
TRANSIT AUTHORITY)	
)	
Request for Waivers to Authorize the Use of)	
Canadian Primary 800 MHz Channels and Short-)	
Spacing in the 800 MHz Band in Seattle,)	
Washington)	

ORDER

Adopted: June 2, 2006

Released: June 5, 2006

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

1. *Introduction.* We have before us an application filed by the Central Puget Sound Regional Transit Authority (Puget Sound) to operate on certain 800 MHz band frequencies in Seattle, Washington.¹ In connection with this application, Puget Sound requests (1) a waiver of Section 90.619(b)(8) of the Commission's Rules in order to use Canada primary 800 MHz channels in the U.S.-Canada border zone and (2) a waiver of Section 90.621(b)(4) of the Commission's Rules in order to operate at a distance less than the required minimum separation to a co-channel station.² For the reasons set forth below, we dismiss as moot the waiver to operate on Canada primary channels, and grant the waiver of the minimum spacing requirements.

2. *Background.* On December 7, 2004, Puget Sound filed an application for authorization to operate a new private land mobile radio station in Seattle, Washington.³ Puget Sound states that the new private land mobile radio station will support communications for a light rail system that will operate throughout King County.⁴ Puget Sound proposes to operate its new private land mobile radio station on ten 800 MHz frequency pairs in the non-NPSPAC portion of the 800 MHz band.⁵ Puget Sound's

¹ FCC File No. 0001865881. The 800 MHz band consists of the frequency segment 806-824 MHz paired with the 851-869 MHz segment. *See* 47 C.F.R. § 90.613.

² *See* 47 C.F.R. §§ 90.621(b)(4), and 90.619(b)(8); *see also* attachment to FCC File No. 0001865881 (Waiver Request).

³ *See* FCC File No. 0001865881. The application was originally submitted on September 9, 2004, but was returned to the applicant for clarification on November 19, 2004. *See* Return Letter No. 3150178. The application was amended on December 7, 2004.

⁴ *See* Waiver Request at 1.

⁵ At the present time, the National Public Safety Planning Advisory Committee (NPSPAC) allocation is located in the 821-824 MHz/866-869 MHz segment, but will be relocated to the 806-809 MHz/851-854 MHz segment. The non-NPSPAC portion of the 800 MHz band consists of those portions of the band that are located outside the (continued....)

proposed station will be implemented to provide coverage in two tunnel segments that are a part of the light rail system.

3. Because Seattle, Washington is located in the U.S.-Canada border area, Puget Sound's proposed station will be subject to the requirements of Section 90.619 of the Commission's Rules,⁶ which specifies the requirements for stations operating in the 800 MHz band along the U.S.-Canada or U.S.-Mexico border. At the time that Puget Sound filed its application, Section 90.619(b)(8) listed the channels in the non-NPSPAC portion of the 800 MHz band that were available for licensing to U.S. applicants along the U.S.-Canada border.⁷ The channels listed in Section 90.619(b)(8) included only those specified for primary use by the United States.⁸ Puget Sound requests a waiver of Section 90.619(b)(8) because it proposes to operate on ten channel pairs specified for primary use by Canada, and thus not listed in Section 90.619(b)(8).⁹

4. Puget Sound also requests a waiver of the Commission's co-channel short-spacing requirements because its proposed station will be less than 88 kilometers (55 miles) from co-channel Station WQBZ780, Snoqualmie, Washington, licensed to King County, Washington. Section 90.621(b)(4) specifies that co-channel stations may be separated by less than 113 kilometers (70 miles) but not less than 88 kilometers (55 miles) if the proposed station satisfies certain transmitter power and antenna height limits listed in a short-spacing table.¹⁰ However, Section 90.621(b)(4) also specifies that co-channel stations may be separated by less than 88 kilometers (55 miles) if the applicant requests a waiver and submits an interference analysis demonstrating that co-channel stations would receive the same or greater interference protection than that provided in the short-spacing table.¹¹ Such applicants must also include an analysis of interference potential from mobile transmitters to existing co-channel base station receivers.¹² In its waiver request, Puget Sound purports to demonstrate that the 22 dB μ V/m F(50,10) interference contour of its proposed site would not overlap the existing 40 dB μ V/m F(50,50)

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NPSPAC allocation. *See Improving Public Safety Communications in the 800 MHz Band, WT Docket 02-55, Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order, 19 FCC Rcd 14969, 15051 ¶ 151 (2004) (800 MHz R&O).*

⁶ 47 C.F.R. § 90.619.

⁷ 47 C.F.R. § 90.619(b)(8) (2004).

⁸ As a general matter, 800 MHz channels along the U.S.-Canada border are divided for primary use by either the United States or Canada. *See Arrangement Between the Department of Communications of Canada and the Federal Communications Commission of the United States Concerning the use of the Band 806 to 890 MHz along the Canada - United States Border*, effected by exchange of notes, signed at Washington November 2, 1993 and January 4, 1994.

⁹ *See Waiver Request at 1.*

¹⁰ 47 C.F.R. § 90.621(b)(4).

¹¹ *Id.*

¹² *Id.*

coverage contour of King County's station.¹³ Puget Sound has also shown that its mobile units are unlikely to interfere with the base station receiver of the King County's station.¹⁴

5. *Discussion.* As an initial matter, we will address the request for waiver of Section 90.619(b)(8) in order to allow Puget Sound to operate on Canada primary channels. As noted above, when Puget Sound filed its application, Section 90.619(b)(8) specified that U.S. licensees along the U.S.-Canada border could operate only on U.S. primary channels.¹⁵ Section 90.619(b)(8) contained no provisions for U.S. licensees to operate on Canada primary channels in the non-NPSPAC portion of the 800 MHz band. After Puget Sound filed its application, Section 90.619 was modified to provide that 800 MHz operations along the U.S.-Canada border shall be in accordance with international agreements between the United States and Canada.¹⁶ Furthermore, the United States and Canada have reached an agreement that allows each country to operate on the other country's primary spectrum – in the non-NPSPAC portion of the band – as long as the predicted maximum power flux density (PFD) at or beyond the border does not exceed -107 dB(W/m²).¹⁷ Puget Sound has demonstrated that its proposal will not exceed the PFD limit of -107 dB(W/m²) at or beyond the border.¹⁸ Our staff has analyzed the Puget Sound application and confirmed that the PFD limit will be satisfied at or beyond the Canada border. Puget Sound's application thus complies with an existing international arrangement. Consequently, its request for a waiver of Section 90.619(b)(8) is moot.

6. We will now address the short-spacing waiver request. 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;¹⁹ 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.²⁰ We conclude that Puget Sound has demonstrated that its waiver request should be granted under the circumstances presented.

7. Our staff has confirmed that Puget Sound's proposed base station would be located 70.6 kilometers or 43.9 miles from King County's licensed site, and has analyzed whether Puget Sound's application would satisfy the short-spacing table of Section 90.621(b)(4).²¹ Our staff has confirmed that Puget Sound's proposed 22 dBμV/m F(50,10) contour will not overlap the 40 dBμV/m F(50,50) contour

¹³ See Waiver Request at 20-22.

¹⁴ *Id.* at 23-26.

¹⁵ 47 C.F.R. § 90.619(b)(8) (2004).

¹⁶ See 47 C.F.R. § 90.619(c). See also *800 MHz R&O*, 19 FCC at Rcd 15063 ¶176.

¹⁷ See letter dated December 9, 1994, from Robert W. McCaughern, Deputy Director General, Spectrum Engineering, Industry Canada to Bruce Franca, Deputy Chief Engineer, Office of Engineering and Technology, Federal Communications Commission.

¹⁸ See Waiver Request at 9-11.

¹⁹ 47 C.F.R. § 1.925(b)(3)(i).

²⁰ 47 C.F.R. § 1.925(b)(3)(ii).

²¹ 47 C.F.R. § 90.621(b)(4).

of King County's station. Since the short-spacing table in Section 90.621(b)(4) is based on non-overlap of the 22 dB μ V/m F(50,10) contour of the proposed stations with the 40 dB μ V/m F(50,50) contour of existing co-channel stations, we conclude that Puget Sound has demonstrated that its proposal will provide King County's station with the same or greater interference protection than required by the short-spacing table.²² We have also analyzed Puget Sound's mobile interference study and conclude that Puget Sound's mobile units are unlikely to cause interference to the co-channel base station receivers of King County's station.²³

8. Accordingly, IT IS ORDERED, pursuant to Sections 2 and 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 152, 154(i), and Sections 1.3 and 1.925 of the Commission's Rules, 47 C.F.R. §§ 1.3, 1.925, that the request dated July 8, 2004 filed by Central Puget Sound Regional Transit Authority for a waiver of Section 90.621(b)(4) of the Commission's Rules in connection with FCC File No. 0001865881 filed on December 7, 2004, IS GRANTED to the extent indicated herein.

9. IT IS FURTHER ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i) and Sections 1.925, 90.619(c) of the Commission's Rules, 47 C.F.R. §§ 1.925, 90.619(c), that the request dated July 8, 2004 filed by Central Puget Sound Regional Transit Authority for a waiver of Section 90.619(b)(8) of the Commission's Rules in connection with FCC File No. 0001865881 filed on December 7, 2004, IS DISMISSED AS MOOT.

10. IT IS FURTHER 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), that application FCC File No. 0001865881, filed on December 7, 2004, SHALL BE PROCESSED in accordance with this decision.

11. This action is taken pursuant to delegated authority granted under the provisions of Sections 0.131(a) and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131(a), 0.331.

FEDERAL COMMUNICATIONS COMMISSION

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

²² See footnote 2 of Short-Spacing Separation Table in 47 C.F.R. § 90.621(b)(4).

²³ Puget Sound's study demonstrates that King County's mobile units would not exceed an undesired signal level greater than -120.6 dBm at King County's Dodge Ridge base station receiver site. See Waiver Request at 24-27.