

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

In the Matter of
PTC-220, LLC
Request for Modification of Station KIVD0007 and
Waivers to Implement Positive Train Control
File No. 0007202625

PROPOSED ORDER OF MODIFICATION

Adopted: December 19, 2016

Released: December 19, 2016

By the Chief, Mobility Division, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. In this Proposed Order of Modification we propose to modify 218-219 MHz Service Station license KIVD0007 to facilitate Positive Train Control (PTC) implementation by New Jersey Transit (NJ Transit), the Southeastern Pennsylvania Transportation Authority (SEPTA), and certain freight railroads.

2. Station KIVD0007 currently includes 500 kilohertz of spectrum (218.000 to 218.500 MHz) in eight counties where NJ Transit and SEPTA must deploy PTC. However, NJ Transit and SEPTA also must deploy PTC in eight additional counties, bordering the current license area.

1 See infra discussion at paragraphs 4-5 (describing PTC).

2 PTC-220, LLC Request for License Modification and Waivers, ULS File No. 0007202625 (filed Mar. 25, 2016) (PTC-220 Modification Request) (describing PTC-220's plan to facilitate commuter rail PTC deployment and to resolve interference that would result from freight and commuter railroads operating within close geographic and spectral proximity), amended October 5, 2016 (PTC-220 Amendment to Modification Request). On October 28, 2016, PTC-220 submitted a letter to clarify its request. Letter, David L. Martin, Counsel to PTC-220, LLC, to Richard Arsenault, Chief Counsel, Mobility Division, Wireless Telecommunications Bureau (WTB), Federal Communications Commission (FCC) (Oct. 28, 2016) (on file in ULS File No. 0007202625) (PTC-220 October 28, 2016 Letter). PTC-220 is a joint venture of the nation's seven Class I freight railroads. Its members include BNSF Railway Company, Canadian National, Canadian Pacific, CSX Corporation (CSX), Kansas City Southern, Norfolk Southern Corporation (NS), and Union Pacific Corporation. PTC-220 Modification Request at 1 n.3.

3 Station KIVD0007 includes three New Jersey counties (Burlington, Camden, and Gloucester); NJ Transit must deploy PTC in Camden County. PTC-220 states that NJ Transit will obtain spectrum in Burlington County to provide interference protection and for possible future expansion of its commuter rail system into this county, which would require PTC deployment. See PTC-220 October 28, 2016 Letter at 1. Station KIVD0007 also includes five Pennsylvania counties (Bucks, Chester, Delaware, Montgomery, and Philadelphia) where SEPTA must deploy PTC. PTC-220 states that SEPTA will obtain spectrum in Gloucester County, New Jersey, to prevent interference to its PTC operations in adjacent counties. Id.

4 To complete its PTC spectrum footprint, NJ Transit also requires spectrum in the following New Jersey counties: Atlantic, Burlington and Camden (both now licensed under Station KIVD0007), Hunterdon, Middlesex, Monmouth, Ocean, Sussex, and Warren. In addition to spectrum in six counties now licensed under Station KIVD0007, SEPTA will require spectrum to deploy PTC in Mercer County, New Jersey.

requests that we modify Station KIVD0007 by authorizing the use of 250 kilohertz of spectrum from the Commission's 218-219 MHz band inventory in the eight additional counties. PTC-220 further requests that we modify Station KIVD0007 to return 250 kilohertz of spectrum from each of the eight counties currently comprising the license area to the Commission.<sup>5</sup> The modifications would result in a 16-county, 250 kilohertz spectrum license. PTC-220 has committed to partition the modified license between NJ Transit and SEPTA to implement PTC.<sup>6</sup>

3. We propose to modify Station KIVD0007 as requested by PTC-220. The proposed license modification will serve the public interest<sup>7</sup> in rail safety first by providing NJ Transit access to suitable spectrum in an area where it has encountered challenges in obtaining spectrum to deploy PTC.<sup>8</sup> Second, it will enable SEPTA to transition its PTC operations to the 218-219 MHz band, providing needed spectral separation from potentially interfering freight railroad PTC operations in the 220-222 MHz band.<sup>9</sup> Additionally, to facilitate the PTC deployments of NJ Transit and SEPTA, we propose to grant a limited waiver of the effective radiated power (ERP) limits specified in Section 95.855 of the Commission's rules<sup>10</sup>—from 4 to 8 watts for mobile operations, and from 20 to 30 watts for fixed and base station operations.<sup>11</sup> We also propose to grant a waiver of Section 95.815(b), which requires 218-219 MHz licensees to notify the Commission when they modify certain base stations,<sup>12</sup> and Section 1.955(a)(3), which provides that authorizations automatically terminate if service is permanently discontinued.<sup>13</sup>

## II. BACKGROUND

4. *Positive Train Control.* Pursuant to the Rail Safety Improvement Act of 2008,<sup>14</sup> as amended by the Positive Train Control Enforcement and Implementation Act of 2015,<sup>15</sup> all trains providing passenger service and freight trains operating on lines carrying toxic and poisonous-by-inhalation hazardous materials are required to implement interoperable<sup>16</sup> PTC systems by December 31, 2018.<sup>17</sup> PTC systems are intended to reduce the risk of human-error rail accidents, by “prevent[ing] train-

---

<sup>5</sup> See *id.* at 4. The spectrum would become unassigned and available for future disposition as determined by the Commission.

<sup>6</sup> PTC-220 Modification Request at 1-2.

<sup>7</sup> 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).

<sup>8</sup> See Letter from Charles N. Dickerson, Chief, Construction and Project Management, NJ Transit, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC, at 3-4 (Mar. 18, 2016) (on file in ULS File No. 0007202625) (attached as Appendix E to PTC-220 Modification Request) (NJ Transit Letter).

<sup>9</sup> See Letter from Jeffrey D. Knueppel, General Manager, SEPTA, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC (Sept. 14, 2016) (on file in ULS File No. 0007202625) (SEPTA Letter).

<sup>10</sup> 47 CFR § 95.855.

<sup>11</sup> See PTC-220 Modification Request at 16-23; PTC-220 Amendment to Modification Request.

<sup>12</sup> 47 CFR § 95.815(b).

<sup>13</sup> 47 CFR § 1.955(a)(3).

<sup>14</sup> Pub. L. No. 110-432, § 104, 122 Stat. 4848, 4857 (2008).

<sup>15</sup> Pub. L. No. 114-73, § 1302, 129 Stat. 568, 576 (2015).

<sup>16</sup> 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).

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.”<sup>18</sup> The U.S. 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.

5. Congress enacted the PTC mandate soon after a tragic rail accident in Chatsworth, California, where a Metrolink commuter train collided head-on with a Union Pacific freight train on September 12, 2008, killing 25 passengers and injuring more than 100 others.<sup>19</sup> The National Transportation Safety Board (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.<sup>20</sup> The Commission has recognized that “PTC is a potentially transformative technology” that can “save lives, prevent injuries, and avoid extensive property damage,”<sup>21</sup> and has taken myriad actions to facilitate its successful implementation by U.S. commuter rails, Amtrak, and the freight rail industry.<sup>22</sup>

6. *PTC-220*. PTC-220 is a joint venture of the nation’s seven Class I freight railroads.<sup>23</sup> PTC-220 was formed in 2007 to support efficient spectrum use and ensure interoperable PTC deployment by the railroad industry, and it has acquired 220-222 MHz band spectrum for its members to implement PTC.<sup>24</sup> Several of PTC-220’s member railroads operate over, or nearby, track where NJ Transit and SEPTA operate commuter rail trains.<sup>25</sup> When in close geographic proximity, the freight rails’ and commuter rails’ respective PTC radio technologies can experience intersystem interference absent

(Continued from previous page) \_\_\_\_\_

<sup>17</sup> 49 U.S.C. § 20157(a)(1). In October 2015, Congress extended the PTC implementation deadline from December 31, 2015, to December 31, 2018. 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).

<sup>18</sup> 49 U.S.C. § 20157(i)(5).

<sup>19</sup> National Transportation Safety Board, Collision of Metrolink Train 111 with Union Pacific Train LOF65-12 Chatsworth, California, Accident Report No. RAR-10/01 at vii (2010), <http://www.nts.gov/investigations/AccidentReports/Reports/RAR1001.pdf> (last visited Nov. 2, 2016).

<sup>20</sup> *Id.* at vii.

<sup>21</sup> *Maritime Communications/Land Mobile, LLC*, Memorandum Opinion and Order, 29 FCC Rcd 10871, 10882, para. 29 (2014) (*MCLM Order*) (subsequent history omitted).

<sup>22</sup> See *MTA Proposed Order of Modification*; see also *MTA Order of Modification*, 31 FCC Rcd at 1437-38, para. 3 (modifying license to include spectrum in areas where MTA was unable to obtain suitable spectrum to implement PTC). See also *MCLM Order*, 29 FCC Rcd at 10880, para. 25 (removing from a contested hearing, an application to assign spectrum for MetroLink to implement PTC); *National Railroad Passenger Corporation (d/b/a Amtrak), Request for Waiver of Certain Part 80 Automated Maritime Telecommunications System Rules to Implement Positive Train Control*, Order, 30 FCC Rcd 2038, 2038, para. 1 (WTB Mobility Div. 2015) (approving Amtrak spectrum acquisition and granting waivers to deploy PTC); *Wireless Telecommunications Bureau Announces Adoption of Program Comment to Govern Review of Positive Train Control Wayside Facilities*, Public Notice, 29 FCC Rcd 5340, 5340 (WTB 2014) (“tailoring and expediting the historic preservation review process under Section 106 for PTC wayside poles and infrastructure in the railroad right-of way”).

<sup>23</sup> See *supra* note 2.

<sup>24</sup> See *PTC-220, LLC, Request for Waiver to Facilitate Deployment of Positive Train Control Systems*, Memorandum Opinion and Order, 30 FCC Rcd 2281, 2282, para. 3 (WTB Mobility Div. 2015).

<sup>25</sup> See NJ Transit Letter at 1-2, nn. 1 & 3; see also SEPTA Letter at 2. These carriers include CSX, NS, and indirectly, Conrail Shared Assets, which operates trains for CSX and NS. NJ Transit Letter at 3.

adequate spectral separation and filtering.<sup>26</sup> PTC-220 acquired Station KIVD0007 to provide NJ Transit and SEPTA necessary spectral separation so that filters could be deployed to mitigate potential intersystem interference rather than relying on a complex scheme of synchronizing disparate PTC radio technologies.<sup>27</sup>

7. *NJ Transit.* NJ Transit operates one of the nation's busiest commuter rail systems, providing more than 300,000 passenger trips on an average weekday.<sup>28</sup> It must deploy PTC on 11 commuter rail lines, serving 116 municipalities.<sup>29</sup> As discussed below,<sup>30</sup> earlier this year, the Commission proposed, as a condition of modifying a 218-219 MHz license held by the Metropolitan Transportation Authority (MTA) of New York to enable its PTC deployment, that MTA provide NJ Transit spectrum from 218-219 MHz band Station KIVD0002 to facilitate NJ Transit's PTC implementation in seven northern New Jersey counties.<sup>31</sup> The Bureau subsequently modified Station KIVD0002 accordingly.<sup>32</sup> The respective boards of MTA and NJ Transit have approved a related spectrum leasing arrangement to provide NJ Transit the spectrum it needs to deploy PTC in northern New Jersey.<sup>33</sup>

8. *SEPTA.* SEPTA provides commuter rail service to approximately 130,000 passengers on an average weekday in greater Philadelphia over 13 rail lines.<sup>34</sup> SEPTA has begun to implement PTC in earnest using a 220-222 MHz band license it acquired in 2010.<sup>35</sup> The nation's freight railroads, however, have acquired spectrum in the same band to deploy PTC, but with a different radio technology that could interfere with SEPTA's PTC operations.<sup>36</sup>

9. The WTB placed PTC-220's application on public notice on March 30, 2016.<sup>37</sup> PTC-220 filed a minor amendment to the application on October 5, 2016, and filed a letter clarifying its request on October 28, 2016.<sup>38</sup> In addition to NJ Transit and SEPTA, the MTA and Amtrak support grant of PTC-220's application.<sup>39</sup> No party opposes the application.

---

<sup>26</sup> PTC-220 Modification Request at 4-9.

<sup>27</sup> *Id.* at 3-4. *See also infra* discussion at paragraphs 12-13 (discussing the PTC radio technologies).

<sup>28</sup> NJ Transit Letter at 2.

<sup>29</sup> *Id.*

<sup>30</sup> *See infra* discussion at paragraph 10.

<sup>31</sup> *Metropolitan Transportation Authority*, Proposed Order of Modification and Order on Reconsideration, 31 FCC Rcd 1436 (2016) (*MTA Proposed Order of Modification* and *MTA Order on Reconsideration*, respectively).

<sup>32</sup> *See Metropolitan Transportation Authority*, Order of Modification, 31 FCC Rcd 8862 (WTB Mobility Div. 2016) (*MTA Order of Modification*).

<sup>33</sup> *See* Press Release, NJ Transit Takes Step Toward PTC Completion for 2018 Deadline (Oct. 26, 2016), [http://www.njtransit.com/tm/tm\\_servlet.srv?hdnPageAction=PressReleaseTo&PRESS\\_RELEASE\\_ID=3085](http://www.njtransit.com/tm/tm_servlet.srv?hdnPageAction=PressReleaseTo&PRESS_RELEASE_ID=3085) (last visited Oct. 28, 2016); Letter, Alan Tilles, Counsel to MTA, to Roger S. Noel, Chief, Mobility Division, FCC (Oct. 31, 2016) (on file in ULS File No. 0006682035).

<sup>34</sup> SEPTA Letter at 1; SEPTA Annual Report Fiscal Year 2015 at 18 (2015), <http://septa.org/strategic-plan/reports/annual-2015.pdf> (last visited Nov. 2, 2016).

<sup>35</sup> SEPTA Letter at 2-3.

<sup>36</sup> *See infra* discussion at paragraphs 12-13.

<sup>37</sup> *Wireless Telecommunications Bureau Market-Based Applications Accepted for Filing*, Public Notice, 2016 WL 1248792 (WTB 2016).

<sup>38</sup> *See supra* note 2.

<sup>39</sup> MTA supports PTC-220's application, noting that a grant by the FCC would "complement and be fully consistent with its action" in the *MTA Proposed Order of Modification*. *See* Letter from Joseph J. Giulietti, President, Metro-North Railroad, and Patrick A. Nowakowski, President, Long Island Railroad, to the FCC at 2 (Apr. 12, 2016) (on

(continued....)

### III. DISCUSSION

#### A. Modification of Station KIVD0007

10. *Legal Authority.* This year the Commission—citing its authority to modify licenses under Section 316(a)(1) of the Act<sup>40</sup>—proposed to modify a 218-219 MHz license (Station KIVD0002) held by the Metropolitan Transportation Authority (MTA) of New York to include spectrum in four counties needed to complete the PTC spectrum footprint of the MTA Metro-North commuter railroad.<sup>41</sup> The Commission conditioned that proposed license modification, by requiring MTA to provide NJ Transit spectrum to implement PTC in certain northern New Jersey counties.<sup>42</sup> The Commission delegated authority to the Bureau to implement the proposed license modification, which it did in the *MTA Order of Modification*, including the condition that MTA provide NJ Transit spectrum to implement PTC in northern New Jersey.<sup>43</sup> Today we take complementary action under Section 316(a)(1) by proposing to modify Station KIVD0007 as discussed below, conditioned on PTC-220 providing NJ Transit spectrum to complete its PTC spectrum footprint and providing SEPTA spectrum to enable transition of its PTC operations to the 218-219 MHz band.

11. *NJ Transit Spectrum Needs.* The rail industry has targeted spectrum in the 217 to 222 MHz range to implement PTC.<sup>44</sup> The 217 to 222 MHz range includes spectrum in three bands: the Automated Maritime Telecommunications Service (AMTS) 217-218/219-220 MHz band, the 218-219 MHz Service band, and the 220-222 MHz Service band. NJ Transit states it has expended considerable time and effort exploring spectrum solutions to implement PTC in these bands, but has been unable to identify a viable option that would provide it with sufficient geographic authorization.<sup>45</sup> NJ Transit states that responses from the two geographic AMTS licensees in the area of interest were unsatisfactory, in part due to the “more than decade-long dispute at the FCC and in other fora in which the validity and assignability of their authorizations have come under scrutiny.”<sup>46</sup> Second, NJ Transit states that 218-219 MHz spectrum is unavailable in much of the area it requires because it is held in FCC inventory.<sup>47</sup> Third,

(Continued from previous page) \_\_\_\_\_  
file in ULS File No. 0007202625). Amtrak, which operates PTC-equipped trains in close proximity to NJ Transit and SEPTA lines, is optimistic that their systems will not interfere with Amtrak’s PTC network (deployed at 217-217.100 MHz) and is prepared to work with NJ Transit and SEPTA should any technical issues arise. See Letter from Dr. Atousa Vali, National Railroad Passenger Corporation, to Richard Arsenault, Chief Counsel, Mobility Division, WTB, FCC (Oct. 28, 2016) (on file in ULS File No. 0007202625).

<sup>40</sup> Section 316(a)(1) 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 States will be more fully complied with.” 47 U.S.C. § 316(a)(1). The Commission’s authority to modify licenses under Section 316(a)(1) is well established. See, e.g., *Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Services in the Upper and Lower L-Band*, Report and Order, 17 FCC Rcd 2704, 2714, para. 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).

<sup>41</sup> *MTA Order of Modification*, FCC Rcd at 8865, para. 8

<sup>42</sup> *Id.* at 8862, para. 1.

<sup>43</sup> *Id.*

<sup>44</sup> See *Request of PTC-220, LLC for Waivers of Certain 220 MHz Rules*, 24 FCC Rcd 8537, 8538, para. 3 (WTB 2009). See also Federal Railroad Administration (FRA), *Positive Train Control Desense Mitigation Test: Research Phase 1 at 7* (2016), [ntl.bts.gov/lib/60000/60100/60185/PTC\\_Desense\\_Mitigation\\_Phase\\_1\\_final.pdf](http://ntl.bts.gov/lib/60000/60100/60185/PTC_Desense_Mitigation_Phase_1_final.pdf) (last visited Oct. 31, 2016) (TTCI Study).

<sup>45</sup> NJ Transit Letter at 3-4.

<sup>46</sup> *Id.* at 3 & n.10.

<sup>47</sup> *Id.* at 4.

NJ Transit states that the 220-222 MHz band is not suitable for its PTC deployment due to possible interference with the freights' PTC deployment of a different PTC radio technology in the same band.<sup>48</sup>

12. *Intersystem Interference.* Although both commuter and freight railroads must implement PTC, they have chosen to deploy different PTC technologies in the densely populated Northeast Corridor (NEC), which extends from Boston to Washington, D.C.<sup>49</sup> The nation's freight rails, including PTC-220 members operating in areas served by NJ Transit and SEPTA, have chosen to deploy a PTC radio technology called an Interoperable Electronic Train Management System (I-ETMS) and have acquired 220-222 MHz band spectrum throughout the United States to implement that technology.<sup>50</sup> NJ Transit and SEPTA, like Amtrak and other commuter rails in the NEC, are deploying a PTC radio technology called an Advanced Civil Speed Enforcement System (ACES).<sup>51</sup>

13. In support of its Modification Request, PTC-220 cites the TTCI Study, an FRA-funded engineering study performed by the Transportation Technology Center, Inc.,<sup>52</sup> which explains the unique challenges of operating ACSES and I-EMTS systems in close spectral and geographic proximity.<sup>53</sup> PTC-220 states "that frequency and physical separation alone are not a practical solution to mitigating interference between the two systems" because at least 1.1375 megahertz of spectral separation is necessary to prevent interference, in addition to geographic spacing as discussed in the study.<sup>54</sup> 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.<sup>55</sup> SEPTA agrees that spectral separation is "the only practicable way to mitigate" intersystem interference.<sup>56</sup> Significantly, in the *MTA Proposed Order of Modification*, the Commission cited the potential for intersystem interference as a public interest basis for directing the Bureau to modify MTA's 218-219 MHz spectrum license.<sup>57</sup>

14. *Acquisition of Station KIVD0007 and Modification Request.* To help mitigate the potential interference that could occur between freight and commuter railroads' PTC systems and to enable ACSES implementation by NJ Transit and SEPTA, PTC-220 acquired Station KIVD0007, the 218-219 MHz Service frequency A segment license (218.000 to 218.500 MHz) for the Philadelphia, PA Market Area, IVM004.<sup>58</sup> PTC-220 requests that we modify Station KIVD0007 by authorizing the use of 250 kilohertz of 218-219 MHz band spectrum (218.000 to 218.250 MHz) to enable PTC deployment in eight New Jersey counties: Atlantic (IVM134); Hunterdon (IVM550); Mercer (IVM121); Middlesex (IVM062); Monmouth (IVM070); Ocean (IVM551); Sussex (IVM552); and Warren (IVM058).<sup>59</sup> PTC-

<sup>48</sup> *Id.* at 3 n.9. See also *infra* discussion at paragraphs 12-13 (explaining the potential for intersystem interference).

<sup>49</sup> See Northeast Corridor Fact Sheet, <http://nec.amtrak.com/node/321> (last visited Nov. 2, 2016).

<sup>50</sup> PTC-220 Modification Request at 2-3.

<sup>51</sup> NJ Transit Letter at 3. Although NJ Transit and SEPTA use slightly different versions of ACSES, we use the term "ACES" to refer to both systems.

<sup>52</sup> PTC-220 Modification Request at 6-8. TTCI, a subsidiary of the American Association of Railroads (AAR), manages the FRA's Transportation Technology Center. See Transportation Technology Center, Inc., <http://www.ttc.aar.com/> (last visited Nov. 2, 2016).

<sup>53</sup> PTC-220 Modification Request at 3.

<sup>54</sup> *Id.* at 7 (noting that TTCI field testing confirmed the need for spectral separation).

<sup>55</sup> TTCI Study at 12.

<sup>56</sup> SEPTA Letter at 2.

<sup>57</sup> *MTA Proposed Order of Modification*, 31 FCC Rcd at 1449-50, para. 61.

<sup>58</sup> PTC-220 Modification Request at 3.

<sup>59</sup> *Id.* at 1-2.

220 further requests that we modify Station KIVD0007 to return 250 kilohertz of spectrum (218.250-218.500 MHz) from the eight counties comprising Station KIVD0007 (pre-modification) to the Commission;<sup>60</sup> PTC-220 commits to assign the spectrum it would retain in these counties as well as the 250 kilohertz of spectrum it seeks to obtain by license modification to NJ Transit and SEPTA for their PTC deployments.<sup>61</sup>

15. *Modification of KIVD0007 Will Serve the Public Interest.* Congress, the NTSB, and the Commission have recognized that PTC is a transformative technology that can save lives, prevent human injury, and avoid property damage.<sup>62</sup> We have carefully reviewed the record before us and find that the proposed modification of Station KIVD0007 will promote the public interest in rail safety<sup>63</sup> by facilitating the implementation of PTC by NJ Transit, SEPTA, and by freight rails as required by Congress in the Rail Safety Improvement Act of 2008. The proposed license modification and the related spectrum assignments to NJ Transit and SEPTA are consistent with the Commission's core obligation to "promot[e] safety of life and property through the use of wire and radio communications,"<sup>64</sup> and will promote the public interest by providing:

- NJ Transit, one of the nation's busiest commuter railroads, spectrum needed to deploy PTC in Atlantic, Hunterdon, Middlesex, Monmouth, Ocean, Sussex, and Warren counties, New Jersey;
- SEPTA spectrum needed to transition its PTC operations to spectrum with more than one megahertz of separation from the freight railroads' PTC operations in the 220-222 MHz band—separation that the FRA-funded TTCI Study states is required to mitigate intersystem interference that could cause both systems to fail,<sup>65</sup> and
- A return of comparable spectrum from Station KIVD0007 to the Commission for future disposition.<sup>66</sup>

16. *License Modification and Conditions.* In view of the foregoing and pursuant to Section 316(a)(1) of the Act, we hereby propose to modify Station KIVD0007 to:

---

<sup>60</sup> *Id.* at 1 & n.4.

<sup>61</sup> *Id.* at 1-2. PTC-220 states that all necessary board approvals to partition and assign KIVD0007 (as modified) on commercially reasonable terms to NJ Transit and SEPTA have been obtained. PTC-220 October 28, 2016 Letter at 2. NJ Transit Corporation's Board of Directors has authorized NJ Transit to acquire spectrum from PTC-220 as envisioned by this proposed order. See New Jersey Transit Corporation Board of Directors, April 12, 2016 Minutes at 49030, 49060-63 (2016), [www.njtransit.com/pdf/2016\\_04\\_12\\_OpenSess.pdf](http://www.njtransit.com/pdf/2016_04_12_OpenSess.pdf) (last visited Nov. 2, 2016). PTC-220 understands that SEPTA does not require board approval for the spectrum exchange with PTC-220 and that SEPTA expects to complete final review of a spectrum exchange agreement and execute it in the very near term. PTC-220 October 28, 2016 Letter at 2.

<sup>62</sup> See *supra* discussion at paragraphs 4-5.

<sup>63</sup> 47 U.S.C. § 316(a).

<sup>64</sup> 47 U.S.C. § 151.

<sup>65</sup> See *supra* discussion at paragraph 13.

<sup>66</sup> PTC-220 Modification Request at 15-16. The proposed license modification would provide the Commission 250 kilohertz of spectrum now authorized under Station KIVD0007 in eight counties with a population of 5,259,673 (based on the 2010 U.S. Census): Burlington, 448,734; Camden, 513,657; Gloucester, 288,288; Bucks, 625,249; Chester, 498,886; Delaware, 558,979; Montgomery, 799,874; and Philadelphia, 1,526,006. Also, the proposed license modification would provide NJ Transit and SEPTA 250 kilohertz of spectrum to implement PTC in eight counties with a population of 3,044,173 (based on the 2010 U.S. Census): Atlantic, 274,549; Hunterdon, 128,349; Mercer, 366,513; Middlesex, 809,858; Monmouth, 630,380; Ocean, 576,567; Sussex, 149,265; and Warren, 108,692. As a result, the Commission's 218-219 MHz Service spectrum inventory would increase by a net 553,875 MHz/pops: 250 kHz x (5,259,673-3,044,173) = 553,875 MHz/pops.

- Authorize the use of an additional 250 kilohertz of spectrum, 218.000-218.250 MHz, in the following New Jersey counties: Atlantic (IVM134); Hunterdon (IVM550); Mercer (IVM121); Middlesex (IVM062); Monmouth (IVM070); Ocean (IVM551); Sussex (IVM552); and Warren (IVM058);
- Delete the authorization to use 250 kilohertz of spectrum, 218.250-218.500 MHz, now licensed under Station KIVD0007 (IVM004) from Burlington, Camden, and Gloucester counties, New Jersey, and from Bucks, Chester, Delaware, Montgomery, Philadelphia counties, Pennsylvania—which spectrum will become unassigned and available for future disposition as determined by the Commission;
- Add a special condition requiring PTC-220 to file an application—within 45 days of the release date of an order of modification—to assign on commercially reasonable terms 250 kilohertz of spectrum under Station KIVD0007 (as modified) to NJ Transit to enable PTC implementation in Atlantic, Burlington,<sup>67</sup> Camden, Hunterdon, Middlesex, Monmouth, Ocean, Sussex, and Warren counties, New Jersey;
- Add a special condition requiring PTC-220 to file an application—within 45 days of the release date of an order of modification—to assign on commercially reasonable terms 250 kilohertz of spectrum under Station KIVD0007 (as modified) to SEPTA to enable its PTC implementation in Bucks, Chester, Delaware, Montgomery, and Philadelphia counties, Pennsylvania, and in Gloucester<sup>68</sup> and Mercer counties, New Jersey;
- Add a special condition requiring PTC-220 to consummate the assignments of spectrum to NJ Transit and SEPTA as specified above within 180 days of the release date of an order of modification; and
- Add a special condition providing that if PTC-220 does not consummate the assignments of spectrum to NJ Transit and SEPTA as specified above within 180 days of the release date of an order of modification, any remaining spectrum authorized by the modification shall return to the Commission without further action and will become unassigned and available for future disposition as determined by the Commission.

## B. Waiver Requests

17. PTC-220 requests waiver of Sections 1.955, 95.815(b), and 95.855 of the Commission's rules to facilitate use of Station KIVD0007 (as modified) for PTC.<sup>69</sup> We evaluate waiver requests 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.<sup>70</sup> The Commission also may waive its rules for good cause shown.<sup>71</sup>

---

<sup>67</sup> PTC-220 understands that NJ Transit intends to use spectrum in this county, now authorized under Station KIVD0007, to help prevent interference and for possible future PTC use. PTC-220 October 28, 2016 Letter at 1.

<sup>68</sup> PTC-220 understands that SEPTA intends to use spectrum in this county, now authorized under Station KIVD0007, to help prevent interference. *Id.*

<sup>69</sup> PTC-220 Modification Request at 16-23; PTC-220 Amendment to Modification Request.

<sup>70</sup> 47 CFR § 1.925(b)(3).

<sup>71</sup> 47 CFR § 1.3.



## 1. Section 95.855

18. PTC-220 requests a waiver of the ERP limits specified in Section 95.855 of the Commission's rules<sup>72</sup>—from 4 to 8 watts for mobile operations, and from 20 to 30 watts for fixed and base station operations—to enable NJ Transit and SEPTA to deploy ACSES-based PTC in the 218-219 MHz band.<sup>73</sup> In the *MTA Power Waiver Order*, the Mobility Division granted an identical power waiver to enable the MTA Metro-North and Long Island commuter railroads to deploy ACSES-based PTC in the 218-219 MHz band.<sup>74</sup> In the *MTA Order on Reconsideration*, the Commission modified the power waiver by adopting additional out-of-band emissions (OOBE) attenuation requirements of 1.77 dB for fixed operations and 3 dB for mobile operations; it did so to ensure that PTC operations under the waiver's increased ERP limits would have no more effect on planned spectrally adjacent AMTS operations than would operations under Section 95.855's ERP limits.<sup>75</sup>

19. The underlying purpose of Section 95.855's ERP limits for the 218-219 MHz band is to limit the potential for interference to over-the-air (OTA) viewers of Channel 13 stations in the 210-216 MHz band.<sup>76</sup> The Commission envisioned that a licensee seeking to exceed the ERP limits while demonstrating interference protection would file a waiver request as PTC-220 has done here.<sup>77</sup> PTC-220 has submitted a study, prepared by Pericle Communications Company (Pericle), to estimate the potential impact of the NJ Transit and SEPTA PTC operations at the requested power level increases on Channel 13 OTA households.<sup>78</sup>

20. Pericle has identified three full power Channel 13 stations—with noise limited service contours (NLSC)<sup>79</sup> that overlap (or nearly overlap) NJ Transit and SEPTA PTC base station interference contours—which qualified for consideration: Channel 13, WJZ-DT, Baltimore, Maryland (Baltimore DMA); Channel 13, WYOU-DT, Scranton, Pennsylvania (Wilkes-Barre-Scranton-Hazleton DMA); and Channel 13, WNET-DT, Newark, New Jersey (New York DMA).<sup>80</sup> WNET-DT is licensed to operate from the Empire State Building and has a construction permit to operate from the new World Trade

---

<sup>72</sup> 47 CFR § 95.855.

<sup>73</sup> See PTC-220 Modification Request at 18; PTC-220 Amendment to Modification Request at 1-2.

<sup>74</sup> PTC-220 Modification Request at 18, citing *Metropolitan Transportation Authority Request for Waiver to Facilitate Positive Train Control System*, Order, 29 FCC Rcd 2004 (WTB Mobility Div. 2014) (*MTA Power Waiver Order*).

<sup>75</sup> *MTA Order on Reconsideration*, 31 FCC Rcd at 1446-47, paras. 32-35. A change in ERP from 20 to 30 watts represents an increase of 1.77 dB, and a change in ERP from 4 to 8 watts represents an increase of 3 dB.

<sup>76</sup> 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, 15 FCC Rcd 1497, 1554-55 at paras. 109-110 (1999).

<sup>77</sup> See *id.* at 1555, para. 110 (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”).

<sup>78</sup> See Pericle Study of 218-219 MHz Interference to Channel 13 Television Receivers January 26, 2016 (Version 4) (2016) (attached as Appendix C to the PTC-220 Modification Request) (Pericle Study).

<sup>79</sup> Historically, the Commission analyzed the potential for interference according to a TV station's analog Grade B predicted contour. To account for the conversion to digital television, the Commission developed the NLSC to approximate the same probability of service as the analog Grade B contour. See, e.g., *Review of the Commission's Part 95 Personal Radio Services Rules*, Notice of Proposed Rule Making and Memorandum Opinion and Order on Reconsideration, 25 FCC Rcd 7651, 7676, para. 65 (2010).

<sup>80</sup> Pericle Study at 2.

Center tower; Pericle modeled both cases in the study.<sup>81</sup>

21. *NJ Transit*. Pericle estimates that, assuming a 100% OTA penetration rate—that is, assuming all households receive television over the air and not discounting the rate for households that receive television from cable or satellite providers—and using a -33 dB desired-to-undesired (D/U) signal ratio,<sup>82</sup> NJ Transit’s PTC operations from 38 base stations<sup>83</sup> (at 30 watts) may potentially affect up to 1,064 Channel 13 OTA households and its mobile operations (at 8 watts) up to 1,502 households.<sup>84</sup> Pericle predicts that with application of television receiver 25 dB notch filters to mitigate possible interference,<sup>85</sup> NJ Transit’s fixed PTC operations would affect no households and its mobile operations may affect up to 6 households.<sup>86</sup>

22. *SEPTA*. Pericle estimates that, assuming a 100% OTA penetration rate as above and using a -33 dB D/U signal ratio, SEPTA’s PTC operations from 37 base stations (at 30 watts) may potentially affect up to 5,059 Channel 13 OTA households and its mobile operations (at 8 watts) up to 10,511 households.<sup>87</sup> Pericle predicts that with application of television receiver 25 dB notch filters to mitigate possible interference, SEPTA’s fixed PTC operations may affect up to 245 households and its mobile operations up to 315 households.<sup>88</sup>

23. Pericle further predicts that, assuming an 8.7% OTA penetration rate and after application of 25 dB notch filters to mitigate interference, SEPTA’s fixed PTC operations may affect up to 21 households and its mobile operations up to 27 households.<sup>89</sup> The actual OTA penetration rate may be higher or lower than 8.7% in the areas potentially impacted by SEPTA’s PTC operations; we therefore cannot say with certainty that SEPTA’s PTC operations would impact no more than 48 households after application of notch filters.

24. For completeness, Pericle estimated the impact of PTC operations on viewers of Channel 13 stations WJZ-DT (Baltimore, Maryland) and WYOU-DT (Scranton, Pennsylvania), even though none of the NJ Transit or SEPTA locations fall within the 36 dBu service contours of those stations, which would require protection under Section 95.861(c).<sup>90</sup> The only Channel 13 station with a service contour

---

<sup>81</sup> *Id.*

<sup>82</sup> In the *MTA Power Waiver Order*, the Mobility Division concluded that the potential for interference from proposed PTC operations to TV viewers is best predicted at locations where the D/U signal ratio is below -33 dB. See *MTA Power Waiver Order*, 29 FCC Rcd at 2006, para. 7 & n.19.

<sup>83</sup> Pericle modeled a subset of NJ Transit base and mobile stations—only those within the geographic area proposed to be acquired from PTC-220. Pericle Study at 7.

<sup>84</sup> *Id.* at 4. Pericle predicted potential mobile radio interference by modeling “train stations because these are locations where the mobile is most likely to transmit and the train is moving at its slowest or is stopped.” *Id.* at 8. Pericle also notes that population density tends to be greatest near train stations. *Id.*

<sup>85</sup> A notch filter attenuates certain frequencies in a specific range to very low levels while passing desired frequencies without alteration. Notch filters are commercially available to consumers for off-the-shelf use for applications in the VHF band, as suggested in the Pericle Study. *Id.* at 17.

<sup>86</sup> *Id.* at 4.

<sup>87</sup> *Id.* at 3-4.

<sup>88</sup> *Id.*

<sup>89</sup> *Id.* at 11-12. Pericle assumed an area-wide 8.7% OTA penetration based on the Baltimore DMA OTA rate, rather than using the lower OTA rates of the Wilkes-Barre-Scranton-Hazleton DMA (6.3%) or New York DMA (5.3%). *Id.* at 11.

<sup>90</sup> See PTC-220 Modification Request at 18 n. 47 (NJ Transit); Amendment to PTC-220 Modification Request at 2 (SEPTA).

encompassing a NJ Transit or SEPTA location is WNET-DT/WNET-CP (New York, New York).<sup>91</sup> WNET states that it has reviewed the Pericle Study and has no objection to NJ Transit's use of increased power to implement PTC, provided it resolves promptly any interference to WNET's viewers from its PTC operations.<sup>92</sup> NJ Transit has committed to "work cooperatively with WNET to ensure that its viewers are not adversely affected by NJ Transit's PTC operations and to remedy promptly any interference that might arise."<sup>93</sup> Similarly, WNET has no objection to SEPTA's use of increased power provided it cooperates with WNET to resolve promptly any interference to WNET's viewers from its PTC operations,<sup>94</sup> and SEPTA has acknowledged WNET's conditional consent.<sup>95</sup>

25. We must consider both the potential safety benefits of PTC and the potential impact of PTC operations on Channel 13 OTA viewers in evaluating the power waiver request. Together, NJ Transit and SEPTA provide 430,000 passenger trips on an average weekday—nearly 112 million passenger trips annually.<sup>96</sup> According to Pericle, their PTC operations at the requested increased power levels have the potential to impact up to 566 Channel 13 OTA households, after application of television receiver 25 dB notch filters to mitigate possible interference.<sup>97</sup> Where such measures are insufficient to cure interference, NJ Transit and SEPTA would have additional options to eliminate the interference.<sup>98</sup>

26. We have carefully considered the entire record before us and find that the public interest in rail safety would be served by proposing to grant PTC-220 the requested waiver. Ultimately, grant of the proposed waiver would provide regulatory parity by enabling NJ Transit and SEPTA to deploy PTC in the same band as, and using the same technology and power limits as, the MTA Metro-North and Long Island commuter railroads. We also find that in view of the unique factual circumstances before us, strict application of Section 95.855's power limits would not serve the public interest. Congress adopted the PTC mandate to save lives and property, and the higher power limits would enable NJ Transit and SEPTA to meet their obligation to deploy PTC. We therefore propose to grant PTC-220 a 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—subject to the additional OOB attenuation requirements of 1.77 dB for fixed operations and 3 dB for mobile operations adopted by the Commission in the *MTA Order on Reconsideration*.

27. We emphasize that under Section 95.861(c),<sup>99</sup> NJ Transit and SEPTA would be required upon request to promptly install, free of charge, an interference reduction device (here, a notch filter) for

---

<sup>91</sup> See PTC-220 Modification Request at 18 n. 47 (NJ Transit); Amendment to PTC-220 Modification Request at 2 (SEPTA).

<sup>92</sup> Letter from Frank Graybill, Senior Director of Engineering, WNET, to Paul K. Stangas, Director, Systems Engineering & Design, NJ Transit, (Mar. 15, 2016) (on file in ULS File No. 0007202625) (attached to PTC-220 Modification Request, Appendix D).

<sup>93</sup> NJ Transit Letter at 1-2.

<sup>94</sup> Letter from Frank Graybill, Senior Director of Engineering, WNET, to Jeff Knueppel, General Manager, SEPTA (Sept. 29, 2016) (on file in ULS File No. 0007202625).

<sup>95</sup> SEPTA Letter at 3 n.6.

<sup>96</sup> See *supra* paragraph 7 (NJ Transit provides more than 300,000 passenger trips on an average weekday) and paragraph 8 (SEPTA provides approximately 130,000 passenger trips on an average weekday).

<sup>97</sup> See Pericle Study, Appendix A at 2-27. We note that Pericle assumed certain station and technical parameters (e.g., a cross polarization loss factor of 12 dB) for its study. See Pericle Study at 8. As no party objected to the study and because the PTC licensees must mitigate any actual interference that may occur, we do not address those parameters herein.

<sup>98</sup> *Infra* note 101.

<sup>99</sup> 47 CFR § 95.861(c).

any television of an OTA viewer that is impacted by their PTC operations. If NJ Transit or SEPTA, as applicable, cannot fully abate interference with a 25 dB notch filter or other measure such as modifying the parameters of an interfering transmitter, Section 95.861(e) provides that it must cease operation of an offending transmitter within 30 days of the time it is notified in writing.<sup>100</sup> Where such measures are insufficient to cure interference, NJ Transit and SEPTA would have additional options at their disposal to eliminate the interference.<sup>101</sup>

## 2. Section 95.815(b)

28. PTC-220, on behalf of NJ Transit and SEPTA, requests a limited waiver of Section 95.815(b), which requires a 218-219 MHz licensee to provide certain information when modifying an individually-licensed base station.<sup>102</sup> Section 95.811(b) provides for individual licensing of base stations in the 218-219 MHz band where the antenna exceeds 6.1 meters above ground.<sup>103</sup> Section 95.815(b), in turn, requires that each request to add, delete, or modify technical information of an individually licensed base station must include a description of the licensee's system after the proposed addition, deletion, or modification, including the population served, and an explanation of how the system will satisfy the substantial service requirement of Section 95.831.<sup>104</sup> In the *MTA Power Waiver Order*, the Mobility Division granted the MTA Metro-North and Long Island commuter railroads a waiver of Section 95.815(b)'s reporting requirements, noting that that relief from these obligations is appropriate for PTC base stations when no practical purpose would be served by either an explanation of how changes to the PTC system would satisfy the substantial service requirement or by a provision of population information.<sup>105</sup>

29. We find that the public interest in rail safety would be served by granting PTC-220 the requested waiver. We find that in view of the unique factual circumstances before us, strict application of Section 95.815(b)'s reporting requirement to provide population information each time a rail adds, deletes, or modifies an individually-licensed base station or to explain how each time such changes to its PTC deployment would satisfy Section 95.831's substantial service requirement would be unduly burdensome and would not help staff evaluate such applications. We emphasize that NJ Transit and SEPTA would still be required by Section 95.815(b) to file an appropriate application each time they add, delete, or modify an individually-licensed base station. Accordingly, we propose to grant PTC-220 a limited waiver of Section 95.815(b)'s reporting requirements.

## 3. Section 1.955(a)(3)

30. Lastly, PTC-220, on behalf of NJ Transit and SEPTA, requests a limited waiver of Section 1.955(a)(3),<sup>106</sup> which provides that “[a]uthorizations automatically terminate, without specific Commission action, if service is permanently discontinued.”<sup>107</sup> Where both an authorization and the

---

<sup>100</sup> 47 CFR § 95.861(e).

<sup>101</sup> For example, they could use a better notch filter, install a more directional television receive antenna, or furnish a better-performing television receiver. *See* Pericle Study at 4, 13, 16.

<sup>102</sup> 47 CFR § 95.815(b). PTC-220 Modification Request at 20-21; PTC-220 Amendment to Modification Request at 1-3.

<sup>103</sup> 47 CFR § 95.811(b).

<sup>104</sup> 47 CFR § 95.815(b). Each 218-219 MHz licensee must make a substantial service showing within 10 years of license grant. 47 CFR § 95.831 (incorporating 47 CFR § 95.833(a)'s initial construction requirements). Further, a licensee must file a detailed system report with its renewal application. 47 CFR § 95.833(b).

<sup>105</sup> *See MTA Waiver Order*, 29 FCC Rcd at 2008, para. 14.

<sup>106</sup> 47 CFR § 1.955(a)(3).

<sup>107</sup> PTC-220 Modification Request at 21; Amendment to PTC-220 Modification Request.

Commission's related service rules are silent regarding the definition of permanent discontinuance of service, we determine permanent discontinuance on a case-by-case basis.<sup>108</sup> We consider the totality of the facts and circumstances in determining whether a waiver of the rule is warranted.<sup>109</sup>

31. Both NJ Transit and SEPTA—the ultimate intended licensees of Station KIVD0007 (as modified and to be partitioned)—are under a Congressional mandate to implement PTC by December 31, 2018. Subjecting either rails' putative authorization to automatic termination before that deadline could undermine their ability to timely deploy PTC. NJ Transit notes there is a “critical need for timely deployment of PTC,”<sup>110</sup> and SEPTA has already begun to deploy PTC (albeit using 220-222 MHz spectrum).<sup>111</sup> We find that in view of these unique factual circumstances, application of Section 1.955(a)(3) would be contrary to the public interest in rail safety and therefore propose to grant PTC-220 a waiver of this rule until the December 31, 2018, PTC implementation deadline.

### C. Protest Rights

32. In accordance with Section 1.87(a) of the Commission's Rules,<sup>112</sup> we will not issue an order of modification until PTC-220 has received notice of our proposed action and has had an opportunity to interpose a protest. To protest the proposed license modification or waivers, PTC-220 must, within 30 days of the release date of this Proposed Order of Modification, submit a written statement with sufficient evidence to show that the modification would not be in the public interest. The protest must be electronically filed in ULS under File No. 0007202625 or manually filed with the Office of the Secretary, Federal Communications Commission, 445 Twelfth Street, S.W., Room TW-A325, Washington, D.C. 20554.<sup>113</sup> If no protest is filed, PTC-220 will have waived its right to protest the modification and will be deemed to have consented to the modification.

33. We also note that 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.”<sup>114</sup> Section 316(a)(3) provides that “[a]ny protest filed . . . shall be subject to the requirements of section 309, for petitions to deny.”<sup>115</sup> 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.<sup>116</sup>

## IV. CONCLUSION AND ORDERING CLAUSES

34. Today's proposed action would benefit millions of Americans by enabling NJ Transit and SEPTA to meet their statutory obligation to deploy PTC as required by Congress in the Rail Safety

---

<sup>108</sup> *Northeast Utilities Service Co.*, Order, 24 FCC Rcd 3310, 3314, para. 10 (WTB Mobility Div. 2009), *recon. pending*.

<sup>109</sup> *See, e.g., Applications of Marion B. Brechner*, Memorandum Opinion and Order, 14 FCC Rcd 1266, 1271, para. 15 (1998) (totality of the facts and circumstances presented provides a sufficient basis to merit grant of waiver).

<sup>110</sup> NJ Transit Letter at 2.

<sup>111</sup> SEPTA Letter at 2.

<sup>112</sup> *See* 47 CFR § 1.87(a).

<sup>113</sup> The address for FCC locations should be used only for documents filed by United States Postal Service first-class mail, Express Mail, and Priority Mail, and for hand-delivered or messenger-delivered documents. Documents sent by overnight mail (other than United States Postal Service Express Mail and Priority Mail) should be addressed for delivery to 9300 East Hampton Drive, Capitol Heights, MD 20743.

<sup>114</sup> 47 U.S.C. § 316(a)(2). *See also* 47 CFR § 1.87(c) (implementing 47 U.S.C. § 316(a)(2)).

<sup>115</sup> 47 U.S.C. § 316(a)(3). *See also* 47 CFR § 1.87(d) (implementing 47 U.S.C. § 316(a)(3)).

<sup>116</sup> 47 U.S.C. § 309(d). *See also* 47 CFR § 1.939 (petitions to deny).

Improvement Act of 2008.<sup>117</sup> PTC could help prevent injury not only to commuter rail passengers and railroad employees, but also to citizens that live and work near rail tracks. We seek to ensure that the public realizes these benefits expeditiously. Accordingly, the 250 kilohertz of spectrum that would remain authorized under Station KIVD0007, the additional 250 kilohertz of spectrum that we propose to authorize under Station KIVD0007, and the related rule waivers proposed above may only be used to comply with Congress's PTC mandate and are subject to the requirement that PTC-220 partition, under the time frames specified above,<sup>118</sup> the modified license to NJ Transit and SEPTA to implement PTC as specified above.

35. 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 IS ADOPTED.

36. 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 Sections 1.87 and 1.925(b)(3) of the Commission's Rules, 47 C.F.R. §§ 1.87, 1.925(b)(3), Station KIVD0007, licensed to PTC-220, LLC, BE MODIFIED consistent with Section III of this Proposed Order of Modification.

37. AND 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 by certified mail, return receipt requested to PTC-220, LLC.

38. 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  
Chief, Mobility Division  
Wireless Telecommunications Bureau

<sup>117</sup> Pub. L. No. 110-432, § 104, 122 Stat. 4848, 4857 (2008), amended by Pub. L. No. 114-73, § 1302 (2015).

<sup>118</sup> See *supra* discussion at paragraph 16.