

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

ORDER OF MODIFICATION

Adopted: August 10, 2016

Released: August 10, 2016

By the Chief, Mobility Division, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. In this Order of Modification we modify Station KIVD0002, licensed to the Metropolitan Transportation Authority (MTA) in the 218-219 MHz Service, to facilitate implementation of a Congressionally-mandated positive train control (PTC) system¹ by the MTA Metro-North Commuter Railroad (Metro-North).² Our action will also enable the National Railroad Passenger Corporation (Amtrak) to use PTC where it is a tenant on Metro-North track, and will benefit New Jersey Transit’s (NJ Transit) PTC deployment by requiring MTA to provide NJ Transit access to sufficient spectrum to deploy PTC in seven northern New Jersey counties.

II. BACKGROUND

2. *Metro-North and Positive Train Control.* Metro-North is one of the nation’s busiest commuter railroads, providing more than 275,000 passenger trips on an average weekday within its service territory.³ Its affiliate commuter railroad, the Long Island Rail Road (LIRR), provides more than 300,000 passenger trips on an average weekday on routes running from eastern Long Island to Manhattan’s Penn Station.⁴ Metro-North and LIRR are a critical part of the Northeast Corridor (NEC),

¹ Congress adopted the PTC mandate in the Rail Safety Improvement Act of 2008. See Pub. L. No. 110-432, § 104, 122 Stat. 4848, 4857 (2008), amended by the Positive Train Control Enforcement and Implementation Act of 2015, Pub. L. No. 114-73, § 1302, 129 Stat. 568, 576 (Oct. 29, 2015). PTC systems are intended to reduce the risk of human-error rail accidents, by “prevent[ing] 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.” 49 U.S.C. § 20157(i)(5).

² Request for Modification of License of the Metropolitan Transportation Authority, ULS File No. 0006682035 (filed Feb. 23, 2015). See *Metropolitan Transportation Authority*, Proposed Order of Modification and Order on Reconsideration, 31 FCC Rcd 1436 (2016) (*Proposed Order of Modification* and *Order on Reconsideration*, respectively).

³ *Proposed Order of Modification*, 31 FCC Rcd at 1448, para. 39. Metro-North’s 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). *Id.*

⁴ Long Island Rail Road, General Information, <http://web.mta.info/lirr/about/GeneralInformation/> (last visited July 29, 2016). The LIRR serves five counties in New York State: Brooklyn, Nassau, New York, Queens, and Suffolk. *Id.*

which extends from Boston to Washington, D.C.⁵

3. Pursuant to the Rail Safety Improvement Act of 2008 (RSIA), as amended by the Positive Train Control Enforcement and Implementation Act of 2015,⁶ Congress has required all trains providing passenger service and freight trains operating on lines carrying toxic and poisonous-by-inhalation hazardous materials to implement interoperable⁷ PTC systems by December 31, 2018.⁸ The American rail industry has chosen to implement PTC using radio spectrum that creates wireless networks with the capacity to 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. Like Amtrak, NJ Transit, and other commuter railroads serving the NEC, Metro-North and the LIRR are deploying a PTC radio technology called an Advanced Civil Speed Enforcement System (ACSES).⁹ ACSES radios are designed to operate in the 216-222 MHz frequency range.¹⁰

4. To implement ACSES for Metro-North and the LIRR, MTA acquired Station KIVD0002, the frequency B segment (218.501 to 219.000 MHz) license of the 218-219 MHz Service for the New York Cellular Market Area (CMA001).¹¹ The license area includes five counties comprising the LIRR’s service territory and five of the nine counties comprising Metro-North’s service territory.¹² 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.¹³ MTA’s efforts to obtain other suitable spectrum for PTC implementation were limited by the U.S. freight railroads’ decision to deploy a different PTC radio technology, called an Interoperable Electronic Train Management System (I-ETMS), in the 220-222 MHz band.¹⁴

5. Having been unsuccessful in securing other suitable spectrum in the secondary market to

⁵ See Northeast Corridor Fact Sheet, <http://nec.amtrak.com/node/321> (last visited July 29, 2016). Of the over 260 million passenger trips per year that take place on the NEC, the balance of these trips is provided by eight commuter railroads that share the NEC. *Id.*

⁶ See *supra* note 1.

⁷ Interoperability is defined as “the ability to control locomotives of the host railroad and tenant railroad to communicate with and respond to the positive train control system, including uninterrupted movements over property boundaries.” 49 U.S.C. § 20157(i)(3).

⁸ 49 U.S.C. § 20157(a)(1). In October 2015, Congress extended the PTC implementation deadline from December 31, 2015, to December 31, 2018. See Positive Train Control Enforcement and Implementation Act of 2015, Pub. L. No. 114-73, § 1302, 129 Stat. 568, 576 (Oct. 29, 2015). 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).

⁹ *Proposed Order of Modification*, 31 FCC Rcd at 1448, para. 39.

¹⁰ *Id.*

¹¹ *Id.* at 1448, para. 40.

¹² *Id.*

¹³ See *id.* at 1450, para. 44. 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).

¹⁴ The ACSES and I-ETMS technologies cannot operate without intersystem interference in the same spectrum band where freight and commuter railroads operate in close geographic proximity, as is the case in much of the NEC. *Id.* at 1449-50, paras. 41-43 (discussing May 2015 results of an FRA-funded engineering study performed by the Transportation Technology Center, Inc. (TTCI Study)). The TTCI Study concludes that I-ETMS radios should only operate above 220 MHz and ACSES radios below 219 MHz when in close geographic proximity in order to mitigate possible ACSES/I-ETMS intersystem interference in the NEC. *Id.* at 1449, para. 42.

complete Metro-North's PTC spectrum footprint,¹⁵ MTA requested that the Commission modify Station KIVD0002 by authorizing the use of an additional 250 kHz of 218-219 MHz Band spectrum (218.501-218.750 MHz) in Dutchess County, New York (CMA151); Orange County, New York (CMA144); Fairfield County, Connecticut (CMA042); and New Haven County, Connecticut (CMA049).¹⁶ MTA requested modification of 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 Station KIVD0002 to the Commission.¹⁷ MTA also committed to provide spectrum it would retain in seven New Jersey counties after the license modification to NJ Transit for the latter's PTC implementation.¹⁸ Additionally, MTA requested a limited waiver of Section 95.855's effective radiated Power (ERP) limits,¹⁹ 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.²⁰

6. *Commission's Proposed Order of Modification.* On February 16, 2016, the Commission adopted the *Proposed Order of Modification*.²¹ The Commission found that Section 316(a)(1) of the Communications Act of 1934, as amended, provides it authority to modify Station KIVD0002 as requested by MTA.²² The Commission found that the proposed license modification will promote the vital public interest in rail safety in three respects: (1) by enabling Metro-North to complete its PTC deployment; (2) by enabling Amtrak to deploy PTC-equipped passenger trains on Metro-North track that runs from New Rochelle, New York, to New Haven, Connecticut; and (3) through the requirement that MTA provide NJ Transit sufficient spectrum now licensed under Station KIVD0002 to deploy PTC in northern New Jersey.²³ The Commission evaluated MTA's request for additional power to deploy PTC and found that strict application of Section 95.855's power limits would not serve the public interest.²⁴

7. The Commission delegated authority to the Wireless Telecommunications Bureau to issue an order of modification after addressing any protest of the *Proposed Order of Modification*.²⁵ The period for filing protests of the Proposed Order of Modification has ended and no party filed a protest.²⁶ However, Skybridge Spectrum Foundation (Skybridge)²⁷ filed a petition for reconsideration of the

¹⁵ See *id.* at 1448-49, para. 40.

¹⁶ *Id.* at 1447-48, para. 38.

¹⁷ *Id.* at 1448, para. 38.

¹⁸ *Id.* at 1450-51, para. 45.

¹⁹ 47 CFR § 95.855.

²⁰ *Proposed Order of Modification*, 31 FCC Rcd at 1458, para. 64.

²¹ See *supra* note 2.

²² Section 316(a) states the Commission may modify any station license "if in the judgment of the Commission such action will promote the public interest, convenience, and necessity . . ." 47 U.S.C. § 316(a).

²³ *Proposed Order of Modification*, 31 FCC Rcd at 1456-57, para. 61.

²⁴ *Id.* at 1458, para. 66.

²⁵ *Id.* at 1459, para. 68.

²⁶ The Commission prescribed a 30-day period to file protests, commencing on February 16, 2016 (the public release date of the *Proposed Order of Modification*). *Id.* at 1459, para. 67.

²⁷ 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 Skybridge and certain other related 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 Skybridge and the other 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 accepted on February 6, 2016. On March 11, 2016, Skybridge filed a voluntary petition for bankruptcy under

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Commission's Order on Reconsideration that upheld the renewal of MTA's license under call sign KIVD0002.²⁸

III. DISCUSSION

8. For the reasons stated above and in light of the overriding public interest in rail safety embodied in the Congressional mandate to implement PTC, we find it in the public interest to modify MTA's authorization consistent with the Commission's *Proposed Order of Modification*. Accordingly, we hereby modify Station KIVD0002 as follows:

- We authorize the use of an additional 250 kHz of spectrum, 218.501-218.750 MHz,²⁹ in Dutchess County, New York (CMA151); Orange County, New York (CMA144); Fairfield County, Connecticut (CMA042); and New Haven County, Connecticut (CMA049).
- We 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.³⁰

9. We modify Station KIVD0002 to permit Metro-North to deploy PTC in Dutchess and Orange counties, New York, and Fairfield and New Haven counties, Connecticut, at increased power levels under the *Proposed Order of Modification*, which granted a waiver of Section 95.855's ERP limits, from 4 to 8 watts for mobile PTC operations, and from 20 to 30 watts for base and fixed station PTC operations.³¹ The following additional attenuation requirements also apply consistent with the *Proposed Order of Modification*:

- Metro-North must attenuate out-of-band emissions (OOBE) of fixed and base PTC stations by an additional 1.77 dB when using increased ERP under the waiver.³²
- Metro-North must attenuate OOBE of mobile PTC stations by an additional 3 dB when using increased ERP under the waiver.³³

10. Consistent with the *Proposed Order of Modification*, we require MTA, as a condition of our modification of Station KIVD0002, to sell or lease on commercially reasonable terms sufficient spectrum now licensed under Station KIVD0002 to NJ Transit to enable its PTC implementation in seven northern New Jersey counties (Bergen, Essex, Hudson, Morris, Passaic, Somerset, and Union; collectively, the "Seven Counties") as follows:

- Within 90 days of the release date of this order, MTA must submit a letter under file number 0006682035 reaffirming MTA's authority to sell or lease sufficient spectrum to

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Chapter 11 with the U.S. Bankruptcy Court, Delaware District, Case No. 16-10626. The court dismissed that petition on May 6, 2016. See *Skybridge Spectrum Foundation, Debtor*, Case 16-10626-CSS, Doc 120, Order (May 6, 2016).

²⁸ Petition for Reconsideration, ULS File Nos. 0006109691, 0006682035, and 0005681972 (filed March 17, 2016); *Order on Reconsideration*, 31 FCC Rcd at 1439-43, paras. 9-19 (upholding renewal of Station KIVD0002).

²⁹ This spectrum will provide Metro-North 1.25 MHz of spectral separation from the freights' I-ETMS deployment in 220-222 MHz Band, thereby mitigating the potential for intersystem interference identified in the FRA-funded TTCI Study. *Proposed Order of Modification*, 31 FCC Rcd at 1457, para. 63 n.190.

³⁰ This spectrum shall become unassigned and available for future disposition as determined by the Commission.

³¹ *Proposed Order of Modification*, 31 FCC Rcd at 1458-59, paras. 64-66.

³² *Id.* at 1459, para. 66 (proposing additional attenuation requirements identical to those adopted in the *Order on Reconsideration*, 31 FCC Rcd at 1446-47, para. 32).

³³ *Proposed Order of Modification*, 31 FCC Rcd at 1459, para. 66 (proposing additional attenuation requirements identical to those adopted in the *Order on Reconsideration*, 31 FCC Rcd at 1447, para. 33).

NJ Transit to enable PTC implementation in the Seven Counties.

- Within 180 days of the release date of this order, MTA must file an application to sell or lease sufficient spectrum to NJ Transit to enable PTC implementation in the Seven Counties.³⁴

11. With respect to Skybridge's Petition for Reconsideration of the Order on Reconsideration, we note that the Commission stated that "[t]he filing of an appeal, a petition for reconsideration, or other pleading regarding [the] Order on Reconsideration will not preclude the Bureau from issuing an order of modification in the public interest."³⁵ We therefore find it is unnecessary to address Skybridge's petition here; it will be addressed separately as appropriate.

12. Finally, we note that MTA previously requested a spectrum assignment to facilitate its PTC deployment.³⁶ Because today's spectrum license modification will enable MTA to deploy PTC throughout its commuter rail service area, we dismiss MTA's request as moot.

IV. ORDERING CLAUSES

13. Accordingly, IT IS ORDERED 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, IS MODIFIED as specified in Section III of this Order of Modification. Modification of Station KIVD0002 is effective upon release of this Order of Modification.

14. 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 Order of Modification by certified mail, return receipt requested, to the Metropolitan Transportation Authority.

15. 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), the Waiver Request filed by the Metropolitan Transportation Authority on June 18, 2010, ULS File No. 0004289177, IS DISMISSED as moot.

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

FEDERAL COMMUNICATIONS COMMISSION

Roger S. Noel
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³⁴ We anticipate that NJ Transit will work closely with MTA to help ensure that the relevant application is filed timely.

³⁵ See *Proposed Order of Modification*, 31 FCC Rcd at 1459, para. 68.

³⁶ Waiver Request of the Metropolitan Transportation Authority Pursuant to Section 337(c) and Section 1.925, ULS File No. 0004289177 (filed June 18, 2010).