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

In the Matter of)
Metropolitan Transportation Authority)
Request for Modification of Station KIVD0002) File No. 0006682035
Application for Renewal of Station KIVD0002) File No. 0006109691
Request for Waiver to Facilitate Positive Train Control System) File No. 0005681972

PROPOSED ORDER OF MODIFICATION AND ORDER ON RECONSIDERATION

Adopted: February 16, 2016 Released: February 16, 2016

By the Commission:

TABLE OF CONTENTS

He	ading	3		Paragraph #
I.	INT	RC	DDUCTION	1
II.	BA	CK(GROUND	6
III.			SSION	
			tion KIVD0002 Renewal	
			tion KIVD0002 Power Waiver	
		1.	Standing	
		2.	Public Notice	
			Claim of Potential AMTS Interference	
	C.		tion KIVD0002 Modification Request	
		1.	Background	
		2.	The Record	
			Legal Authority	
			Modification of Station KIVD0002 Will Promote the Public Interest, Convenience	
		••	and Necessity	
		5	License Modification and Conditions.	63
		6.	Power Waiver Request	
		7	Protest Rights, Procedures, and Delegation of Authority	
T/	CO	, .	LUSION AND ORDERING CLAUSES	60

I. INTRODUCTION

- 1. Today we adopt two related orders to facilitate the deployment of Congressionally-mandated Positive Train Control (PTC) safety systems¹ by three of the country's busiest commuter railroads: the Long Island Railroad (LIRR), the Metro-North Railroad (Metro-North), and New Jersey Transit (NJ Transit). Our actions will also enable the National Railroad Passenger Corporation (Amtrak) to use PTC on a critical segment of the Northeast Corridor—from New Rochelle, New York to New Haven, Connecticut—where it is a tenant on Metro-North track.²
- 2. In the Proposed Order of Modification, we propose to modify 218-219 MHz Service Station license KIVD0002,³ which the Metropolitan Transportation Authority (MTA) acquired to implement PTC for its LIRR and Metro-North subsidiaries.⁴ Station KIVD0002 covers all of LIRR's territory, five of the nine counties served by Metro-North, and several northern New Jersey counties. It does not cover Dutchess and Orange counties in New York or Fairfield and New Haven counties in Connecticut—each locations where Metro-North must deploy PTC.
- 3. We propose to modify Station KIVD0002 first by authorizing the use of spectrum from the Commission's inventory in the four counties needed to complete Metro-North's PTC spectrum footprint. Second, we require MTA to return comparable spectrum from Station KIVD0002 to the Commission, which will become unassigned and available for future disposition as determined by the Commission.⁵

¹ Congress established the PTC mandate in the Rail Safety Improvement Act of 2008, Pub. L. No. 110-432, § 104, 122 Stat. 4848, 4857 (2008), which was amended by the Surface Transportation Extension Act of 2015, Pub. L. No. 114-73, § 1302 (Oct. 29, 2015). PTC requirements and goals are discussed below. *See infra* discussion at paras. 6-7.

² See Amtrak Northeast Corridor Facts and Background Information, available at https://www.amtrak.com/ccurl/193/174/Amtrak-Northeast-Corridor-2011.pdf, webpage last visited January 20, 2016. On July 24, 2013, the Wireless Telecommunications Bureau (Bureau or WTB) approved Amtrak's acquisition of spectrum to deploy PTC on the northern portion of the Northeast Corridor from New Haven to Boston, Massachusetts. See ULS File No. 0005861845. On March 4, 2015, the Bureau approved Amtrak's acquisition of spectrum to deploy PTC on the southern portion of the Northeast Corridor from Washington D.C. to New York City. National Railroad Passenger Corporation, Order, 30 FCC Rcd 2038 (WTB Mobility Div. 2015) (Amtrak Order).

³ In 1998, the Commission renamed the former Interactive Video and Data Service (IVDS) the 218–219 MHz Service to better reflect the breadth of services that could be offered in the band. *See* Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, *Memorandum Opinion and Order*, WT Docket No. 95-47, 13 FCC Rcd 19064, 19071 ¶16 (1998). 218–219 MHz Service system license areas correspond to cellular market areas (CMAs). 47 C.F.R. § 95.803(c). There are two 500 kHz frequency segments available for assignment in the 218–219 MHz Service in each CMA. Frequency segment A is 218.000–218.500 MHz and frequency segment B is 218.501–219.000 MHz. 47 C.F.R. § 95.853. Station KIVD0002 is the frequency segment B license for the New York CMA.

⁴ The MTA is a public-benefit corporation responsible for public transportation in 12 southeastern New York counties, and two southwestern Connecticut counties. *See* ULS File No. 0006682035, Request for Modification of License of the Metropolitan Transportation Authority at 1, filed February 23, 2015 (MTA Modification Request).

⁵ See MTA Modification Request at 13. We also propose to grant MTA's related request for a limited waiver of the effective radiated power (ERP) limits specified in Section 95.855 of the Commission's rules—from 4 to 8 watts for mobile operations, and from 20 to 30 watts for fixed and base station operations—to facilitate Metro-North's PTC deployment in the four counties needed to complete its PTC spectrum footprint. See MTA Modification Request at 16, citing 47 C.F.R. § 95.855 and Metropolitan Transportation Authority Request for Waiver to Facilitate Positive Train Control System, Order, DA 14-269, 29 FCC Rcd 2004 (WTB Mobility Div. 2014) (MTA Power Waiver Order).

The proposed license modification will promote the vital public interest⁶ in rail safety by enabling Metro-North to complete its PTC deployment and by enabling Amtrak to deploy PTC-equipped passenger trains on Metro-North track. The proposed modification will also promote the public interest by the requirement that MTA provide sufficient spectrum now licensed under Station KIVD0002 to NJ Transit to enable its PTC implementation in northern New Jersey.⁷ Warren Havens and seven associated entities of which he is president (collectively, with Mr. Havens, the "Havens Entities") oppose modification of Station KIVD0002.⁸

- 4. In the related Order on Reconsideration, we address two petitions for reconsideration filed by the Havens Entities. First, we dismiss the Havens Entities' petition for reconsideration of the renewal of Station KIVD0002 because they did not participate earlier in the proceeding and because they lack standing. We also decline their alternative request to treat the petition as a request for informal Commission action under Section 1.41 of the Commission's rules. 10
- 5. Second, we address the Havens Entities' petition for reconsideration of the *MTA Power Waiver Order*, which granted MTA a limited waiver to use increased power under Station KIVD0002 to deploy PTC.¹¹ We grant the petition in part and require that when operating under the higher power limits, the MTA commuter railroads further attenuate any out-of-band emissions. The additional attenuation will ensure that PTC operations under the increased power limits would have no greater effect on planned spectrally adjacent operations than would PTC operations under applicable rule limits.¹² We otherwise deny the petition for reconsideration.

⁶ Section 316(a) of the Communications Act of 1934 (Act) provides that the Commission may modify "[a]ny station license . . . either for a limited time or for the duration of the term thereof, if in the judgment of the Commission such action will promote the public interest, convenience, and necessity . . ." 47 U.S.C. § 316(a).

⁷ MTA would provide NJ Transit spectrum to implement PTC in Bergen, Essex, Hudson, Morris, Passaic, Somerset, and Union counties, New Jersey.

⁸ Petition in Opposition, Under Competitive Standing, and in the Public Interest, filed April 17, 2015 (Opposition to MTA Modification Request), ULS File No. 0006682035. The seven entities are Environmentel LLC (ENL), Environmentel-2 LLC (ENL-2), Intelligent Transportation & Monitoring Wireless LLC (ITL), Skybridge Spectrum Foundation (SSF), Telesaurus Holdings GB LLC (Telesaurus), Verde Systems LLC (VSL), and V2G LLC. On April 30, 2015, MTA filed an Opposition to the Petition in Opposition (MTA Opposition), ULS File No 0006682035. On November 16, 2015, the Superior Court of Alameda County, California issued an order appointing Susan L. Uecker (Uecker) as receiver to take control of the seven entities. *See* Arnold Leong v. Warrens Havens, *et al.*, Case No. 2002-070640, *Order Appointing Receiver After Hearing and Preliminary Injunction* (Nov. 16, 2015). On December 17, 2015, Uecker filed several applications to notify the Commission of an involuntary transfer of control of the seven entities. *See*, *e.g.*, ULS File No. 0007060862, Description of Application and Public Interest Statement, citing 47 C.F.R. § 1.948(c)(2). The applications were recently accepted.

⁹ Petition for Reconsideration, filed September 26, 2014, ULS File No. 0006109691 (Havens Renewal Petition). MTA filed an Opposition to the Havens Renewal Petition on October 9, 2014 (MTA Renewal Opposition), ULS File No. 0006109691. The Havens Entities filed a Reply on October 21, 2014 (Havens Renewal Reply), ULS File No. 0006109691.

¹⁰ Havens Renewal Petition at 1, citing 47 C.F.R. § 1.41.

¹¹ MTA Power Waiver Order, 29 FCC Rcd 2004. Petition for Reconsideration, filed March 31, 2014 (Havens Power Waiver Petition), ULS File No. 0005681972. MTA filed an Opposition to the Havens Power Waiver Petition on April 10, 2014 (MTA Power Waiver Opposition), ULS File No. 0005681972. The Havens Entities filed a Reply on April 25, 2014 (Havens Power Waiver Reply), ULS File No. 0005681972.

¹² See infra discussion at paras. 26-37.

II. BACKGROUND

- 6. Rail Safety Improvement Act of 2008. Pursuant to the Rail Safety Improvement Act of 2008, ¹³ as amended by the Surface Transportation Extension Act of 2015, ¹⁴ Congress has required all trains providing passenger service and freight trains operating on lines carrying toxic and poisonous-by-inhalation hazardous materials to implement interoperable PTC systems by year-end 2018. ¹⁵ The Federal Railroad Administration (FRA) is responsible for overseeing PTC implementation, and adopted final PTC requirements on January 10, 2010. ¹⁶ PTC systems are intended to reduce the risk of human-error rail accidents, by preventing certain train-to-train collisions, over-speed derailments, incursions into established work zone limits, and the movement of a train through a switch left in the wrong position. ¹⁷
- 7. The U.S. rail industry has chosen to implement PTC using radio spectrum to create wireless networks that will enable real-time information sharing between trains, rail wayside devices, and "back office" applications, regarding train movement authorities, speed restrictions, train position and speed, and the state of signal and switch devices. The Commission has recognized that "PTC is a potentially transformative technology" that can "save lives, prevent injuries, and avoid extensive property damage." We seek to facilitate implementation of this important safety measure, and today we continue our efforts "to develop policies to facilitate the rail industry's acquisition and use of spectrum for PTC in the public interest."

III. DISCUSSION

8. We first address the Havens Entities' petitions for reconsideration of the renewal of Station KIVD0002 and the *MTA Power Waiver Order*, before addressing MTA's request to modify Station KIVD0002.

A. Station KIVD0002 Renewal

9. On January 21, 2014, MTA timely filed an application to renew Station KIVD0002.²⁰ The Mobility Division (Mobility Division or Division) of the Wireless Telecommunications Bureau returned the application to MTA and requested that it provide additional information necessary for the Division to further process the application.²¹ MTA timely responded to the Division's request, and explained it had been working for several years to design and implement a PTC system.²² MTA reported that it was

¹³ Pub. L. No. 110-432, § 104, 122 Stat. 4848, 4857 (2008).

¹⁴ Pub. L. No. 114-73, § 1302 (Oct. 29, 2015).

¹⁵ 49 U.S.C. § 20157(a)(1). Congress recently extended the PTC implementation deadline from December 31, 2015 to December 31, 2018. Railroads may request up to a 24-month extension of the December 31, 2018 deadline in limited circumstances. *See* 49 U.S.C. § 20157(a)(2)(B). *See also* "Positive Train Control: Additional Oversight Needed as Most Railroads Do Not Expect to Meet 2015 Implementation Deadline." GAO-15-739 (Sept. 4, 2015), available at http://www.gao.gov/products/GAO-15-739, webpage last visited January 20, 2016.

¹⁶ See Positive Train Control (PTC) Information (R&D), Federal Railroad Administration, available at https://www.fra.dot.gov/Page/P0152 (information regarding FRA's oversight of PTC implementation), webpage last visited January 20, 2016.

¹⁷ 49 U.S.C. § 20157(i)(3); 49 C.F.R. § 236.1005(a) (PTC system requirements).

¹⁸ Maritime Communications/Land Mobile, LLC, *Memorandum Opinion and Order*, WT Docket 13-85, 29 FCC Rcd 10871, 10882 ¶29 (2014) (*MCLM Order*), recon pending.

¹⁹ *MCLM Order*, 29 FCC Rcd at 10883 ¶29.

²⁰ ULS File No. 0006109691.

²¹ ULS File No. 0006109691, Notice of Return, Reference No. 5790542 (dated May 16, 2014).

²² ULS File No. 0006109691, MTA Response to Notice of Return at 1 (filed July 10, 2014) (MTA Response to Notice of Return).

validating the preliminary design for its PTC radio system and performing frequency planning for Station KIVD0002. MTA explained that it planned to build an estimated 90 base stations and 800 mobile stations for LIRR, and an estimated 52 base stations and 550 mobile stations for Metro-North. The Division reviewed this and other information provided by MTA and conditionally renewed Station KIVD0002 on August 19, 2014. The Division reviewed this and other information provided by MTA and conditionally renewed Station KIVD0002 on August 19, 2014.

- 10. The Havens Entities seek reconsideration of the Division's action granting conditional renewal of Station KIVD0002. Under Section 405 of the Communications Act, any party to an order, decision, report or action by the Commission or any person aggrieved or whose interests are adversely affected thereby, may petition for reconsideration. To qualify as a party, a petitioner for reconsideration generally must have filed a valid petition to deny against the application whose grant it seeks to have reconsidered. Because none of the Havens Entities filed a petition to deny MTA's renewal application, they lack party status.
- 11. Where a petitioner for reconsideration is not a party to the proceeding, Section 1.106(b)(1) of the Commission's rules requires that "the petition [1] shall state with particularity the manner in which the person's interests are adversely affected by the action taken, and [2] shall show good reason why it was not possible for him to participate in earlier stages in the proceeding." MTA's renewal application was placed on public notice on January 29, 2014, commencing a 30-day period for filing petitions to deny. The Havens Entities, however, did not file a petition to deny and offer no reason for not participating earlier in the renewal proceeding. We therefore dismiss the Havens Entities' petition for reconsideration for failing to show good reason why they did not participate earlier in the renewal proceeding as required by Section 1.106(b)(1).
- 12. Even if the Havens Entities were able to show good reason why it was not possible to participate earlier in the renewal proceeding, Section 405 of the Act and Section 1.106(b)(1) require that they show with particularity the manner in which their interests are adversely affected by the license renewal (that is, have standing). The Commission has explained that to establish standing, a petitioner must allege facts sufficient to demonstrate that grant of the application would cause it to suffer a direct injury.³¹ To obtain standing, the Havens Entities must show a causal link between the claimed injury and

²⁵ The renewal includes a condition that MTA make "a satisfactory showing of substantial service on or before December 31, 2015, the date Congress established for implementation of positive train control. *See* Rail Safety Improvement Act of 2008, Section 104." The condition is memorialized on the license for Station KIVD0002.

²³ MTA Response to Notice of Return at 1.

²⁴ *Id*.

²⁶ 47 U.S.C. § 405(a).

²⁷ See Regionet Wireless License, LLC, Order on Reconsideration, 16 FCC Rcd 19375, 19376 ¶5 (WTB Public Safety and Private Wireless Div. 2001) (advising Mr. Havens that "to qualify as a party to the proceeding, a petitioner for reconsideration generally must have filed a valid petition to deny the application that is the subject of the licensing action of which the petitioner seeks reconsideration").

²⁸ 47 C.F.R. § 1.106(b)(1).

²⁹ See Wireless Telecommunications Bureau Market-Based Applications Accepted for Filing, *Public Notice*, Report Number 9314, 2014 WL 323776 (F.C.C.) (Jan. 29, 2014). Section 1.939(a)(2) of the Commission's rules provides that petitions to deny "must be filed no later than 30 days after the date of Public Notice listing the application . . . as accepted for filing." 47 C.F.R. § 1.932(a)(2).

³⁰ See Applications of Ogden Television, Inc., *Memorandum Opinion and Order*, 7 FCC Rcd 3116, 3117 ¶5 (MMB Video Services Div. 1992) (Section 1.106 requires petitioners for reconsideration to provide satisfactory reasons why it was not possible to have utilized the pre-grant objection procedure).

³¹ See Applications of AT&T Mobility Spectrum LLC, Memorandum Opinion and Order, WT Docket No. 12-240, 27 FCC Rcd 16459, 16465 ¶16 (2012); Wireless Co., L.P., Order, 10 FCC Rcd 13233, 13235 ¶7 (WTB 1995) (continued....)

the challenged action,³² and demonstrate that the claimed injury would be prevented or redressed by the relief requested.³³ For purposes of standing, an injury must be both "concrete and particularized" and "actual or imminent, not conjectural or hypothetical."

- 13. Havens Entities ENL, ITL, and SSF hold Automated Maritime Telecommunications Service (AMTS) spectrum licenses that are spectrally adjacent to, and in the same geographic area as, Station KIVD0002. They assert standing to oppose the license renewal, claiming that PTC operations under the higher ERP permitted by the *MTA Power Waiver Order* could adversely impact planned operations under their AMTS licenses.³⁵ We find that such interference, if any, would arise from the higher ERP permitted by the *MTA Power Waiver Order*, not from the Bureau's conditional grant of MTA's renewal application for Station KIVD0002. ENL, ITL, and SSF accordingly have not shown how conditional grant of the renewal application adversely affects them as required by Section 405 of the Act and by Commission rule Section 1.106(b)(1).
- 14. Havens Entities ENL, ITL, and VSL state that they cooperate with affiliates THL and V2G LLC on certain nationwide plans to use their combined spectrum holdings.³⁶ They assert standing, claiming that "grant of the Renewal of the License, along with its increased power limits per the already granted Power Waiver, adversely impact those plans as well."³⁷ They fail to explain, however, how the renewal would result in any such impact. Without such a showing, the fact that THL and V2G LLC may cooperate or combine spectrum holdings under a common plan with ENL, ITL, and VSL affords none of these entities standing to seek reconsideration of the renewal of Station KIVD0002.
- 15. The Havens Entities offer no explanation in their pleadings regarding why ENL-2 or Mr. Havens himself would have standing to challenge the renewal of Station KIVD0002, nor are we aware of any basis to afford them standing. We therefore find that none of the Havens Entities have standing to petition for reconsideration of the license renewal and dismiss their petition on the separate ground of lack of standing. Because we are dismissing the Havens Entities' petition for reconsideration on two separate and independent procedural grounds (lack of standing and failure to justify their lack of participation in

(Wireless Co.), citing Sierra Club v. Morton, 405 U.S. 727, 733 (1972). See also New World Radio, Inc. v. FCC, 294 F.3d 164, 170 (D.C. Cir. 2002); Touchtel Corporation, Order on Reconsideration, 29 FCC Rcd 16249, 16250-51 ¶7 (WTB Broadband Div. 2014) (Touchtel).

³⁴ Conference Group, LLC v. FCC, 720 F.3d 957, 962 (D.C. Cir. 2013), quoting Lujan v. Defenders of Wildlife, 504 U.S. 555, 560 (1992). The Lujan Court stated that the constitutional minimum of standing requires that the plaintiff must have suffered an "injury in fact," an invasion of a legally protected interest which is (a) concrete and particularized, and (b) actual or imminent, not conjectural or hypothetical. Second, there must be a causal connection between the injury and the conduct complained of; the injury has to be fairly traceable to the challenged action of the defendant. Third, it must be likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision. See Lujan v. Defenders of Wildlife, 504 U.S. 555, 560-61 (1992).

^{(...}continued from previous page)

³² Wireless Co., 10 FCC Rcd at 13235 ¶7; Touchtel, 29 FCC Rcd at 16250-51 ¶7.

³³ *Id*.

³⁵ Havens Renewal Petition at 2. ITL and SSF hold A-block (217.5-218 MHz paired with 219.5-220 MHz) AMTS licenses in the AMTS Northern Atlantic license area. ENL and SSF hold B-block (217-217.5 MHz and 219-219.5 MHz) AMTS licenses in the AMTS Northern Atlantic and Mid-Atlantic license areas. MTA's license area is encompassed by the AMTS Northern Atlantic license area. The Mid-Atlantic AMTS license area does not overlap MTA's license area.

³⁶ Havens Renewal Petition at 4.

³⁷ *Id.* at 4-5.

the earlier stages of the proceeding), we need not address their various other arguments against renewal of Station KIVD0002. 38

16. We also decline the Havens Entities' alternative request that, if they are found to not have standing, we treat their petition for reconsideration as an informal request for Commission action under Section 1.41 of the Commission's rules.³⁹ Under Section 1.41, a party may request action informally, "[e]xcept where formal procedures are required" under the Commission's rules. Section 1.41's underlying purpose is to provide "an avenue of recourse to parties who might otherwise have none." The Commission regularly declines to consider informal requests submitted pursuant to Section 1.41 when formal procedures are available to a requesting party. Section 405 of the Act and Section 1.106 of the Commission's rules specify the formal procedures to petition for reconsideration and the Havens Entities failed to follow those procedures.⁴³

17. The Commission has on more than one occasion advised the Havens Entities that they may not circumnavigate the procedural requirements of Section 1.106 by alternatively requesting relief under Section 1.41. In 2013, for example, the Commission admonished Mr. Havens that "Section 1.41 is not a vehicle to evade the procedural requirements of 47 C.F.R. § 1.106." In 2012, the Commission advised Havens Entity SSF that it would not treat two petitions for reconsideration alternatively as either informal requests for action under Section 1.41 or petitions for declaratory ruling under Section 1.2, noting SSF's "pleadings are in substance petitions for reconsideration and we will treat them solely as such." Although the availability of formal procedures does not bar the Commission from considering arguments made by an informal requestor for action under Section 1.41 in appropriate cases, there are no compelling public interest reasons to treat the Havens Entities' petition for reconsideration as an informal request here. We therefore decline to treat the petition for reconsideration as an informal request for action under Section 1.41.

18. Lastly, we grant MTA's request for additional time to make the substantial service showing required by Section 95.833(a) of the Commission's rules⁴⁶ to perfect renewal of Station KIVD0002. The Bureau previously granted MTA a temporary waiver of Section 95.833(a) and renewed Station KIVD0002 subject to MTA making "a satisfactory showing of substantial service on or before December

³⁸ See, e.g., Ponce Broadcasting Corporation, *Memorandum Opinion and Order on Reconsideration*, 10 FCC Rcd 11289, 11289 ¶2 n.3 (1995) (concluding that where the Commission dismisses a petition for reconsideration, it need not address the arguments made therein).

³⁹ Havens Renewal Petition at 1.

⁴⁰ 47 C.F.R. § 1.41.

⁴¹ See Warren C. Havens, Memorandum Opinion and Order, 28 FCC Rcd 16261, 16267 ¶18 (2013) (Havens Order).

⁴² Havens Order, 28 FCC Rcd at 16267-68 ¶18.

⁴³ See supra discussion at paras. 10-15.

⁴⁴ See Havens Order, 28 FCC Rcd at 16268 ¶18. See also Motorola, Inc., Order on Reconsideration, PR Docket No. 92-257, 26 FCC Rcd 16581, 16584 ¶8 n.30 (2011) (denying the request of several Havens Entities to treat petition for reconsideration as an informal request since they were required and failed to follow Section 1.106); Motorola, Inc., Memorandum Opinion and Order, 25 FCC Rcd 455, 456 ¶3 n.8 (2010) (same); Motorola, Inc., Order on Reconsideration, 22 FCC Rcd 18649, 18651 ¶7 (WTB Mobility Division 2007) (same).

⁴⁵ Skybridge Spectrum Foundation, *Memorandum Opinion and Order*, 27 FCC Rcd 7701, 7703 ¶10 (2012). The Commission addressed one petition for reconsideration on the merits, and dismissed the other as defective because it failed to rely on new or newly discovered facts or arguments as required by the Commission's rules governing petitions for reconsideration of orders denying applications for review. *Id*.

⁴⁶ 47 C.F.R. § 95.833(a).

31, 2015, the date Congress established for implementation of positive train control."⁴⁷ In October of 2015, Congress extended the deadline until December 31, 2018.⁴⁸ On December 30, 2015, MTA requested that it be allowed until the new December 31, 2018 deadline to make the substantial service showing required by Section 95.833(a).⁴⁹

19. In support of its request, MTA states that during 2015 it completed installation of numerous PTC antenna poles, continued wayside and onboard RF system engineering, and engaged in extensive equipment testing. MTA states that equipment testing revealed radio deficiencies and that MTA is working to cure these deficiencies. MTA also notes that Congress extended the PTC implementation deadline because of technical barriers affecting railroads' ability to implement PTC systems. We find that the underlying purpose of Section 95.833(a)—to ensure spectrum use in the public interest—would not be served by strict application of the rule here, and that grant of the temporary waiver requested by MTA would serve the public interest in rail safety and intensive spectrum use. We also find that in view of the unique and unusual circumstances associated with MTA's PTC implementation, it would be contrary to the public interest to require MTA to demonstrate substantial service at this time. We therefore grant MTA's request for more time, until December 31, 2018, to make a satisfactory showing of substantial service to perfect renewal of Station KIVD0002.

B. Station KIVD0002 Power Waiver

20. We now turn to the Havens Entities' petition for reconsideration of the *MTA Power Waiver Order*. In March 2013, after acquiring Station KIVD0002, MTA requested a waiver to use increased effective radiated power (ERP) to implement PTC for the LIRR and Metro-North (MTA Power Waiver Request). In the *MTA Power Waiver Order*, the Mobility Division granted MTA a limited waiver of Section 95.855's ERP limits, from 4 to 8 watts for mobile PTC operations, and from 20 to 30 watts for fixed and base station PTC operations. The Havens Entities argue that PTC operations under the permitted increased ERP limits could cause interference to planned Intelligent Transportation Systems (ITS) operations under several of the Havens Entities' spectrally adjacent AMTS band licenses. MTA rejects such arguments. MTA

⁴⁷ See supra note 25.

⁴⁸ See Surface Transportation Extension Act of 2015, Pub. L. No. 114-73, § 1302 (Oct. 29, 2015).

⁴⁹ See ULS File No. 0007078953.

⁵⁰ See Letter from Alan S. Tilles, MTA Counsel, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC at 3-4, dated December 30, 2015, ULS File No. 0007078953.

⁵¹ *Id*. at 4.

⁵² *Id. See also supra* note 15.

⁵³ See 47 C.F.R. § 1.925(b)(3)(i).

⁵⁴ See 47 C.F.R. § 1.925(b)(3)(ii).

⁵⁵ The following pleadings are available under ULS File No. 0005681972: MTA Waiver Request, filed March 8, 2013; MTA Amended Waiver Request, filed July 22, 2013; and MTA Waiver Supplement, filed December 16, 2013.

⁵⁶ 47 C.F.R. § 95.855.

⁵⁷ MTA Power Waiver Order, 29 FCC Rcd at 2007 ¶10.

⁵⁸ Havens Power Waiver Petition at 5-10 (noting that ENF, ITL, and SSF hold AMTS licenses overlapping, or nearby, MTA's license area).

⁵⁹ See MTA Power Waiver Opposition.

1. Standing

- 21. We first address whether the Havens Entities have standing to seek reconsideration of the *MTA Power Waiver Order*. Havens Entities ENL, ITL, and SSF assert that the MTA commuter railroads' future PTC operations under the ERP permitted by the *MTA Power Waiver Order* could adversely affect planned operations under their adjacent band AMTS spectrum licenses. We find that these three entities have standing given the potential for interference to planned adjacent band operations that could arise from PTC operations under the waiver's permitted ERP limits.
- 22. Havens Entities VSL and ENL-2 hold AMTS spectrum licenses in areas far from Station KIVD0002 and claim standing arguing that the precedent established by the *MTA Power Waiver Order* "could adversely affect" AMTS licensees, including themselves, more generally. The Commission considers waiver requests on a case-by-case basis. The *MTA Power Waiver Order* does not predetermine whether the Commission would grant a waiver of Section 95.855's ERP limits to facilitate PTC operations in a market where VSL or ENL-2 may hold AMTS spectrum licenses. Thus, neither VSL nor ENL-2 have standing to challenge the *MTA Power Waiver Order*.
- 23. Havens Entities THL and V2G LLC claim standing based on plans to cooperate with ENL, ITL, and SSF to use their combined spectrum holdings.⁶³ THL and V2G LLC do not hold AMTS spectrum licenses near Station KIVD0002. That they may cooperate or combine spectrum holdings under a common plan with ENL, ITL, and SSF does not afford them standing to challenge the *MTA Power Waiver Order*. The Havens Entities offer no explanation in their pleadings regarding why Mr. Havens would have standing to challenge the *MTA Power Waiver Order* and we are aware of none. Accordingly, we find that THL, V2G LLC and Mr. Havens each lack standing to challenge the *MTA Power Waiver Order*.
- 24. Our assessment below of the claims and other assertions made by the "Havens Entities" is limited to those entities for which we find standing: ENL, ITL, and SSF.

2. Public Notice

25. The Havens Entities assert that the Mobility Division erred by not placing the MTA Power Waiver Request on public notice for comment.⁶⁴ We disagree. The Commission is not required to put a waiver request on Public Notice and has broad discretion whether or not to do so.⁶⁵ Section 1.925(c)(i) of the Commission's rules states "[t]he Commission, in its discretion, may give public notice of the filing of a waiver request and seek comment from the public or affected parties."⁶⁶ Nothing in the record before us shows that the Division unreasonably exercised its discretion under Section 1.925(c)(1). We therefore

⁶⁰ Havens Power Waiver Petition at 2. ITL and SSF hold A-block (217.5-218 MHz paired with 219.5-220 MHz) AMTS licenses in the AMTS Northern Atlantic license area. ENL and SSF hold B-block (217-217.5 MHz and 219-219.5 MHz) AMTS licenses in the AMTS Northern Atlantic license area and Mid-Atlantic license areas. MTA's license area is encompassed by the Northern Atlantic license area. The Mid-Atlantic license area does not overlap MTA's license area.

⁶¹ Havens Power Waiver Petition at 2-3.

⁶² The Commission has held that waiver requests are best suited to a case-by-case analysis. *See, e.g.,* Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications, *Report and Order*, PS Docket Nos. 11-153 and 10-255, 28 FCC Rcd 7556, 7578 ¶62 (2013).

⁶³ Havens Power Waiver Petition at 2-3.

⁶⁴ *Id*. at 6.

⁶⁵ See, e.g., Tektron Micro Electronics, Inc., Order on Reconsideration, 15 FCC Rcd 4438, 4438-39 ¶2 (WTB Public Safety and Private Wireless Div. 2000).

⁶⁶ 47 C.F.R. § 1.925(c)(i).

reject the Havens Entities' claim that the MTA Power Waiver Request should have been placed on public notice for comment.

3. Claim of Potential AMTS Interference

26. In the *MTA Power Waiver Order*, the Mobility Division noted that the underlying purpose of Section 95.855's ERP limits is to minimize the potential for interference to TV/DTV Channel 13 stations in the 210-216 MHz band.⁶⁷ The Division found that waiver of Section 95.855's ERP limits was appropriate, because of the limited potential for interference to Channel 13 over-the-air viewers and because the relevant Channel 13 broadcast station did not object to MTA's request for higher ERP limits, subject to certain interference mitigation conditions.⁶⁸ The Division noted that Congress adopted the PTC mandate to save lives and property, and found that the higher ERP limits would enable LIRR and Metro-North to meet their obligation to deploy an interoperable PTC system.⁶⁹ Against this backdrop, we address the claim that PTC operations under the waiver's permitted ERP limits could cause interference to planned operations under three of the Havens Entities' spectrally adjacent AMTS band licenses.⁷⁰

- 27. We reject the Havens Entities' claim that because the Commission denied Mr. Havens' request for an increase of the AMTS ERP limit from 50 to 1000 watts in 2007, the Mobility Division should have denied MTA's request for an ERP increase for PTC operations in the 218-219 MHz band. The potential for adjacent channel interference arising from Mr. Havens' request for a 20-fold (950 watt) increase in the AMTS power limit is in no respect comparable to that, if any, posed by MTA's geographically limited PTC operations with a 10 watt increase in ERP for base and fixed stations and a 4 watt increase for mobile stations. The Havens Entities reliance on the Commission's 2007 decision is misplaced. In fact, the Commission envisioned that 218-219 MHz licensees seeking to operate at higher ERP would request waiver relief as MTA did here.
- 28. In support of their claim of potential 218-219 MHz Service to AMTS interference, the Havens Entities urge us to consider a study of interference between spectrally adjacent AMTS licensees; that study was filed in 2009 in an unrelated proceeding (2009 AMTS Study).⁷⁴ They claim that the study demonstrates that PTC operations under the waiver's permitted ERP limits could interfere with planned AMTS operations.⁷⁵

⁷⁰ Havens Power Waiver Petition at 5-10 (noting that ENF, ITL, and SSF hold AMTS licenses overlapping, or nearby, MTA's license area).

⁶⁷ MTA PTC Waiver Order, 29 FCC Rcd at 2005 ¶5.

⁶⁸ *Id.*, 29 FCC Rcd at 2007 ¶10.

⁶⁹ *Id*.

⁷¹ *Id.* at 8-9 (asserting the "FCC should not grant to MTA relief denied Havens"), citing MariTEL, Inc., and Mobex Network Services, LLC, *Report and Order*, WT Docket No. 04-257, 22 FCC Rcd 8971, 8985-86 ¶24 (2007), *subsequent history omitted*.

⁷² Havens requested ERP increase from 50 to 1000 Watts would have resulted in an increase in excess of 13dB in the ERP limit.

⁷³ See Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, *Report and Order and Memorandum Opinion and Order*, WT Docket No. 98-169, 15 FCC Rcd 1497, 1555 at ¶110 (1999) (where a "218-219 MHz Service provider structures a system that can operate in excess of twenty watts and provide necessary interference protection, we believe that a request for a waiver would be the most appropriate course").

⁷⁴ The 2009 AMTS Study is attached as Exhibit 1A (parts 1 and 2) to the Havens Power Waiver Petition.

⁷⁵ Havens Power Waiver Petition at 7-8; and Havens Power Waiver Reply, Exhibit 1.

- 29. MTA responds that the 2009 AMTS Study is irrelevant because it addresses potential AMTS to AMTS interference, rather than potential 218-219 MHz Service to AMTS interference, ⁷⁶ and because it lacks a supporting affidavit of a qualified radio engineer. ⁷⁷ Further, MTA argues that the Commission will not consider a showing that does not relate to the proposed operation, and that the Havens Entities must show quantitatively the nature and extent of the alleged interference. ⁷⁸ MTA also submitted an affidavit of an engineer asserting that the 2009 AMTS Study is irrelevant because it addresses interference between two AMTS sub-bands when one sub-band is authorized to use significantly higher ERP and fixed station antenna height than the other. ⁷⁹
- 30. In reply, the Havens Entities renew their claim that the 2009 AMTS Study is germane, and assert that Mr. Havens is competent to present the facts in the 2009 AMTS Study, citing his work with various consulting engineers. Nothing in the record before us supports Mr. Havens' claim that unspecified work he may have done with consulting engineers qualifies him to independently confirm the facts and conclusions in the 2009 AMTS Study. The Havens Entities also request that we accept an affidavit of Douglas Reudink in support of limited portions of the 2009 AMTS Study. We have reviewed the 2009 AMTS Study and find that because it does not address the potential for PTC operations in the 218-219 MHz Service to interfere with the Havens Entities' planned AMTS operations, it is inapposite. We find that the public interest would be served by our own further review of the potential for such interference now.
- 31. The MTA commuter railroads' PTC operations in the 218-219 MHz Band must comply with Section 95.857 of the Commission's rules. Section 95.857(a)(2) requires licensees to attenuate their emissions by at least 28 dB on any frequency removed from the midpoint of the assigned frequency segment by more than 250 kHz up to and including 750 kHz. Section 95.857(a)(3) requires licensees to attenuate their emissions by at least 35 dB from the midpoint of their assigned frequency segment by more than 750 kHz and up to and including 1250 kHz. The midpoint of MTA's assigned frequency segment is 218.750 MHz. Thus, when operating within the power limits specified by the Commission's rules, LIRR and Metro-North must attenuate emissions by at least 28 dB in the AMTS upper B Block (219 to 219.500 MHz), and by at least 35 dB in the AMTS upper A Block (219.500 to 220 MHz) and AMTS lower A Block (217.5 to 218 MHz).
- 32. Commission staff has conducted a further review of the adjacent channel out-of-band emissions regarding the amount of power that could impact planned operations in the AMTS band if LIRR and Metro-North operate under the waiver's permitted ERP limits. For fixed and base station operations, the *MTA Power Waiver Order* provides an increase in maximum ERP from 20 to 30 Watts, or 1.77 dB.⁸⁴ By this order, we modify the relief granted in the *MTA Power Waiver Order* to address the potential for adjacent AMTS band interference. Specifically, we will require LIRR and Metro-North to attenuate out-of-band emissions (OOBE) of fixed and base station operations, they must attenuate emissions

⁷⁶ MTA Power Waiver Opposition at 2.

⁷⁷ *Id*. at 3.

⁷⁸ *Id*.

⁷⁹ MTA Power Waiver Opposition, Exhibit 1, Letter from Jay M. Jacobsmeyer, President, Pericle Communications Company to Alan S. Tilles, Esq., counsel to MTA, dated April 8, 2014.

⁸⁰ Havens Power Waiver Reply at 5 and n.5.

⁸¹ The affidavit is attached as Exhibit 1 to the Havens Power Waiver Reply.

^{82 47} C.F.R. § 95.857.

^{83 47} C.F.R. § 95.857(a)(2).

 $^{^{84}}$ 20 watts ERP = 13 dB; 30 watts ERP = 14.77 dB; 14.77 dB - 13dB = 1.77 dB.

by at least 29.77 dB in the AMTS upper B Block (219 to 219.500 MHz), and by at least 36.77 dB in the AMTS upper A Block (219.500 to 220 MHz) and the AMTS lower A Block (217.5 to 218 MHz). This attenuation will ensure that fixed and base station PTC operations under the waiver's permitted ERP limit will have no more effect on planned spectrally adjacent AMTS operations than would operations under Section 95.855's 20 watt ERP limit for fixed and base station operations.

- 33. Additionally, we modify the relief granted in the *MTA Power Waiver Order* to require that when operating mobile stations under the waiver's increased ERP limit from 4 to 8 watts, LIRR and Metro-North attenuate any adjacent channel OOBE by an additional 3 dB.⁸⁵ Thus, when using increased ERP under the waiver for mobile operations, LIRR and Metro-North must attenuate emissions by at least 31 dB in the AMTS upper B Block (219 to 219.500 MHz), and by at least 38 dB in the AMTS upper A Block (219.500 to 220 MHz) and the AMTS lower A Block (217.5 to 218 MHz). This attenuation will ensure that mobile PTC operations under the waiver's permitted ERP limit will have no more effect on planned spectrally adjacent AMTS operations than would operations under Section 95.855's 4 watt ERP limit for mobile operations.
- 34. We note that Section 95.857(b)(4) requires 218-219 MHz Service licensees to attenuate their emissions by a least 43 plus 10 log (base 10) (mean power in watts) dB on any frequency removed from the midpoint of the assigned frequency segment by more than 1250 kHz. MTA must attenuate its emissions accordingly in the AMTS lower B Block (217 to 217.5 MHz). Additional attenuation is unnecessary under Section 90.857(b)(4) because the amount of attenuation is directly related to the amount of power used.
- 35. The additional attenuation requirements that we adopt above will ensure that PTC operations under the waiver's permitted ERP limits will have no more effect on planned spectrally adjacent AMTS operations than would operations under Section 95.855's ERP limits. We note moreover that under Section 95.861(b) of the Commission's rules, the Commission retains authority to require MTA to modify its PTC operations if we find that operations under the increased ERP limits (with the required additional attenuation) cause harmful interference.⁸⁷
- 36. Finally, we reject the Havens Entities' attempt to collaterally present arguments against renewal of Station KIVD0002 in their petition for reconsideration of the *MTA Power Waiver Order*. 88 We have addressed the Havens Entities' petition for reconsideration of the Bureau's conditional renewal of Station KIVD0002 above, 89 and find that the Havens Entities' arguments opposing the renewal are not within the reasonable scope of their petition for reconsideration of the *MTA Power Waiver Order*.
- 37. For the reasons stated above, we grant the Havens Entities' petition for reconsideration of the *MTA Power Waiver Order* in part by adopting additional attenuation requirements. We otherwise deny the Havens Entities' petition.

C. Station KIVD0002 Modification Request

38. We now turn to MTA's request to modify Station KIVD0002 to authorize the use of an additional 250 kHz of 218-219 MHz Band spectrum (218.501-218.750 MHz) to enable Metro-North's implementation of a Congressionally-mandated PTC rail safety system in Dutchess County, New York

⁸⁵ The requested change in ERP from 4 to 8 watts represents an increase of 3 dB.

⁸⁶ 47 C.F.R. § 95.857(b)(4).

⁸⁷ 47 C.F.R. § 95.861(b). That rule provides that "[t]he use of any frequency segment (or portion thereof) at a given geographical location may be denied when, in the judgment of the Commission, its use in that location is not in the public interest; the use of a frequency segment (or portion thereof) specified for the 218–219 MHz Service system may be restricted as to specified geographical areas, maximum power, or other operating conditions." *Id.*

⁸⁸ Havens Power Waiver Petition at 3-5.

⁸⁹ See supra discussion at paras. 9-17.

(CMA151); Orange County, New York (CMA144); Fairfield County, Connecticut (CMA042); and New Haven County, Connecticut (CMA049). MTA also requests that we modify Station KIVD0002 to return 250 kHz of spectrum (218.751-219 MHz) covering five northern New Jersey counties (Essex, Passaic, Morris, Somerset, and Union) from the license to the Commission. 91

1. Background

39. *Metro-North*. Metro-North is one of the nation's busiest commuter railroads, providing more than 275,000 passenger trips on an average weekday. ⁹² Its service territory spans seven New York State counties (Bronx, Dutchess, New York, Orange, Putnam, Rockland, and Westchester) and two counties in southwestern Connecticut (Fairfield and New Haven). ⁹³ Three of Metro-North's lines terminate in Manhattan's historic Grand Central Terminal. ⁹⁴ Metro-North's affiliate, the LIRR, provides commuter rail service from eastern Long Island to Manhattan's Penn Station, in five New York State counties (Brooklyn, Nassau, New York, Queens, and Suffolk). ⁹⁵ Metro-North, the LIRR, Amtrak, and other commuter railroads serving the Northeast Corridor (NEC), which extends from Boston to Washington, D.C., is deploying a PTC radio technology called an Advanced Civil Speed Enforcement System (ACSES). ⁹⁶ ACSES radios are designed to operate in the 216-222 MHz frequency range. ⁹⁷

40. Spectrum Acquisition. MTA acquired Station KIVD0002—the frequency B segment (218.501 to 219.000 MHz) 218-219 MHz Service license for the New York Cellular Market Area (NY CMA)—for Metro-North and the LIRR to implement ACSES. The license area includes the five counties comprising the LIRR's service territory, and five of the nine counties comprising Metro-North's service territory. MTA states that its efforts to acquire spectrum needed to implement PTC in the four remaining counties to complete Metro-North's PTC spectrum footprint have been unfruitful. MTA states that on January 11, 2011, it advertised an initial request for proposal (RFP)¹⁰¹ for the entire service territory of both the LIRR and Metro-North. While that solicitation resulted in MTA's acquisition of Station KIVD0002 after Commission approval, MTA did not receive a responsive proposal for

⁹⁰ See Letter from Alan S. Tilles, MTA Counsel, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC, dated December 9, 2015 (proposing assignment of spectrum from 218.500 to 218.750 MHz) (MTA December 9, 2015 Letter), ULS File No. 0006682035.

⁹¹ *Id.* (proposing return of spectrum from 218.750 to 219 MHz).

⁹² MTA Modification Request at 3.

⁹³ *Id*.

⁹⁴ *Id*.

⁹⁵ *Id*. at 2.

⁹⁶ More than 260 million passenger trips are made on the NEC each year, including more than 17 million trips by Amtrak passengers. The balance of these trips is provided by eight commuter railroads that share the NEC. *See* Northeast Corridor Fact Sheet, available at http://nec.amtrak.com/node/321, webpage lasted visited January 20, 2016.

⁹⁷ MTA Modification Request at 9.

⁹⁸ *Id.* at 11.

⁹⁹ Id.

¹⁰⁰ *Id*. at 12.

¹⁰¹ An RFP is a solicitation by a party seeking in procure a commodity, service, or asset, to potential suppliers to submit business proposals.

¹⁰² MTA Opposition at 3.

¹⁰³ *Id*.

spectrum in Dutchess and Orange counties, New York, and Fairfield and New Haven counties, Connecticut. Therefore, on June 22, 2012, MTA issued a supplemental RFP seeking spectrum for Metro-North to implement PTC in the four counties. MTA explains that "the only proposals received (including that of a Havens-related entity) were from entities with insufficient spectrum or which imposed commercial and technical terms which were, for good reason, unacceptable to the MTA Railroads."

- 41. *Intersystem Interference*. MTA contends its efforts to obtain suitable spectrum to implement PTC have been complicated by the U.S. freight railroads' decision to deploy a different PTC radio technology, called an Interoperable Electronic Train Management System (I-ETMS). PTC-220, LLC (PTC-220) a consortium of the nation's seven Class I freight railroads, has acquired substantial spectrum nationwide for its members and other railroads to deploy I-ETMS in the 220-222 MHz Band. With respect to the NEC, where railroads intend to deploy both ACSES and I-ETMS, PTC-220 states that because "freight and commuter railroads share many track segments, or operate on tracks that are in very close proximity," spectral separation is necessary to avoid "significant inter-network interference due to receiver desensitization."
- 42. MTA has submitted the May 2015 initial results of an engineering study funded by the FRA and performed by the Transportation Technology Center, Inc. (TTCI Study). The study notes that ACSES and I-ETMS radios have different modulation, data encoding, and channel access protocols and that mutual desensitization of each system's radios would occur if they were to operate in close geographic proximity with little spectral separation between channels. Citing the TTCI Study, MTA states "that at least 1.1375 MHz of spectral separation is necessary to prevent interference, in addition to geographic spacing discussed in the [TTCI] Study. The TTCI Study concludes that to mitigate possible ACSES/I-ETMS intersystem interference in the NEC, I-ETMS radios should only operate above 220 MHz and ACSES radios below 219 MHz when in close geographic proximity.

¹⁰⁴ *Id*. at 3-4.

¹⁰⁵ *Id*. at 4.

¹⁰⁶ *Id*.

¹⁰⁷ See PTC-220, LLC, Request for Waiver to Facilitate Deployment of Positive Train Control Systems, Memorandum Opinion and Order, WT Docket 13-59, 30 FCC Rcd 2281, 2282 ¶3 (WTB Mobility Div. 2015) (PTC-220 2015 Waiver Order) (summarizing PTC-220's 220 MHz Band spectrum holdings), recon. pending.

¹⁰⁸ Letter from Henry McCreary, President, PTC-220, LLC, to Marlene H. Dortch, Secretary, FCC at 1, dated February 6, 2015 (PTC-220 February 6, 2015 Letter) (attached to the MTA Modification Request, ULS File No. 0006682035).

¹⁰⁹ TTCI, a subsidiary of the American Association of Railroads (AAR), manages the FRA's Transportation Technology Center. *See* Transportation Technology Center, Inc., http://www.ttci.aar.com/, webpage last visited January 20, 2016. Letter from Alan S. Tilles, MTA Counsel, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC, dated September 15, 2015 (transmitting the TTCI Study), ULS File No. 0006682035.

¹¹⁰ TTCI Study at 2. Desensitization is a form of electromagnetic interference where a radio receiver is unable to receive a radio signal that it might otherwise be able to receive when there is no interference. It is caused by a nearby transmitter with a strong signal on a nearby frequency, which overloads the receiver and makes it unable to fully receive the desired signal.

¹¹¹ Letter from Alan S. Tilles, MTA Counsel, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC, dated September 15, 2015, citing TTCI Study at 9, ULS File No. 0006682035.

¹¹² TTCI Study at 12. *See also* Letter from Alan S. Tilles, MTA Counsel, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC, dated August 10, 2015 (engineering bench tests indicate that at least one megahertz of spectral separation is required between ACSES and I-ETMS radio systems deployed in close proximity to avoid intersystem interference), ULS File No. 0006682035.

- 43. PTC-220 states that in November 2015, TTCI conducted additional field testing that reconfirmed that at least one megahertz of spectral separation would be sufficient to enable filtering to avoid harmful interference between ACSES and I-EMTS networks when in close geographic proximity. PTC-220 states that TTCI expanded its November testing to evaluate the potential for two different ACSES networks to interfere with one another when operating in close proximity, and found that one megahertz of spectral separation would expand the available options for mitigating interference between two ACSES networks. The testing results indicate that modifying Station KIVD0002 to include spectrum at 218.501 to 218.750 MHz to complete Metro-North's PTC spectrum footprint as we propose below would provide Metro-North sufficient spectral separation to mitigate potential interference with Amtrak's ACSES network, which will operate on spectrum at 217 to 217.100 MHz in the vicinity of certain Metro-North track. NJ Transit notes that spectral separation is not required between its ACSES network and the ACSES networks of Metro-North and the LIRR because the networks will operate under a common channel plan managed by MTA.
- 44. *Spectrum Availability*. MTA states that no 218-219 MHz Band spectrum is available on the secondary market in the four counties needed to complete Metro-North's PTC spectrum footprint because both 500 kHz frequency segments are held by the Commission. Having been unsuccessful in securing other suitable spectrum for the reasons stated above, MTA requests that we modify Station KIVD0002 to include 250 kHz of 218-219 MHz Band spectrum to complete Metro-North's PTC spectrum footprint. MTA also requests a limited waiver of Section 95.855's ERP limits, from 4 to 8 watts for mobile PTC operations, and from 20 to 30 watts for fixed and base station PTC operations for Metro-North to deploy PTC in the four counties. 120
- 45. MTA further requests that we modify Station KIVD0002 to return 250 kHz of spectrum covering five northern New Jersey counties (Essex, Passaic, Morris, Somerset, and Union) from the license to the Commission. MTA states that its proposed license modification "would result in a net gain of spectrum to be made available by the Commission to other entities, while allowing the implementation of a service designed to increase safety for the public." MTA also has committed to

¹¹³ Letter from Michael Lannan, President, PTC-220, LLC, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC at 1, dated November 25, 2015, ULS File No. 0006682035 (PTC-220 November 25, 2015 Letter). *See* "PTC 220 LLC Radio Desense Testing Overview NEC Visit to TTCI," dated November 18, 2015. The report is attached to a Letter from Alan S. Tilles, MTA Counsel, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC, dated December 9, 2015 (filed December 21, 2015), ULS File No. 0006682035. We note that the TTCI Study is based on a spectral separation of 1.1375 megahertz between ACSES and I-EMTS PTC systems. *Id.* at 6.

¹¹⁴ PTC-220 November 25, 2015 Letter at 2.

Amtrak has acquired 100 kHz of AMTS spectrum at 217 to 217.100 MHz to deploy PTC on the southern portion of the Northeast Corridor from Washington D.C. to New York City. *See Amtrak Order*, 30 FCC Rcd 2038.

¹¹⁶ See Letter from Charles N. Dickerson, Chief Construction & Project Management, NJ Transit, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC, dated December 11, 2015 (NJ Transit December 11, 2015 Letter), ULS File No. 0006682035.

¹¹⁷ See MTA Modification Request at 12. Each county corresponds to a single Cellular Market Area (CMA): Dutchess County, New York (CMA 151); Orange County, New York (CMA 144); Fairfield County, Connecticut (CMA 042); and New Haven County, Connecticut (CMA 049).

¹¹⁸ MTA Modification Request at 13.

¹¹⁹ 47 C.F.R. § 95.855.

¹²⁰ MTA Modification Request at 16.

¹²¹ *Id.* at 13.

¹²² Id. at 15-16.

provide spectrum it would retain in seven New Jersey counties, after the license modification, to NJ Transit for its PTC implementation. ¹²³

2. The Record

46. The Connecticut Department of Transportation (CDOT), ¹²⁴ CSX Transportation (CSX), ¹²⁵ NJ Transit, ¹²⁶ and PTC-220¹²⁷ each urge us to grant MTA's modification request. CDOT states that pursuant to a joint service agreement, the State of Connecticut and Metro-North operate commuter rail service over the New Haven Line, which runs from New Haven, Connecticut to Grand Central Terminal in Manhattan. ¹²⁸ Metro-North also provides commuter rail service on three commuter rail branch lines that intersect the New Haven Line in southwestern Connecticut—the New Canaan and Danbury Lines in Fairfield County, and the Waterbury Line in New Haven County. ¹²⁹ CDOT states that of the more than 115,000 daily commuters using the New Haven Line, 80,000 commuters originate from the State of Connecticut. ¹³⁰ It notes that more than 37 million trips are made each year on the line. ¹³¹ CDOT states that it has funded the capital costs for PTC implementation on the New Haven Line and PTC implementation is ready to proceed in Connecticut. ¹³²

47. PTC-220 also urges us to grant MTA's request to modify Station KIVD0002. PTC-220 explains that the proposed license modification "will play a critical role in mitigating interference between freight and commuter rail PTC networks operating side-by-side" in the greater New York Metropolitan Area. PTC-220 states that without at least one megahertz of spectral separation, it could not feasibly apply filtering technology to mitigate intersystem interference due to space constraints on locomotives. PTC-220 explains that adequate spectral separation would reduce the size of filters needed, making filters a viable option for interference mitigation. Similarly, CSX states that the proposed modification of Station KIVD0002 would help ensure that there is adequate spectrum in the greater New York metropolitan area for PTC deployment and play a critical role in mitigating the potential for interference between freight and commuter rail PTC systems.

¹²³ *Id*. at 13.

¹²⁴ Letter from James Redeker, Commissioner, CDOT, to Thomas Wheeler, Chairman, FCC, dated February 17, 2015 (CDOT February 17, 2015 Letter) (attached to MTA Modification Request, ULS File No. 0006682035).

¹²⁵ Letter from Frank A. Lonegro, Executive Vice President and Chief Financial Officer, CSX Corporation, to Marlene H. Dortch, Secretary, FCC, dated November 25, 2015 (CSX November 25, 2015 Letter), ULS File No. 0006682035.

¹²⁶ See Letter from Veronique Hakim, Executive Director, NJ Transit, to FCC, dated February 17, 2015 (NJ Transit February 17, 2015 Letter) (attached to MTA Modification Request, ULS File No. 0006682035).

¹²⁷ PTC-220 February 6, 2015 Letter.

¹²⁸ CDOT February 17, 2015 Letter at 1.

¹²⁹ See Letter from Alan S. Tilles, MTA Counsel, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC, dated January 8, 2016 (MTA January 8, 2016 Letter), ULS File No. 0006682035.

¹³⁰ CDOT February 17, 2015 Letter at 1.

¹³¹ *Id*.

¹³² *Id*.

¹³³ PTC-220 February 6, 2015 Letter at 1.

¹³⁴ *Id*.

¹³⁵ *Id*. at 2.

¹³⁶ *Id*.

¹³⁷ CSX November 25, 2015 Letter at 1.

- 48. NJ Transit, which provides more than 85 million passenger trips each year on its 11 commuter rail lines, ¹³⁸ strongly supports MTA's request to modify Station KIVD0002. NJ Transit states that, as a result of the modification, it will obtain spectrum from MTA "to implement PTC in Essex, Passaic, Hudson, Bergen, Union, Somerset and Morris Counties in northern New Jersey." NJ Transit explains that compatible wireless spectrum is needed to deploy PTC in this heavily trafficked area, ¹⁴⁰ and that NJ Transit and MTA are "already engaged in technical spectrum negotiations . . . which will be used as the basis for a [spectrum] lease between the two parties." The parties also have committed to resolve outstanding technical issues, including providing each other engineering analyses, master site tables, and testing validation of PTC radio performance. MTA and NJ Transit intend to "enter into the appropriate lease arrangement subject to the approval of their respective boards." ¹⁴³
- 49. NJ Transit states that use of the MTA spectrum "is an ideal solution as it meets the technical requirements set forth by the NJ Transit PTC design, promotes coordination between sister railroads on an important passenger safety project, and supports the efficient use of valuable radio frequency." NJ Transit explains that because MTA will coordinate spectrum use under a common channel plan that will integrate NJ Transit base stations with LIRR and Metro-North base stations, spectral separation between the NJ Transit and MTA ACSES operations will not be required. 145
- 50. Amtrak operates passenger trains on Metro-North's Hudson Line from Spuyten Duyvil to Poughkeepsie, New York, and on Metro-North's New Haven Line from New Rochelle, New York to New Haven, Connecticut. Amtrak states "[t]hese Lines are an important part of Amtrak's intercity rail service," and that it supports MTA's commitment to implement PTC, "as it gains safety benefits from PTC implementation on critical sections of the rail network." Amtrak states that it is confident that it can resolve any technical issues associated with MTA's intended PTC deployment.
- 51. The Havens Entities filed a pleading captioned "Petition in Opposition, Under Competitive Standing, and in the Public Interest" in which they oppose MTA's request to modify Station KIVD0002. Citing their petition for reconsideration of the *MTA Power Waiver Order*, Havens Entities ENL, ITL, and SSF allege "private competitor interests and standing." ENL, ITL, and SSF however do not compete

¹³⁸ NJ Transit Facts at a Glance, Fiscal Year 2014 at 1, available at https://www.njtransit.com/pdf/FactsAtaGlance.pdf, webpage last visited January 20, 2016.

¹³⁹ Letter from Veronique Hakim, Executive Director NJ Transit, and Joseph Giulietti, President, Metro-North Railroad, to Thomas Wheeler, Chairman, FCC, dated October 16, 2015 at 1 (NJ Transit October 16, 2015 Letter). The NJ Transit letter is attached to a Letter from Alan S. Tilles, MTA Counsel, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC, dated October 16, 2015, ULS File No. 0006682035.

¹⁴⁰ NJ Transit February 17, 2015 Letter at 1.

¹⁴¹ *Id*.

¹⁴² NJ Transit October 16, 2015 Letter at 1-2.

¹⁴³ *Id*. at 1.

¹⁴⁴ NJ Transit December 11, 2015 Letter at 1.

¹⁴⁵ Id

¹⁴⁶ Letter from Rodrigo Bitar, Senior Vice President and Chief Engineer, Amtrak, to Thomas Wheeler, Chairman, FCC, dated November 30, 2015. The letter is attached to a Letter from Alan S. Tilles, MTA Counsel, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC, dated December 9, 2015 (filed December 21, 2015), ULS File No. 0006682035. Amtrak also operates on the LIRR's Main Line from Harold Interlocking to Gate Interlocking. *Id*.

¹⁴⁷ *Id*.

¹⁴⁸ *Id*.

¹⁴⁹ Opposition to MTA Modification Request at 5.

directly or indirectly with MTA's provision of commuter rail service and therefore lack competitive standing. 150

- 52. ENL, ITL, and SSF also claim standing, arguing that planned operations under certain of their adjacent band AMTS licenses could be impacted if we extend the relief granted in the *MTA Power Waiver Order* to enable Metro-North's PTC implementation in the four counties at issue. We agree that given their licenses' spectral and geographic proximity to Metro-North's intended PTC operations, these three entities have standing to oppose extending the relief granted in the *MTA Power Waiver Order*. We note however that we are proposing to extend that relief subject to additional attenuation of out-of-band emissions. The additional attenuation is intended to ensure that PTC operations under the higher permissible ERP limits would have no greater effect on the Havens Entities' planned spectrally adjacent operations than would PTC operations under Section 95.855's ERP limits. We find that none of the remaining Havens Entities have standing. Accordingly, our assessment below of the claims and other assertions made by the "Havens Entities" is limited to those entities for which we find standing: ENL, ITL, and SSF.
- 53. The Havens Entities "reference and incorporate in full their facts and arguments" contained in their petitions for reconsideration of the renewal of Station KIVD0002 and of the *MTA Power Waiver Order*, and all other filings they made in those two proceedings. The Havens Entities argue those petitions and filings show that the *MTA Power Waiver Order* should not have been granted and Station KIVD0002 automatically terminated (*i.e.*, should not have been renewed). They state we should first determine the license's validity before acting on MTA's license modification request. We have addressed both of those petitions for reconsideration above and determined the license is valid. It is therefore unnecessary for us to revisit the Havens Entities' assertions of fact and arguments made in the license renewal and power waiver proceedings in the context of MTA's request for modification of Station KIVD0002.

3. Legal Authority

54. Section 316(a)(1) of the Act authorizes the Commission to modify any station license "if in the judgment of the Commission such action will promote the public interest, convenience, and necessity, or the provisions of this chapter [i.e., the Communications Act] or of any treaty ratified by the United

¹⁵⁰ See Application of Louis E. Caster, *Memorandum Opinion and Order*, FCC 57-1404, 44 FCC.2d 1181, 1185 at ¶10, 1957 WL 93922 (1957) ("the touchstone of any determination of who is a 'party in interest' from an economic standpoint . . . is one of *direct* and *immediate* competitive injury," citing *FCC v. Sanders Bros*, 309 U.S. 470 (1940) (emphasis in original)).

¹⁵¹ Opposition to MTA Modification Request at 5.

¹⁵² See infra discussion at para, 66 (additional attenuation requirement).

¹⁵³ As in their petitions for reconsideration of the *MTA Power Waiver Order* and the renewal of Station KIVD0002, Havens Entities THL and V2G LLC argue they have standing because they cooperate with ENL, ITL, and SSF on certain nationwide plans to use their combined spectrum holdings. Opposition to MTA Modification Request at 7. THL and V2G LLC do not hold AMTS spectrum near the MTA's planned PTC operations. That they may cooperate or combine spectrum holdings under a common plan with ENL, ITL, and SSF does not afford them standing to challenge modification of Station KIVD0002. The Havens Entities offer no explanation in their pleadings regarding why Mr. Havens himself, ENL-2, or VSL would have standing to challenge modification of Station KIVD002 nor are we aware of any. We decline the Havens Entities' alternative request that, if they are found to not have standing, we treat their opposition as an informal request for Commission action under Section 1.41 of the Commission's rules. Opposition to MTA Modification Request at 1.

¹⁵⁴ Opposition to MTA Modification Request at 8.

¹⁵⁵ *Id*.

¹⁵⁶ Id. at 10.

States will be more fully complied with."¹⁵⁷ The Commission's authority to modify licenses under Section 316(a)(1) is well established. The U.S. Court of Appeals for the District of Columbia Circuit has recognized the Commission's "broad power to modify licenses" under Section 316(a)(1), explaining that the Commission "need only find that the proposed modification serves the public interest, convenience and necessity."¹⁵⁹

- 55. On August 10, 1993, the Omnibus Budget Reconciliation Act of 1993 (1993 Budget Act)¹⁶⁰ added Section 309(j) to the Communications Act. Section 309(j)(1) generally requires the Commission to award spectrum licenses by a system of competitive bidding once it has accepted mutually exclusive applications.¹⁶¹ Following passage of the 1993 Budget Act and after awarding licenses for the first nine 218-219 MHz Service markets by lottery,¹⁶² the Commission decided to auction future licenses in the service, reasoning that the spectrum would likely be used to provide a commercial service.¹⁶³ The Commission auctioned licenses by oral outcry, including licenses for each of the four CMAs where MTA seeks spectrum to implement PTC;¹⁶⁴ several of the licenses were not granted because the provisionally winning bidders failed to make required payments, while others were returned to the Commission. In 2010, the Commission postponed a possible second auction of 218-219 MHz Service licenses.¹⁶⁵ The Commission has not accepted mutually exclusive applications for these spectrum licenses, and is not required to do so.
- 56. Section 309(j)(6)(E) of the Act provides that the competitive bidding requirements of Section 309(j)(1) should not "be construed to relieve the Commission of the obligation in the public interest to continue to use engineering solutions, negotiation, threshold qualifications, service regulations, and other means in order to avoid mutual exclusivity in application and licensing proceedings." It is well-established that Section 309(j)(6)(E) provides "the Commission broad authority to create or avoid mutual exclusivity in licensing, based on the Commission's assessment of the public interest." In the 800 MHz

¹⁵⁷ 47 U.S.C. § 316(a)(1).

¹⁵⁸ See Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Services in the Upper and Lower L-Band, *Report and Order*, IB Docket 96-132, FCC 02-24, 17 FCC Rcd 2704, 2714 ¶25 (2002) (citing *Rainbow Broadcasting Co. v. FCC*, 949 F.2d 405 (D.C. Cir. 1991)) ("the Commission is afforded significant latitude when it exercises its Section 316 authority") (subsequent history omitted).

¹⁵⁹ California Metro Mobile Communications v. FCC, 365 F.3d 38, 45 (D.C. Cir. 2004).

¹⁶⁰ P.L. 103-66, 107 Stat. 312 (1993).

¹⁶¹ 47 U.S.C. § 309(j)(1).

¹⁶² The 218-219 MHz Service was formerly known as the Interactive Video and Data Service. *See supra* note 3.

¹⁶³ Implementation of Section 309(j) of the Communications Act—Competitive Bidding, *Second Report and Order*, PP Docket No. 93–253, FCC 94–61, 9 FCC Rcd 2348, 2357 ¶51 (1994) (subsequent history omitted) (the "principal use of IVDS will be "reasonably likely to involve" the receipt of compensation from subscribers").

¹⁶⁴ See Announcing High Bidders for 594 Interactive Video and Data Service (IVDS) Licenses, *Public Notice*, Mimeo No. 44160 (rel. Aug. 2, 1994).

¹⁶⁵ See Wireless Telecommunications Bureau Postpones Auction of 218-219 MHz Service and Phase II 220 MHz Service Licenses (Auction 89), *Public Notice*, AU Docket No. 10-107, DA 10-1630, 25 FCC Rcd 12507 (2010).

¹⁶⁶ See 47 U.S.C. § 309(j)(6)(E).

¹⁶⁷ 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 No. 02-55, FCC 04-168, 19 FCC Rcd 14969, 15021 ¶85 (2004) (800 MHz Order) (other captions, docket numbers, and subsequent history omitted). *See also* Amendment of the Commission's Rules Regarding Multiple Address Systems, *Report and Order*, WT Docket No. 97-81, 15 FCC Rcd 11956, 11962-63 ¶12 (2000) ("Section 309(j)(6)(E) has been construed to give the Commission broad authority to create or avoid mutual exclusivity in licensing, based on the Commission's assessment of the public interest," citing *DirectTV, Inc. v. FCC*, 110 F.3d 816, 828 (D.C. Cir. 1997)).

Order, for example, the Commission stated that "in Section 309(j)(6)(E), Congress recognized that the Commission can determine that its public interest obligation warrants action that avoids mutual exclusivity, and that this obligation extends to "application and licensing proceedings" (which include license modifications), not just initial licensing matters."¹⁶⁸ Here, MTA seeks spectrum by license modification to enable implementation of a Congressionally-mandated critical rail safety system intended to help protect life and property. Under these unique circumstances, we find that the public interest is served by not permitting the filing of mutually exclusive applications for the limited spectrum at issue.

57. The Havens Entities argue that the Commission may only effectuate the proposed modification of Station KIVD0002 by a rulemaking to remove the requested 218-219 MHz Band spectrum from the spectrum auctions process. We disagree. The Havens Entities' cite no authority compelling the Commission to proceed by rulemaking nor are we aware of any. The notice and comment rulemaking procedures embodied in Section 553 of the Administrative Procedure Act do not apply here because we are not proposing a new rule or proposing to amend an existing rule. 170

4. Modification of Station KIVD0002 Will Promote the Public Interest, Convenience, and Necessity

58. We have carefully reviewed the record before us and find that the proposed modification of Station KIVD0002 will promote the public interest, convenience, and necessity—the touchstone for modification of a license under Section 316(a) of the Act.¹⁷¹ We also find that the proposed modification of Station KIVD0002 is consistent with the Commission's fundamental obligation to "promot[e] safety of life and property through the use of wire and radio communications..."¹⁷²

59. Congress enacted the PTC mandate in the immediate wake of a tragic rail accident in Chatsworth, California where, on September 12, 2008, a Metrolink commuter train collided head-on with a Union Pacific freight train, killing 25 passengers and injuring more than 100 others. The NTSB found that the Metrolink engineer failed to observe and appropriately respond to a red signal, and that a PTC system would have stopped the Metrolink train short of the red signal and thus prevented the collision. The NTSB found that the Metrolink train short of the red signal and thus prevented the collision.

Report No. RAR-10/01 at vii (January 21, 2010) (NTSB Report No. RAR-10/01), available at http://www.ntsb.gov/investigations/AccidentReports/Reports/RAR1001.pdf, webpage last visited January 20, 2016.

¹⁶⁸ 800 MHz Order, 19 FCC Rcd at 15015 ¶73.

¹⁶⁹ Opposition to MTA Modification Request at 9.

outside of a rulemaking, unspecified rule waivers must have been requested by MTA and granted. Opposition to MTA Modification Request at 9. It is unclear what rule waivers the Havens Entities believe MTA should have requested. The Havens Entities also argue that the Commission has "already concluded that it would not reallocate spectrum for PTC systems" in WT Docket No. 11-79. *See* Opposition to MTA Modification Request at 8-9. The Commission made no such finding in WT Docket No. 11-79. That docket was initiated by the Wireless Telecommunications Bureau to obtain comment on spectrum needs for PTC implementation. *See* Wireless Telecommunications Bureau Seeks Comment on Spectrum Needs for the Implementation of the Positive Train Control Provisions of the Rail Safety Improvement Act of 2008, *Public Notice*, WT Docket No. 11-79, 26 FCC Rcd 6704 (WTB 2011).

¹⁷¹ 47 U.S.C. § 316(a).

¹⁷² 47 U.S.C. § 151.

¹⁷³ NTSB, Collision of Metrolink Train 111 with Union Pacific Train LOF65-12 Chatsworth, California, Accident

¹⁷⁴ NTSB Report No. RAR-10/01 at vii.

- 60. According to the NTSB, since 1970, there have been more than 140 rail accidents across the nation with nearly 300 fatalities, more than 6,500 injuries, and costing millions of dollars, that could have been prevented or mitigated by PTC. The MTA experienced a tragic rail accident on December 1, 2013, when a Metro-North commuter train derailed in the Bronx after entering a speed-restricted curve at 82 mph, taking four lives and injuring 61 others. The NTSB determined that a contributing factor to the accident was the absence of a PTC system that would have automatically applied the brakes to enforce the speed restriction. More recently, on May 12, 2015, an Amtrak train derailed near Philadelphia after entering a 50 mph speed-restricted curve at 106 mph, killing eight passengers, injuring more than 200 others, and causing more than \$9 million of estimated property damage. Although the NTSB is continuing its investigation, NTSB Chairman Christopher A. Hart has stated PTC "would have prevented the May 12 accident."
- 61. We also note that on May 6, 2015, the FRA provided MTA a \$967.1 million loan to finance PTC deployment by Metro-North and the LIRR. U.S. Transportation Secretary Anthony Foxx stated that the "loan will help prevent derailments and ensure the safety of the riding public." FRA Administrator Sarah Feinberg noted that "[t]here are 166 million rides taken on LIRR and Metro-North annually [and that] [i]nstalling PTC will further ensure the safety of employees and passengers alike." We find that the proposed modification of Station KIVD0002 will promote the irrefutable public interest in rail safety by enabling Metro-North to meet its statutory obligation to deploy PTC as required by Congress in the Rail Safety Improvement Act of 2008. Specifically, the proposed license modification will promote the public interest, convenience, and necessity under Section 316(a)(1) of the Act by:
 - Providing Metro-North, one of the nation's busiest commuter railroads, spectrum needed to implement PTC in Dutchess and Orange counties, New York, and Fairfield and New Haven counties, Connecticut, where MTA has been unable to acquire spectrum on the secondary market. 182
 - Promoting rail safety by enabling Amtrak to deploy PTC-equipped passenger trains on Metro-North's Hudson Line (which traverses Dutchess County, New York), and on Metro-North's New Haven Line in Fairfield and New Haven counties, Connecticut, where more

¹⁷⁵ Passenger Rail Safety: Accident Prevention and On-Going Efforts to Implement Train Control Technology: Hearing before the S. Comm. on Commerce, Science, & Transportation, 161 Cong. 1 (2015) (June 10, 2015 testimony of T. Bella Dinh-Zarr, PhD, MPH, NTSB Member, available at http://www.ntsb.gov/news/speeches/T-Bella-Dinh-Zarr/Pages/dinh-zarr20150610.aspx, webpage last visited January 20, 2016.

¹⁷⁶ MTA Modification Request at 5-6. *See also* NTSB, *Metro North Railroad Derailment*, Accident Brief No. RAB-14/12 (October 24, 2014) (NTSB Brief No. RAB-14/12), available at http://ntsb.gov/investigations/AccidentReports/Pages/RAB1412.aspx, webpage last visited January 20, 2016.

¹⁷⁷ NTSB Brief No. RAB-14/12.

¹⁷⁸ NTSB Preliminary Report, DCA15MR010 (June 2, 2105), available at http://ntsb.gov/investigations/AccidentReports/Pages/DCA15MR010_Preliminary.aspx, webpage last visited January 20, 2016.

¹⁷⁹ Oversight of the Amtrak Accident in Philadelphia: Hearing before the H. Comm. on Transportation & Infrastructure, 161 Cong. 1 (2015) (June 2, 2015 testimony of Hon. Christopher A. Hart, NTSB Chairman), available at http://www.ntsb.gov/news/speeches/CHart/Pages/hart_20150602.aspx, webpage last visited January 20, 2016

¹⁸⁰ See Federal Railroad Administration Issues \$967.1 Million MTA Loan to Finance Critical Safety Upgrades to the Nation's Largest Commuter Railroads, Press Release FRA 07-15 (May 6, 2015), available at https://www.fra.dot.gov/eLib/details/L16359#p1 z25 gD lPR, webpage last visited January 20, 2016.

¹⁸¹ *Id*

¹⁸² See supra discussion at para. 40.

- than 37 million trips are made each year. 183
- Promoting rail safety by enabling Metro-North to deploy PTC on three commuter rail branch lines that intersect the New Haven Line in southwestern Connecticut—the New Canaan and Danbury Lines in Fairfield County, and the Waterbury Line in New Haven County.¹⁸⁴
- Promoting rail safety beyond Metro-North's service territory by the requirement (a condition
 of the proposed license modification) that MTA provide spectrum now licensed under Station
 KIVD0002 to NJ Transit to enable its PTC implementation in seven northern New Jersey
 counties
- Promoting rail safety by providing Metro-North and NJ Transit access to spectrum to deploy ACSES with more than one megahertz of spectral separation from the freight railroads' I-ETMS radio deployment in the 220-222 MHz band; spectral separation that the FRA-funded TTCI Study states is required to avoid intersystem interference that could cause both systems to fail.¹⁸⁵
- 62. In addition to the above, the proposed modification of Station KIVD0002 will also uniquely promote the public interest by resulting in a return of comparable spectrum from Station KIVD0002 to the Commission for future reassignment. The proposed license modification would provide the Commission spectrum authorized under Station KIVD0002 in five counties with a total population of 2,637,414, in exchange for 250 kHz of spectrum needed to implement PTC in four counties with a total population of 2,449,607. As a result of the proposed modification, the Commission's 218-219 MHz Service spectrum inventory would increase by a net 46,951 MHz/pops.

5. License Modification and Conditions

- 63. In view of the foregoing and pursuant to Section 316(a)(1) of the Act, we hereby propose to modify Station KIVD0002 to:
 - Authorize the use of an additional 250 kHz of spectrum, 218.501-218.750 MHz, ¹⁹⁰ in Dutchess County, New York (CMA151); Orange County, New York (CMA144); Fairfield County, Connecticut (CMA042); and New Haven County, Connecticut (CMA049); ¹⁹¹
 - Delete the authorization to use 250 kHz of spectrum, 218.751-219.000 MHz from five New Jersey counties, all in CMA001—Essex, Morris, Passaic, Somerset, and Union—which spectrum will become unassigned and available for future disposition as determined by the

¹⁸³ CDOT February 17, 2015 Letter at 1.

¹⁸⁴ MTA January 8, 2016 Letter at 1.

¹⁸⁵ See supra discussion at para. 42.

¹⁸⁶ MTA Modification Request at 15 (the proposed license modification "would result in a net gain of spectrum to be made available by the Commission to other entities").

¹⁸⁷ Based on the 2010 U.S. Census, the population includes: Essex, 783,969, Morris, 492,276; Passaic, 501,226; Somerset, 323,444; and Union, 536,499.

 $^{^{188}}$ Based on the 2010 U.S. Census, the population includes: Dutchess, 297,488; Fairfield, 916,829; New Haven, 862,477; Orange, 372,813.

 $^{^{189}}$ 250 kHz x (2,637,414-2,449,607) = 46,951 MHz/pops.

¹⁹⁰ This spectrum will provide Metro-North 1.25 MHz of spectral separation from the freights' I-ETMS deployment in 220-222 MHz Band, mitigating the potential for intersystem interference identified in the FRA-funded TTCI Study. *See supra* discussion at para. 42.

¹⁹¹ See MTA December 9, 2015 Letter (proposing assignment of spectrum from 218.500 to 218.750 MHz).

Commission; 192 and

• Add a special condition requiring MTA to sell or lease on commercially reasonable terms sufficient spectrum now licensed under Station KIVD0002 in Bergen, Essex, Hudson, Morris, Passaic, Somerset, and Union counties, New Jersey, to NJ Transit to enable its PTC implementation. Within 90 days of the release date of an order of modification, MTA must submit a letter under file number 0006682035, authorizing MTA to sell or lease sufficient spectrum to NJ Transit for its PTC implementation in Bergen, Essex, Hudson, Morris, Passaic, Somerset, and Union counties, New Jersey. Within 180 days of the release date of an order of modification, MTA must file an application to sell or lease sufficient spectrum to NJ Transit for its PTC implementation in Bergen, Essex, Hudson, Morris, Passaic, Somerset, and Union counties, New Jersey.

6. Power Waiver Request

- 64. MTA requests a limited waiver of Section 95.855's ERP limits—from 4 to 8 watts for mobile operations, and from 20 to 30 watts for base station operations—to facilitate Metro-North's PTC implementation in Dutchess and Orange counties, New York, and Fairfield and New Haven counties, Connecticut. We evaluate MTA's waiver request under Section 1.925(b)(3) of the Commission's Rules. Under that rule, the Commission may grant a request for waiver if it is shown that: (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) 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. The Commission also may waive its rules for good cause shown.
- 65. In the *MTA Power Waiver Order*, the Bureau granted MTA a waiver of Section 95.855's ERP limits to facilitate PTC implementation by Metro-North and LIRR under Station KIVD0002. MTA states that "[a]doption of consistent technical parameters across the breadth of the MTA's PTC system will aid in system design, reducing potential costs by avoiding the need to utilize different equipment in different parts of the MTA's service area." The Havens Entities claim that the requested increase in permissible ERP—for PTC operations in Dutchess and Orange counties, New York, and Fairfield and New Haven counties, Connecticut—could result in interference to planned operations under several of the Havens Entities' spectrally adjacent AMTS licenses. As explained above, we are modifying the *MTA Power Waiver Order* to require additional attenuation of out-of-band emissions to address the possibility of interference to the Havens Entities' planned spectrally adjacent operations.
- 66. We find that the public interest in rail safety will be served by affording MTA the same relief granted in *MTA Power Waiver Order*, as modified above, to facilitate Metro-North's PTC implementation in Dutchess and Orange counties, New York, and Fairfield and New Haven counties, Connecticut. We find that in view of the unique factual circumstances before us, strict application of Section 95.855's power limits to Metro-North's PTC deployment would not serve the public interest. Congress adopted

¹⁹² *Id.* (proposing return of spectrum from 218.750 to 219 MHz).

¹⁹³ MTA Modification Request at 16.

¹⁹⁴ 47 C.F.R. § 1.925(b)(3).

¹⁹⁵ 47 C.F.R. § 1.3.

¹⁹⁶ MTA Power Waiver Order, 29 FCC Rcd 2004.

¹⁹⁷ MTA Modification Request at 16.

¹⁹⁸ Opposition to MTA Modification Request at 5.

¹⁹⁹ See supra discussion at paras. 32-35.

the PTC mandate to save lives and property, and the higher power limits requested here will enable Metro-North to meet its obligation to deploy PTC. We therefore propose to grant MTA a limited waiver of Section 95.855's power limits—from 4 to 8 watts for mobile operations, and from 20 to 30 watts for base and fixed station operations and subject to the additional attenuation requirements adopted above—to deploy PTC in Dutchess and Orange counties, New York, and Fairfield and New Haven counties, Connecticut.

7. Protest Rights, Procedures, and Delegation of Authority

67. Section 316(a)(1) of the Act provides that no proposed order of modification shall become final until the license holder has been provided at least 30 days to protest the proposed order; the Commission may establish a shorter period where the safety of life or property is involved.²⁰⁰ We will provide MTA 30 days from the release date of this Proposed Order of Modification to file a protest. Section 316(a)(2) of the Act provides that "[a]ny other licensee or permittee who believes its license or permit would be modified by the proposed action may also protest the proposed action before its effective date."²⁰¹ Section 316(a)(3) provides that "[a]ny protest filed . . . shall be subject to the requirements of section 309, for petitions to deny."²⁰² Section 309(d) in turn provides that a petition to deny must "show that the petitioner is a party in interest," that is, has standing, and that the Commission's action would be contrary to the public interest.²⁰³

68. Today's proposed action would benefit millions of Americans by enabling Metro-North to implement PTC on key track segments in Connecticut (track also used by Amtrak) and in New York State, and by enabling NJ Transit to deploy PTC in northern New Jersey. We seek to ensure that the public realizes these benefits expeditiously and believe that the Wireless Telecommunications Bureau has the necessary expertise to address any protest of today's proposed action. We therefore delegate authority to the Bureau to issue an order of modification if appropriate after addressing any protest of the proposed modification of Station KIVD0002. We further authorize the Bureau to dismiss any pleading—however captioned—challenging the proposed modification of Station KIVD0002 that does not comply with the requirements of Sections 309 and 316 of the Act and Section 1.87 of the Commission's rules. The filing of an appeal, a petition for reconsideration, or other pleading regarding today's Order on Reconsideration will not preclude the Bureau from issuing an order of modification in the public interest.

IV. CONCLUSION AND ORDERING CLAUSES

69. We emphasize that we are proposing to modify Station KIVD0002 to enable Metro-North to meet its statutory obligation to deploy a PTC system as required by Congress in the Rail Safety Improvement Act of 2008. The additional 250 kHz of spectrum that we propose to authorize MTA to use under its Station KIVD0002 license may only be used to comply with Congress's PTC mandate and is subject to the requirement that MTA sell or lease on commercially reasonable terms sufficient spectrum—already licensed under Station KIVD0002—to NJ Transit to enable its PTC deployment in Bergen, Essex, Hudson, Morris, Passaic, Somerset, and Union counties, New Jersey.

70. Accordingly, IT IS ORDERED that pursuant to Sections 4(i), 303(r), and 316(a)(1) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), 316(a)(1), and Sections 1.87 and 1.925(b)(3) of the Commission's Rules, 47 C.F.R. § 1.87, 1.925(b)(3), this Proposed Order of Modification and Order on Reconsideration IS ADOPTED.

²⁰⁰ 47 U.S.C. § 316(a)(1). See also 47 C.F.R. § 1.87(a) (implementing 47 U.S.C. § 316(a)(1)).

²⁰¹ 47 U.S.C. § 316(a)(2). See also 47 C.F.R. § 1.87(c) (implementing 47 U.S.C. § 316(a)(2)).

²⁰² 47 U.S.C. § 316(a)(3). See also 47 C.F.R. § 1.87(d) (implementing 47 U.S.C. § 316(a)(3)).

²⁰³ 47 U.S.C. § 309(d). *See also* 47 C.F.R § 1.939 (petitions to deny).

²⁰⁴ Pub. L. No. 110-432, § 104, 122 Stat. 4848, 4857 (2008), amended by Pub. L. No. 114-73, § 1302 (Oct. 29, 2015).

- 71. IT IS FURTHER PROPOSED that pursuant to Sections 4(i) and 316(a) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 316(a), and Section 1.87 of the Commission's Rules, 47 C.F.R. § 1.87, Station KIVD0002, licensed to the Metropolitan Transportation Authority, BE MODIFIED consistent with Section III of this Proposed Order of Modification and Order on Reconsideration.
- 72. IT IS FURTHER ORDERED that pursuant to Section 316(a)(1) of the Communications Act of 1934, as amended, 47 U.S.C. § 316(a)(1), the Wireless Telecommunications Bureau SHALL SEND this Proposed Order of Modification and Order on Reconsideration by certified mail, return receipt requested to the Metropolitan Transportation Authority.
- 73. IT IS FURTHER ORDERED that pursuant to Sections 4(i) and 316 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 316, and Section 1.87 of the Commission's Rules, 47 C.F.R. § 1.87, the Wireless Telecommunications Bureau is delegated authority to issue an order of modification and resolve any protests of the Proposed Order of Modification consistent with Section III of this Proposed Order of Modification and Order on Reconsideration.
- 74. IT IS FURTHER ORDERED that pursuant to Sections 4(i) and 405 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 405, and Section 1.106 of the Commission's Rules, 47 C.F.R. § 1.106, the Petition for Reconsideration filed by Environmentel LLC, Environmentel-2 LLC, Intelligent Transportation & Monitoring Wireless LLC, Skybridge Spectrum Foundation, Telesaurus Holdings GB LLC, Verde Systems LLC, V2G LLC and Warren Havens on September 26, 2014, File No. 0006109691, IS DISMISSED with prejudice as procedurally defective.
- 75. IT IS FURTHER ORDERED that pursuant to Sections 4(i) and 405 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 405, and Section 1.106 of the Commission's Rules, 47 C.F.R. § 1.106, the Petition for Reconsideration filed by Environmentel LLC, Environmentel-2 LLC, Intelligent Transportation & Monitoring Wireless LLC, Skybridge Spectrum Foundation, Telesaurus Holdings GB LLC, Verde Systems LLC, V2G LLC and Warren Havens on March 31, 2014, File No. 0005681972, IS GRANTED TO THE EXTENT PROVIDED ABOVE, AND IS OTHERWISE DENIED.
- 76. AND IT IS FURTHER ORDERED that pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and Section 1.925(b)(3) of the Commission's Rules, 47 C.F.R. § 1.925(b)(3), the request filed on December 30, 2015 by the Metropolitan Transportation Authority for additional time, until December 31, 2018, to make a satisfactory showing of substantial service to perfect renewal of Station KIVD0002, File No. 0007078953, IS GRANTED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch Secretary