



Federal Communications Commission
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DA 15-984

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RE: Application File Nos. 0006419194, 0006419207, and 50000NCAA15

Dear Ms. Farquhar and Mr. Tilles:

For the reasons discussed below, the Mobility Division of the Wireless Telecommunications Bureau (Bureau) hereby grants the above captioned applications to partition and assign five nationwide 220-222 MHz band (220 MHz Band) spectrum licenses from PTC-220, LLC (PTC-220),¹ to the Alaska Railroad Corporation (ARRC) to enable ARRC to implement a positive train control (PTC) system in the State of Alaska.² We also grant to the extent described below certain related waiver requests and an extension of time, until December 31, 2015, for ARRC to demonstrate substantial service for the partitioned licenses.

BACKGROUND

Pursuant to the Rail Safety Improvement Act of 2008 (RSIA), most freight, intercity passenger, and commuter railroads are required to install and operate interoperable positive train control (PTC) systems by December 31, 2015.³ PTC systems, once implemented, are intended to reduce the risk of rail accidents caused by human error, including train-to-train collisions, derailments caused by excessive speed, and unauthorized train movements in work zones. PTC wireless communications networks are intended to enable real-time information sharing between trains, rail wayside devices, and control centers, regarding train movement authorities, speed restrictions, train consist, position, speed, and the state of signal and switch devices.

¹ PTC-220 is a joint venture of the nation's seven Class I freight railroads: BNSF Railway Company, Canadian National, Canadian Pacific, CSX Corporation, Kansas City Southern, Norfolk Southern Corporation, and Union Pacific Corporation.

² File Nos. 0006419194 (Phase 1 licenses WFPF444 and WPFR284), 0006419207 (Phase 2 licenses WPOI701 and WPOJ271), and 50000NCAA15 (Phase 1 license WPWY753) (attached to file no. 0006225216). The three assignment applications include the same Public Interest Statement and Description of Transaction exhibit (Public Interest Statement). Licenses in the 220 MHz Band resulting from applications filed on or before May 24, 1991 are referred to as Phase I licenses. 47 C.F.R. § 90.701(b)(1). Licenses in the 220 MHz Band resulting from applications filed after May 24, 1991 are referred to as Phase II licenses. 47 C.F.R. § 90.701(c)(1). On May 7, 2015, the Division granted the application of the Association of American Railroads to assign WPWY753 to PTC-220. *See* Letter from Roger S. Noel, Chief, Mobility Division, to Michele Farquhar, Esq., DA-15-549, 30 FCC Rcd 4635 (May 7, 2015) (*WPWY753 Letter Ruling*). PTC-220 consummated acquisition of that license on July 30, 2015.

³ Rail Safety Improvement Act of 2008, Pub. L. No. 110-432, § 104, 122 Stat. 4848, 4857 (2008).

PTC-220 has acquired nationwide and other 220 MHz Band spectrum licenses to enable the deployment of PTC systems by its seven members and other railroads, including passenger and commuter railroads, in the United States.⁴

ARRC is a full-service freight and passenger railroad linking ports and communities to major metropolitan centers such as Anchorage, Fairbanks, and other communities throughout South-central and Interior Alaska.⁵ ARRC primarily conducts business as a regularly scheduled public transportation service in these regions. Its routes also traverse remote and wild landscapes, providing spectacular wildlife viewing opportunities for more than 500,000 annual guests.⁶

PTC-220 and ARRC request Commission consent to partition and assign the State of Alaska to ARRC from PTC-220's five nationwide 220 MHz Band licenses to enable the railroad to implement PTC as required by the RSIA.

DISCUSSION

We find that the contemplated spectrum assignment will serve the public interest in both passenger and freight rail safety because it will facilitate the deployment of a Congressionally-mandated PTC system, and thereby "promot[e] safety of life and property"⁷ in the State of Alaska. We therefore consent to the assignment.

Rule Waivers. ARRC requests that certain waivers applicable to the licenses be assigned to facilitate PTC implementation. The Commission may grant a request for a waiver where: (i) the underlying purpose of a rule would not be served or would be frustrated by its application, and a grant of the requested waiver would be in the public interest; or (ii) given unique or unusual factual circumstances, application of a rule would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.⁸ The Commission also may waive a rule, in whole or in part, on its own motion or on petition for good cause.⁹

PTC-220 2009 Waiver Order. ARRC requests that waivers of Section 90.715(a) (base/mobile configuration), and Sections 90.713(a) and 90.717(b) (commercial use restrictions)¹⁰ applicable to licenses WFP444, WPF284, WPOI701 and WPOJ271, which were granted in the *PTC-220 2009 Waiver Order*,¹¹ apply to the partitioned licenses.¹² ARRC states that because it too will use the spectrum licenses for PTC, it needs the waivers and the same public interest rationales will apply to its PTC deployment.¹³ In support of its request, ARRC explains that its PTC radio system, like that of PTC-220's

⁴ See PTC-220, LLC, Request for Waiver to Facilitate Deployment of Positive Train Control Systems, WT Docket 13-59, *Memorandum Opinion and Order*, DA 15-332, 30 FCC Rcd 2281, 2282 ¶3 (WTB Mobility Div. 2015) (*PTC-220 2015 Waiver Order*) (summarizing PTC-220's 220 MHz Band spectrum holdings), *reconsideration pending*.

⁵ Public Interest Statement at 2.

⁶ *Id.*

⁷ 47 U.S.C. § 151.

⁸ 47 C.F.R. § 1.925(b)(3).

⁹ 47 C.F.R. § 1.3.

¹⁰ 47 C.F.R. §§ 90.715(a), 90.713(a), and 90.717(b).

¹¹ Request of PTC-220, LLC for Waivers of Certain 220 MHz Rules, *Memorandum Opinion and Order*, DA 09-1425, 24 FCC Rcd 8537 (WTB 2009) (*PTC-220 2009 Waiver Order*).

¹² Public Interest Statement at 5.

¹³ *Id.*

members, will use time division duplex (TDD) technology, which requires the ability for base and mobile radios to transmit on both the upper and lower portions of the 220 MHz Band.¹⁴

Although WPWY753 was not covered by the *PTC-220 Waiver Order*, the Bureau waived the same rules for this license when it approved its assignment to PTC-220 in the *WPWY753 Letter Ruling*.¹⁵ Because the partitioned area of WPWY753 will also be used for PTC, ARRC states these same rule waivers should apply too.¹⁶

We find under the first prong of the Commission's Section 1.925(b)(3) waiver standard that waiver of Section 90.715(a)'s base/mobile provisions will serve the public interest in rail safety by facilitating spectrally-efficient PTC operations and that the underlying purpose of the rule (to limit interference) would not be served by strict application here.¹⁷ We also find good cause under Section 1.3 of the Commission's rules¹⁸ to waive Section 90.713(a) and 90.717(b)'s commercial use restrictions because ARRC will operate a private PTC network.

PTC-220 2015 Waiver Order. ARRC requests that a conditional waiver of Section 90.729(b)—limiting power and antenna height in the 221-222 MHz band segment—applicable to the five nationwide licenses and granted in the *PTC-220 2015 Waiver Order*¹⁹ apply to the partitioned licenses.²⁰ The Bureau granted a waiver of Section 90.729(b)'s power and antenna height limits to facilitate the deployment of PTC systems in the 221-222 MHz band segment.²¹ The Bureau found waiver of Section 90.729(b) would serve the public interest by “enabling more intensive use of PTC-220’s unique spectrum resources to deploy advanced rail safety systems.”²² Absent such a waiver, base station transmissions in the 221-222 MHz band segment would have a much smaller coverage footprint than those in the lower band segment (where higher-powered operations are permitted), which could limit network capacity and require the construction of additional sites.

As noted above, ARRC's PTC network will employ TDD technology that utilizes both the upper and lower 220 MHz Band segments for base and mobile transmissions. We find under the first prong of the Commission's Section 1.925(b)(3) waiver standard²³ that the underlying purpose of Section 90.729(b)—to address the possibility of interference to co- and adjacent channel operations²⁴—would not be served by strict application of the rule to ARRC's PTC base station operations in the 221-222 MHz

¹⁴ Public Interest Statement at 5.

¹⁵ *WPWY753 Letter Ruling*, 30 FCC Rcd at 4635.

¹⁶ Public Interest Statement at 5.

¹⁷ 47 C.F.R. § 1.925(b)(3)(i).

¹⁸ 47 C.F.R. § 1.3.

¹⁹ *PTC-220 2015 Waiver Order*, 30 FCC Rcd 2281.

²⁰ Public Interest Statement at 5-6. Section 90.729(b) generally prohibits licensees from operating stations in the 221-222 MHz band segment with an effective radiated power (ERP) greater than 50 watts and with antenna height above average terrain (HAAT) higher than 7 meters. 47 C.F.R. § 90.729(b).

²¹ *PTC-220 2015 Waiver Order*, 30 FCC Rcd at 2283 ¶9, and at 2285-86 ¶¶14-17.

²² *Id.* at 2285 ¶16.

²³ 47 C.F.R. § 1.925(b)(3)(i).

²⁴ Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Memorandum Opinion and Order on Reconsideration*, PR Docket 89-552, FCC 98-93, 13 FCC Rcd 14569, 14609 ¶84 (1998) (“permitting 500 watt ERP fixed station transmissions on the mobile channels in the 220 MHz band could cause interference to adjacent channel operations”).

band segment. We also find that waiver of Section 90.729(b) will serve the public interest in rail safety, including the safety of life and property,²⁵ by facilitating PTC deployment in Alaska.

To avail itself of this waiver relief, we will require ARRC to comply with all applicable conditions and coordination procedures adopted in the *PTC-220 2015 Waiver Order*.²⁶ These measures should ensure that co- and adjacent channel licensees in the 220 MHz Band do not suffer harmful interference from ARRC's PTC operations. We emphasize however that should interference to other licensees' operations occur despite these safeguards, ARRC must promptly remedy such interference at its own expense.

Construction Requirement for Partitioning of Phase I Licenses. PTC-220 seeks to partition three 220 MHz Phase I nationwide licenses (WPFP444, WPFR284, and WPWY753) to ARRC. The parties request a waiver of Section 90.1019(a)(2), which only permits partitioning of a Phase I nationwide license if at least 40 percent of the geographic area of the license has been constructed.²⁷ This benchmark has been satisfied for WPWY753.²⁸

PTC-220's member railroads have already constructed 850 PTC base stations under WPFP444 and WPFR284,²⁹ and the record shows ARRC will intensively use the partitioned spectrum for PTC. Under these circumstances, we find under the first prong of the Commission's Section 1.925(b)(3) waiver standard³⁰ that the underlying purpose of Section 90.1019(a)(2)—to limit potential speculation or trafficking in 220 MHz Band licenses³¹—would not be served by strict application here. We also find that waiver of Section 90.1019(a)(2) will serve the public interest in rail safety by making spectrum available for timely PTC deployment in Alaska.

Substantial Service Showings. The Bureau has granted PTC-220 an extension of time until December 31, 2015 (the statutory PTC implementation deadline) to demonstrate substantial service under Sections 90.743 and 90.769 of the Commission's rules for WPOI701, WPOJ271, WPFR284, and WPFP444.³² Renewal of each license is conditioned on a Commission finding that PTC-220 has satisfied the requirements of both rules, and complied with all other requirements and conditions specified in DA 09-1425, the *PTC-220 2009 Waiver Order*. ARRC requests that it too be granted an extension of time

²⁵ The Commission was formed "for the purpose of promoting safety of life and property through the use of wire and radio communication . . ." 47 U.S.C. § 151.

²⁶ See *PTC-220 2015 Waiver Order*, 30 FCC Rcd at 2287-89 ¶¶22-30 (geographic and spectral separation conditions; prior notification condition), and at 2292 ¶¶40-41 (coordination procedures).

²⁷ 47 C.F.R. § 90.1019(a)(2) ("Phase I nationwide licensees may apply to partition their licensed geographic service area or disaggregate their licensed spectrum after constructing at least 40 percent of the geographic areas designated in their applications in accordance with the provisions in § 90.725(a) of this part.").

²⁸ See ULS File No. 0001396590.

²⁹ See ULS File No. 0006730053, Exhibit 1 at 5.

³⁰ 47 C.F.R. § 1.925(b)(3)(i).

³¹ See Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Fifth Report and Order*, PR Docket No. 89-552, FCC 98-186, 13 FCC Rcd 24615, 246030 ¶21 (1998).

³² 47 C.F.R. §§ 90.743 (renewal requirements) and 90.769 (construction and implementation of Phase II nationwide licenses). Although WPFP444 and WPFR284 are Phase I nationwide licenses, they are subject to the construction requirements of Section 90.769 for Phase II nationwide licenses. See *Petition for Extension of Terms for 220-222 MHz Band Phase I Nationwide Licenses held by Access 220 LLC (WPFP444 and WPFR284) and Other Relief or, Alternatively, for Renewal of Licenses, Memorandum Order and Opinion*, DA 06-2093, 21 FCC Rcd 11883, 11895 ¶24 (WTB Mobility Div. 2006).

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until December 31, 2015 to demonstrate substantial service under Sections 90.743 and 90.769 for the four partitioned licenses.³³ We find good cause under Section 1.3 of the Commission's rules³⁴ to grant ARRC's request, which will facilitate its implementation of PTC in Alaska.

Electronic Application Filing Requirement. Finally, we grant the parties' request for waiver of the mandatory electronic application filing requirement for the partition and assignment of WPWY753 because PTC-220 had not yet acquired the license when it filed its application to partition the license to ARRC.³⁵

CONCLUSION

For the reasons stated above, we consent to the partitioning and assignment of the State of Alaska from PTC-220's five nationwide 220 MHz Band spectrum licenses to the Alaska Railroad Corporation. We emphasize that the related waivers we grant above will serve the vital public interest in rail safety, by enabling ARRC to implement a positive train control system as required by the Rail Safety Improvement Act of 2008.

Action taken pursuant to Sections 1, 4(i), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), and 303(r), and Sections 0.131, 0.331, 1.3, and 1.925(b)(3)(i) of the Commission's rules, 47 C.F.R. §§ 0.131, 0.331, 1.3, and 1.925(b)(3)(i).

Sincerely,

Roger S. Noel
Chief, Mobility Division
Wireless Telecommunications Bureau

³³ Public Interest Statement at 5.

³⁴ 47 C.F.R. § 1.3.

³⁵ *Id.* at 6-7, citing 47 C.F.R. § 1.913(b) (requiring the electronic filing of FCC Form 603 for Commission consent to the partitioning and assignment of a license).