**Before the**

**Federal Communications Commission**

**Washington, D.C. 20554**

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| In the Matter of Application of  THOMAS K. KURIAN  For Partitioning and Disaggregation of License for Automated Maritime Telecommunications System Station WQCP809 to PTC-220, LLC | **)**  **)**  **)**  **)**  **)**  **)**  **)** | File No. 0008694347 |

**ORDER**

**Adopted: November 23, 2020 Released: November 23, 2020**

By the Chief, Mobility Division, Wireless Telecommunications Bureau:

1. This *Order* addresses a petition to deny filed by Warren Havens (Havens) and the Polaris PNT Group (together, Petitioners) against an Application to assign part of the license for Automated Maritime Telecommunications System (AMTS) Station WQCP809 from Thomas K. Kurian (Kurian) to PTC-220, LLC (PTC-220) (Kurian and PTC-220 are together, the Applicants).[[1]](#footnote-3) This *Order* also addresses the request of PTC-220, a consortium of the nation’s seven largest freight railroads, for waiver of several AMTS rules to facilitate use of the spectrum for implementation of Positive Train Control (PTC) and related rail safety systems by its members.[[2]](#footnote-4) For the reasons stated below, we deny the petition, grant PTC-220’s Waiver Request, and will process the Application.

# BACKGROUND

1. The Commission originally intended that AMTS stations would be used to provide service to tugs, barges, and other commercial maritime vessels.[[3]](#footnote-5) The Commission amended the AMTS rules in 1997 to permit AMTS stations to serve fixed, mobile, and handheld units on land,[[4]](#footnote-6) and now licenses AMTS stations by geographic area.[[5]](#footnote-7) The AMTS band includes two spectrum blocks in 10 geographic license areas: Block A (217.5-218/219.5-220 MHz) and Block B (217-217.5/219-219.5 MHz).[[6]](#footnote-8) Station WQCP809 is the Mountain Area (AMT010) A Block license.
2. On July 16, 2019, Kurian filed an application to partition and disaggregate 219.5-220.0 MHz spectrum from Kurian’s Station WQCP809 to PTC-220, except for several counties in Montana and Wyoming.[[7]](#footnote-9) On July 24, 2019, the Wireless Telecommunications Bureau (Bureau) placed the Application on public notice.[[8]](#footnote-10)
3. On August 7, 2019, Petitioners filed the Petition to Deny in which they argue that: (1) granting the Application would interfere with the jurisdiction of the Nevada state courts, including the Nevada Supreme Court, regarding a contractual dispute in which Havens claims he is entitled to an assignment of spectrum licensed under Station WQCP809 (the “Nevada litigation”); (2) Kurian and PTC breached duties to the FCC and lacked candor by not disclosing the Nevada litigation in the Application; and (3) the Public Interest Showing and Waiver Request are deficient.[[9]](#footnote-11)
4. On August 19, 2019, PTC-220 filed an Opposition to the Petition to Deny.[[10]](#footnote-12) On September 14, 2019, Petitioners filed a Reply, arguing that because Kurian did not file an opposition to the petition, the petition is effectively unopposed.[[11]](#footnote-13) They also argue that counsel for PTC-220, the law firm of Hogan & Lovells, should be disqualified.[[12]](#footnote-14) Petitioners filed supplements to their Petition to Deny on August 14, 2019 (regarding a judgment lien filed in the Nevada litigation)[[13]](#footnote-15) and August 21, 2019 (transmitting a motion for stay and an injunction to prohibit the sale of spectrum under Station WQCP809 by Kurian).[[14]](#footnote-16) PTC-220 filed an opposition to the supplemental filings on August 28, 2019.[[15]](#footnote-17) We treat the supplemental filings as informal requests for action under section 1.41 of the Commission’s rules[[16]](#footnote-18) and address them below.
5. On January 28, 2020, PTC-220 filed an update to the Application under Section 1.65 of the Commission’s rules,[[17]](#footnote-19) transmitting a January 23, 2020, *Order of Affirmance* issued by the Nevada Supreme Court, which denied an appeal of Havens in the Nevada litigation.[[18]](#footnote-20) On January 28, 2020, Havens (but no other petitioner) filed a response to PTC-220’s Section 1.65 filing.[[19]](#footnote-21) On February 29, 2020, Havens supplemented his response to PTC-220’s Section 1.65 filing, by transmitting his Petition for Rehearing before the Nevada Supreme Court.[[20]](#footnote-22) He also argued that the Commission should review several Civil-War era “federal railroad acts” and determine what public interest obligations railroads have under these acts.[[21]](#footnote-23)
6. On May 8, 2020, PTC-220 filed an update to the Application under Section 1.65,[[22]](#footnote-24) noting that the Nevada Supreme Court issued an *Order* on April 26, 2020, denying Havens’ Petition for Rehearing of the Supreme Court’s January 23, 2020, *Order of Affirmance*.[[23]](#footnote-25) It also responded to arguments regarding an alleged ethical violation by counsel for PTC-220 and other claims made by Petitioners.[[24]](#footnote-26) On May 21, 2020, Havens (but no other petitioner) responded to PTC-220’s May 8 Section 1.65 Update, by filing an email exchange Havens initiated with counsel for PTC-220 and an *Order* of the Nevada Supreme Court granting his motion to recall the court’s mandate and re-setting the time for him to file a motion for an en banc rehearing.[[25]](#footnote-27) On July 15, 2020, Havens filed a copy of his Petition for En Banc Reconsideration or Other Relief filed in the Nevada litigation.[[26]](#footnote-28) Finally, on September 25, 2020, PTC-220 filed an update to the Application under Section 1.65,[[27]](#footnote-29) transmitting a September 11, 2020, *Order* of the Nevada Supreme Court denying Havens’ Petition for En Banc Reconsideration or Other Relief.[[28]](#footnote-30)

# Discussion

## Assignment Application

1. Nevada Litigation. Petitioners argue that “the FCC should deny the Application to not undermine and interfere with the jurisdiction and actions pending before the Nevada Courts” in which Havens contends that Kurian must assign certain spectrum under Station WQCP809, including the spectrum at issue here, to himself.[[29]](#footnote-31) In 2018, a jury awarded Havens money damages in the Nevada litigation but declined to grant his request for specific performance (assignment of spectrum under Station WQCP809).[[30]](#footnote-32) The trial court denied Havens’ request for specific performance on reconsideration.[[31]](#footnote-33) Most recently, on September 11, 2020, the Nevada Supreme Court issued an *Order* denying Havens’ Petition for En Banc Reconsideration or Other Relief.[[32]](#footnote-34)
2. It is well established that the Commission will not defer action on assignment applications pending the resolution of private litigation.[[33]](#footnote-35) In 2009, the Bureau found that the Nevada litigation involved private contractual matters, and rejected Havens’ argument that its pendency provided a basis for denying an application to assign spectrum under Station WQCP809 from Kurian to NorthWestern Corporation.[[34]](#footnote-36) The Commission affirmed that decision,[[35]](#footnote-37) and the U.S. Court of Appeals affirmed the Commission’s decision.[[36]](#footnote-38)
3. Absent a stay or injunction issued by a court, the Commission routinely acts on license assignment applications pending resolution of private disputes.[[37]](#footnote-39) Despite more than a decade of litigation, Petitioners have not presented a court order holding that Havens is entitled to enforce a putative contract for assignment of spectrum under Station WQCP809. Consequently, the Nevada litigation provides no basis for denying the Application to assign spectrum under Station WQCP809 from Kurian to PTC-220. Kurian and PTC-220 may consummate the assignment at their own risk that Havens might ultimately prevail in the Nevada litigation.[[38]](#footnote-40)
4. Alleged Breach of Duty and Lack of Candor. In their Petition to Deny, Petitioners argue that Kurian and PTC-220 had an affirmative duty to report the Nevada litigation in the Application.[[39]](#footnote-41) They claim that by not reporting the litigation, Kurian and PTC-220 “breached duties to the FCC, including lack of candor, in the Application.”[[40]](#footnote-42) In its Opposition, PTC-220 responds that the Application provides the information required by the Communications Act and the Commission’s rules, and that Petitioners have not cited any precedent to support their claim that disclosure of the Nevada litigation in the Application was necessary.[[41]](#footnote-43) In their Reply, Petitioners argue that Kurian and PTC-220 had an obligation to advise the Commission “that they do not currently have any agreement to sell/buy the spectrum in the assignment, but have a ‘no contract’ now for ‘the sale’ later deal, documentation of which they hide.”[[42]](#footnote-44) Petitioners claim that these assertions warrant that the Commission conduct a hearing proceeding.[[43]](#footnote-45)
5. Petitioners cite one case, *WOKO v. FCC*,[[44]](#footnote-46) to support their claims. In *WOKO*, the Commission refused to renew a radio station license “because of misrepresentations made to the Commission and its predecessor as to the ownership of the applicant’s capital stock,” as well as “false testimony” at Commission hearings.[[45]](#footnote-47) Petitioners’ reliance on *WOKO* is misplaced. Here, unlike *WOKO*, neither Kurian nor PTC-220 provided false testimony or misrepresented facts to the Commission. They provided the information required by Section 308(b) of the Communications Act, as amended,[[46]](#footnote-48) and section 1.948(c) of the Commission’s rules in the Application.[[47]](#footnote-49)
6. On the date Kurian and PTC-220 filed the Application, there was no final order in the Nevada litigation that would have barred processing of the Application nor has there been one since. Moreover, we agree with PTC-220 that “no FCC rule requires an executed contract to exist at the time of filing of an assignment application.”[[48]](#footnote-50) Petitioners cite no precedent, nor are we aware of any, to support their claim that Kurian and PTC-220 had an obligation to disclose the existence of the Nevada litigation in the Application or that they were required to advise the Commission whether they had a contract for the sale of spectrum under Station WQCP809. We find that neither party breached a duty to the Commission nor lacked candor, and that there is no evidence in the record that would warrant undertaking a hearing as urged by Petitioners.
7. Public Interest Showing. Petitioners argue that the Application’s Public Interest Showing is deficient and that the Application therefore should be denied.[[49]](#footnote-51) Petitioners acknowledge that PTC-220 seeks Kurian’s AMTS spectrum for use in PTC networks but complain the Public Interest Showing does “not define what PTC is” or explain why more spectrum is needed to implement PTC.[[50]](#footnote-52) Petitioners further argue that the Application fails to explain why AMTS spectrum is needed for PTC “where extensive other spectrum is available, and easy to use in multi-band radio equipment that can even provide net advantages.”[[51]](#footnote-53)
8. Petitioners cite no rule or precedent for their claim that PTC-220 should seek non-AMTS spectrum to deploy PTC.[[52]](#footnote-54) The public interest does not require PTC-220 to seek spectrum in other bands. Indeed, we note that Havens (through two licensee companies), previously assigned AMTS spectrum to Amtrak for its PTC deployment along the Northeast Rail Corridor.[[53]](#footnote-55)
9. In the Public Interest Showing, the Applicants explain that PTC-220 “was established to lead the deployment of PTC networks nationwide that Class I and certain other railroads are required to implement pursuant to the Rail Safety Improvement Act of 2008 (“RSIA”).”[[54]](#footnote-56) That law requires that U.S. freight, passenger, and commuter railroads implement PTC systems to “prevent 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.”[[55]](#footnote-57)
10. The Applicants state that the proposed assignment “is consistent with the public interest, convenience, and necessity because it will increase the amount of usable spectrum available for PTC operations, and other related train control safety applications.”[[56]](#footnote-58) In its concurrently filed Waiver Request, PTC-220 explains that the AMTS spectrum will enable more robust PTC systems by permitting the deployment of two additional nationwide Common Control Channels, “which would be used by all locomotive radios to attach to a PTC base station and receive instructions regarding the proper frequency to operate on in the particular area.”[[57]](#footnote-59) PTC-220 also explains that the spectrum will be used for expanded PTC deployments and other rail safety applications, including End of Train (EOT) devices and distributed power systems.[[58]](#footnote-60)
11. The Commission has recognized that “PTC is a potentially transformative technology” that can “save lives, prevent injuries, and avoid extensive property damage,”[[59]](#footnote-61) and has taken myriad actions to facilitate its successful implementation.[[60]](#footnote-62) We find that consistent with this precedent, the Application’s Public Interest Showing, its related Waiver Request, and Section 309(a) of the Communications Act,[[61]](#footnote-63) the proposed assignment of spectrum to enhance PTC and other rail safety systems will serve the public interest, convenience, and necessity.
12. Disqualification of Counsel to PTC-220. In their Reply, Petitioners claim that counsel to PTC-220, the law firm of Hogan Lovells US LLP (Hogan Lovells), should be disqualified in this matter.[[62]](#footnote-64) In a January 28, 2020, filing, Havens (but no other petitioner) states that “the Hogan Lovells firm [is] past counsel to myself and associated LLCs . . . including as to the subject AMTS spectrum involved.”[[63]](#footnote-65) Havens claims that by not addressing his disqualification arguments, Hogan Lovells’ “lack of responses are admissions and waivers.”[[64]](#footnote-66) Petitioners failed to timely raise these arguments in their Petition to Deny as required by Section 1.948(j)(1)(iii) of the Commission’s rules.[[65]](#footnote-67) In the interest of a full record, we will treat the allegations as an informal request for action under section 1.41 of the Commission’s rules.[[66]](#footnote-68)
13. A May 8, 2020, filing executed by David L. Martin of Hogan Lovells, explains that the law firm’s relationship with Havens “ended 13 years ago.”[[67]](#footnote-69) The filing includes Martin’s declaration “under penalty of perjury that the factual statements in the . . . filing known by me are true and correct.”[[68]](#footnote-70) The filing also states “[u]ndersigned counsel denies that representation of PTC-220 in the instant assignment application proceeding gives rise to any violation of the D.C. Rules of Professional Conduct.”[[69]](#footnote-71) As PTC-220 notes, even if Havens demonstrated some violation of those rules, the Commission has declined to adjudicate “[i]ssues related to attorney misconduct . . . in the course of an ongoing licensing proceeding except where the allegations of attorney misconduct are inextricably related to the questions being litigated.”[[70]](#footnote-72) We find that there is no nexus between Petitioners’ claim that Hogan Lovells should be disqualified and the substantive issues before us in this proceeding. We therefore decline to consider these allegations further here.
14. Kurian Filings. Petitioners note that Kurian did not formally oppose their Petition to Deny, did not join PTC-220’s Opposition, and did not respond to Petitioners’ supplements to the Petition to Deny.[[71]](#footnote-73) Petitioners claim that, absent such filings, their Petition to Deny “is not effectively opposed, and is effectively admitted.”[[72]](#footnote-74) Petitioners cite no FCC rule or precedent to support their assertions, nor are we aware of any. The fact that Kurian chose not to file a separate opposition, join PTC-220’s Opposition or other filings, or respond to supplements to the Petition to Deny, has no decisional significance.
15. Federal Railroad Acts. In a February 29, 2020 filing, Havens cites several Civil-War era statutes, including “the Act of July 1, 1862, 12 Stat. 489.”[[73]](#footnote-75) Havens contends that we should review these acts “[b]efore finding that . . . private freight railroads have a valid public-interest basis to get more FCC licensed spectrum” to deploy PTC.[[74]](#footnote-76) PTC-220 responds that Havens appears to be asserting that PTC is a form of wireless telegraphy under these statutes, railroads are required to deploy telegraphy, and that we should consider the railroads’ obligations under these statutes.[[75]](#footnote-77) PTC-220 states that even assuming Havens’ assertions are correct, grant of the application would provide spectrum so that the railroads could satisfy their asserted obligation under the statutes to deploy a form of telegraphy (PTC).[[76]](#footnote-78)
16. Havens’ arguments regarding the alleged import of the Civil-War era statutes rely include on no new facts and could have been presented in the Petition to Deny.[[77]](#footnote-79) In the interest of a complete record, we will treat Havens’ arguments as an informal request for action under section 1.41 of the Commission’s rules.[[78]](#footnote-80)
17. The laws Havens cites are not relevant to our review of the proposed assignment. In the Rail Safety Improvement Act of 2008, Congress mandated that U.S. freight, passenger, and commuter railroads implement PTC systems to “prevent 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.”[[79]](#footnote-81) This mandate, not the Civil-War era statutes cited by Havens, informs our analysis here. We have conducted the public interest analysis required by Section 309(a) of the Communications Act above,[[80]](#footnote-82) and found that consistent with the Rail Safety Improvement Act of 2008, Commission precedent, and Section 309(a), the proposed assignment of spectrum to enable PTC and related rail safety systems will serve the public interest.

## PTC-220 Waiver Request

1. PTC-220 filed a request for waiver of the following Part 80 rules with the Application:[[81]](#footnote-83)

* Section 80.92(a), which requires licensees to monitor a frequency before transmitting; [[82]](#footnote-84)
* Section 80.105, which requires coast stations[[83]](#footnote-85) to receive calls from ship and aircraft stations;[[84]](#footnote-86)
* Section 80.106, which requires a coast station to receive communications from mobile stations and to transmit communications delivered to it, which are directed to mobile stations;[[85]](#footnote-87)
* Section 80.123(a), which requires an AMTS land station to secure a letter authorizing the land station to communicate with a coast station;[[86]](#footnote-88)
* Section 80.123(b), which requires coast stations to afford priority to marine-originating communications;[[87]](#footnote-89)
* Section 80.123(f), which provides that AMTS land stations may only communicate with coast stations;[[88]](#footnote-90)
* Section 80.215(h)(5), which requires coast stations’ transmitter power, as measured at the input terminals to the station antenna, to be 50 watts or less;[[89]](#footnote-91) and
* Section 80.385(a)(2), which divides the AMTS spectrum band into coast (base) station frequencies (217-218 MHz) and ship (mobile) station frequencies (219-220 MHz).[[90]](#footnote-92)

1. Petitioners claim PTC-220’s Waiver Request is deficient because it does not include a showing regarding the railroads’ need for additional spectrum to deploy PTC.[[91]](#footnote-93) In fact, PTC-220 explains that the spectrum will enable more robust PTC systems by permitting the deployment of two additional nationwide Common Control Channels, “which would be used by all locomotive radios to attach to a PTC base station and receive instructions regarding the proper frequency to operate on in the particular area.”[[92]](#footnote-94) PTC-220 further explains that the spectrum will be used for expanded PTC deployments and related rail safety applications, including End of Train (EOT) Devices and distributed power systems.[[93]](#footnote-95) The record does not support Petitioners’ claim that the Waiver Request is deficient.
2. Moreover, with the exception of Section 80.215(h)(5), the Bureau previously issued orders waiving each of the Part 80 rules identified above to enable Amtrak and the Southern California Regional Rail Authority to deploy PTC using AMTS spectrum in the Northeast Rail Corridor (from New York to Washington DC) and Southern California, respectively.[[94]](#footnote-96) The Bureau’s reasoning for waiving the subject rules to enable PTC in those orders applies equally here.
3. Waiver Standard. Section 1.925(b)(3) of the Commission's Rules provides that we may grant a 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 grant of the requested waiver would be in the public interest; or (ii) in light of unique or unusual circumstances, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.[[95]](#footnote-97) The Commission also may waive a rule, in whole or in part, on its own motion or on petition for good cause.[[96]](#footnote-98)
4. Further, when the Commission amended its rules to permit AMTS stations to provide service to units on land, it stated that the following factors would be considered in evaluating requests for waiver of AMTS rules: (a) whether the applicant will provide priority to maritime communications; (b) the distance of a proposed land mobile radio operation from the nearest navigable waterways; (c) the magnitude of divergence sought from specific Part 80 technical requirements; (d) whether alternative spectrum that could accommodate the proposed private land mobile radio (PLMR) or other land mobile radio service is unavailable or unsuitable for that purpose; and (e) whether grant of the waiver would benefit public safety or homeland security (including support of critical infrastructure).[[97]](#footnote-99)
5. Section 80.92(a). Section 80.92(a) requires an AMTS station operator to determine that a frequency is not in use before transmitting.[[98]](#footnote-100) PTC-220 states that while this rule is “necessary for a shared public system like AMTS, the rule is unnecessary for PTC systems,”[[99]](#footnote-101) which operate on an exclusive-use basis. In the *Amtrak Part 80 Waiver Order*, the Bureau found that waiving the requirement to monitor before transmitting would “promote the efficient use of AMTS spectrum and serve the public interest by promoting rail safety.”[[100]](#footnote-102) Consistent with that order and because railroads are deploying PTC in defined rail corridors, we find that the purpose of the rule (to avoid interference) would not be served here, and that grant of the requested waiver would be in the public interest by promoting rail safety and the efficient use of AMTS spectrum.[[101]](#footnote-103)
6. Section 80.105 and Section 80.123(b). PTC-220 requests waiver of the requirements that AMTS licensees receive calls from ship stations (section 80.105),[[102]](#footnote-104) and that they afford priority to marine communications (section 80.123(b)).[[103]](#footnote-105) In the *SCRRA Waiver Order*, the Bureau stated that a waiver of section 80.105 was required to enable “necessary intercommunication between the various PTC system elements,”[[104]](#footnote-106) and that the rule’s application would impair “PTC operation by interrupting critical information flow.”[[105]](#footnote-107) We note that maritime users have many options to meet their communications needs, including cellular and satellite services, and find that waiver of sections 80.105 and 80.123(b) to enable PTC deployment will not jeopardize the maritime community’s ability to meet its operational, safety, and security communications needs. We also find that, considering the unique circumstances of PTC deployments, strict application of sections 80.105 and 80.123(b) to PTC operations would be contrary to the public interest in rail safety and accordingly waive these rules.[[106]](#footnote-108)
7. Section 80.106.PTC-220 requests a waiver of the requirement that an AMTS coast station receive communications from mobile stations (that is, ship and aircraft stations at sea) and transmit communications delivered to it that are directed to mobile stations (section 80.106).[[107]](#footnote-109) In the *Amtrak Part 80 Waiver Order*, the Bureau waived section 80.106 to enable Amtrak’s PTC deployment when it waived section 80.105’s requirement that coast stations acknowledge and receive calls from mobile stations.[[108]](#footnote-110) Consistent with that order, we find that waiving section 80.106 here will promote the efficient use of AMTS spectrum and serve the public interest by improving the safety of railroad operations, without jeopardizing the maritime community’s ability to meet its communications needs.[[109]](#footnote-111) And consistent with the *SCRRA Order*, we find that considering the unique circumstances of U.S. railroads’ PTC deployments, application of section 80.106 to their PTC operations would be contrary to the public interest in rail safety and therefore waive this rule*.*[[110]](#footnote-112)
8. Section 80.123(a). PTC-220 requests waiver of the requirement that AMTS land stations secure a letter authorizing the land station to communicate with a coast station (section 80.123(a)),[[111]](#footnote-113) which enables authorities to verify that a unit on land is authorized to operate on AMTS spectrum.[[112]](#footnote-114) PTC-220 notes that the Bureau previously waived this rule to enable Amtrak and SCRRA to deploy PTC using AMTS spectrum.[[113]](#footnote-115) In the *Amtrak Part 80 Waiver Order*, the Bureau found that because PTC “is configured to transmit only data[] and railroad operations take place in limited locations where the responsible party is easily identifiable,”[[114]](#footnote-116) waiver would be appropriate. And in the *SCRRA Order*, the Bureau found that the “unique circumstances . . . in complying with the federal PTC mandate” supported a finding that “application of Section 80.123(a) . . . is unnecessary and would be unduly burdensome.”[[115]](#footnote-117) We find that considering the unique circumstances U.S. railroads face in complying with the federal PTC mandate, application of section 80.123(a) to their PTC operations is unnecessary and would be unduly burdensome and therefore waive this rule.[[116]](#footnote-118)
9. Section 80.123(f). PTC-220 seeks a waiver of the requirement that AMTS land stations only communicate with coast stations (section 80.123(f)),[[117]](#footnote-119) noting that in the *SCRRA Order*, the Bureau found that this operational standard is unnecessary for a private, internal-use only PTC system,[[118]](#footnote-120) and that the Bureau granted Amtrak a waiver of this requirement to enable its PTC deployment on AMTS spectrum.[[119]](#footnote-121) Consistent with these orders, and in light of the unique circumstances U.S. railroads face in complying with the federal PTC mandate, we find that application of section 80.123(f) to their PTC operations would be contrary to the public interest in rail safety and accordingly waive this rule.[[120]](#footnote-122)
10. Section 80.385(a)(2). PTC-220 requests waiver of Section 80.385(a)(2),[[121]](#footnote-123) which divides the AMTS spectrum band into coast (base) station frequencies (217-218 MHz) and ship (mobile) station frequencies (219-220 MHz).[[122]](#footnote-124) PTC-220 notes that PTC systems use Time Division Duplexing (TDD) transmit/receive time slot separation, and that PTC base and mobile stations will need to transmit on both the base and mobile station frequencies.[[123]](#footnote-125) When the Bureau granted Amtrak and SCRRA a waiver of this requirement, it noted that the railroads would operate under the antenna height and radiated power levels permitted for AMTS stations in their limited geographic area of operations.[[124]](#footnote-126) Because PTC-220’s member railroads’ PTC operations likewise will be in limited geographic areas and subject to the same restrictions, we conclude that a waiver of section 80.385(a)(2) is warranted. We find that, considering the unique circumstances U.S. railroads face in complying with the federal PTC mandate, strict application of section 80.385(a)(2) to their PTC operations would be contrary to the public interest and accordingly waive this rule.[[125]](#footnote-127)
11. Section 80.215(h)(5). Finally, PTC-220 requests a limited waiver of section 80.215(h)(5), which requires coast stations’ “transmitter power, as measured at the input terminals to the station antenna, [to] be 50 watts or less.”[[126]](#footnote-128) PTC-220 states that thousands of existing PTC base stations have a transmitter power output of 75 watts peak envelope power (PEP) or less.[[127]](#footnote-129) It explains that because these stations have at least 0.6 dB of cable, connector, and filter insertion loss between a transmitter’s output and an antenna’s input terminals, power at the input terminals will not exceed 65 watts PEP.[[128]](#footnote-130) PTC-220 therefore requests a waiver of section 80.215(h)(5) to permit up to 65 watts PEP as measured at the input terminals to a station antenna.
12. As PTC-220 explains, power at the input to antenna terminals alone does not determine whether a PTC transmitter has the potential to interfere with other licensees’ operations; rather, the level of radiated power from an antenna determines interference potential.[[129]](#footnote-131) PTC-220 states that because PTC base stations generally use omnidirectional (or nearly omnidirectional) antennas, most of an antenna’s gain results from focusing the power in the vertical plane.[[130]](#footnote-132) PTC-220 states that larger antennas could produce more gain so that the same radiated power levels could be achieved with 50 watts at an antenna’s input terminal.[[131]](#footnote-133) But to achieve these power levels while adhering to section 80.215(h)(5)’s 50-watt limit, railroads would have to install new, lower power transmitters and new antennas at thousands of base station sites.[[132]](#footnote-134) Under these circumstances, we find that strict application of section 80.215(h)(5) to railroads’ PTC operations is unnecessary and would be unduly burdensome.[[133]](#footnote-135) We also find that considering the unique circumstances U.S. railroads face in complying with the federal PTC mandate, strict application of section 80.215(h)(5) to their PTC operations would be contrary to the public interest and accordingly waive this rule to permit operations at up to 65 watts PEP as measured at the input terminals to a base station antenna.[[134]](#footnote-136)

## Conclusion and Ordering Clauses

1. Petitioners have not demonstrated that the Application should be denied. Moreover, in addition to the reasons discussed above for granting PTC-220 a waiver of certain AMTS rules to facilitate railroads’ compliance with the federal PTC mandate, we find good cause under section 1.3 of the Commission’s rules to waive these rules,[[135]](#footnote-137) because doing so will serve the public interest in rail safety in the Western United States.[[136]](#footnote-138)
2. We emphasize that the waiver relief we grant today will only apply to use of the AMTS spectrum to deploy PTC and related rail safety applications in defined rail corridors, thereby limiting the area of potential interference. If PTC-220 assigns, partitions, disaggregates, or leases any spectrum to be assigned from Kurian under Station WQCP809 to a third party, the waivers would only apply if that spectrum is used for PTC or related rail safety applications.
3. Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and 309 of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), 309, and section 1.939 of the Commission’s Rules, 47 CFR § 1.939, that the (Errata Copy) Petition to Deny Under 47 USC § 309(d) (and associated FCC rules) or in the Alternative Informal Request Under 47 CFR § 1.41, filed by Warren Havens and the Polaris PNT Group on August 7, 2019, IS DENIED, and application FCC File No. 000869437, filed on July 16, 2019, SHALL BE PROCESSED in accordance with this *Order* and the Commission’s Rules.
4. And, IT IS FURTHER ORDERED, pursuant to Sections 4(i) and 309 of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), 309, and sections 1.3, 1.925(b)(3) of the Commission’s rules, 47 CFR §§ 1.3, 1.925(b)(3), that the Request for Waivers for AMTS Spectrum to be Partitioned & Disaggregated from Call Sign WQCP809, FCC File No. 0008694347, filed by PTC-220 LLC on July 16, 2019 and amended on November 17, 2020, IS GRANTED to the extent provided above.
5. This action is taken under delegated authority pursuant to sections 0.131 and 0.331 of the Commission’s Rules, 47 CFR §§ 0.131, 0.331.

FEDERAL COMMUNICATIONSCOMMISSION

Roger S. Noel

Chief, Mobility Division

Wireless Telecommunications Bureau

1. File No. 0008694347 (filed July 16, 2019) (Application). The Polaris PNT Group’s members include Polaris PNT PBC; Polaris PNT1, PB LLC; Polaris PNT 2, PB LLC; and Polaris PNT 3, PB LLC. (Errata Copy) Petition to Deny Under 47 USC § 309(d) (and associated FCC rules) or in the Alternative Informal Request Under 47 CFR § 1.41, File No. 0008694347, at 1 (filed Aug. 7, 2019) (Petition to Deny). [↑](#footnote-ref-3)
2. Request for Waivers for AMTS Spectrum to be Partitioned & Disaggregated from Call Sign WQCP809, File No. 0008694347 (filed July 16, 2019, amended Nov. 17, 2020) (Waiver Request). PTC-220’s members include BNSF Railway Company, CSX Corporation, Norfolk Southern Corporation, Union Pacific Corporation, Kansas City Southern, Canadian National, and Canadian Pacific. Description of the Transaction and Public Interest Statement, File No. 0008694347, at n.2 (filed July 16, 2019) (Public Interest Statement). [↑](#footnote-ref-4)
3. *Amendment of Parts 2, 81 and 83 of the Commission's Rules to Allocate Spectrum for an Automated Inland Waterways Communications System (IWCS) along the Mississippi River and Connecting Waterways*, GEN Docket No. 80-1, Report and Order, 84 F.C.C. 2d 875 (1981). [↑](#footnote-ref-5)
4. *Amendment of the Commission's Rules Concerning Maritime Communications*, PR Docket No. 92-257, Second Report and Order*,* 12 FCC Rcd 16949, 16964-65 paras. 24-25 (1997) (*AMTS Second Report and Order*). [↑](#footnote-ref-6)
5. *Amendment of the Commission’s Rules Concerning Maritime Communications*, PR Docket No. 92-257, Second Memorandum Opinion and Order and Fifth Report and Order, 17 FCC Rcd 6685, 6696, para. 24 (2002). Incumbent site-based stations are grandfathered and are entitled to protection from a geographic licensee. [↑](#footnote-ref-7)
6. 47 CFR § 80.385 (frequencies for AMTS systems). [↑](#footnote-ref-8)
7. File No. 0008694347. [↑](#footnote-ref-9)
8. *Wireless Telecommunications Bureau Assignment of License Authorization Applications, Transfer of Control of Licensee Applications, and De Facto Transfer Lease Applications, and Designated Entity Reportable Eligibility Event Applications Accepted for Filing*, Public Notice,Report No. 14227 (WTB rel. July 24, 2019). [↑](#footnote-ref-10)
9. Petition to Deny. [↑](#footnote-ref-11)
10. PTC-220 Opposition to Petition to Deny, File No. 0008694347 (filed Aug. 19, 2019) (Opposition). [↑](#footnote-ref-12)
11. (Errata Copy) Reply to Opposition to Petition to Deny Under 47 USC § 309(d) (and associated FCC rules) or in the Alternative Informal Request Under 47 CFR § 1.41, and Reply to Opposition to Supplemental Filings, at 2, File No. 0008694347 (filed Sept. 14, 2019) (Reply). [↑](#footnote-ref-13)
12. *Id.* at 6. [↑](#footnote-ref-14)
13. Havens Supplement of 8-14-2019 to (Errata Copy) Petition to Deny Under 47 USC § 309(d) (and associated FCC rules) or in the Alternative Informal Request Under 47 CFR § 1.41, File No. 0008694347 (filed Aug. 14, 2019). [↑](#footnote-ref-15)
14. Petition Supplement, With Request to Accept Copy of Relevant Court Filing, 8-20-2019 Filed Motion for Stay and Injunction Before the Nevada Supreme Court by Appellant Havens, File No. 0008694347 (filed Aug. 21, 2019). [↑](#footnote-ref-16)
15. Opposition to Late Filings or, Alternatively, Informal Filings, File No. 0008694347 (filed Aug. 28, 2019). [↑](#footnote-ref-17)
16. 47 CFR § 1.41 (the rule provides that “[e]xcept where formal procedures are required” under the Commission’s rules “requests for action may be submitted informally”). [↑](#footnote-ref-18)
17. 47 CFR § 1.65 (the rule requires applicants to advise the Commission of substantial changes of matters that may be of decisional significance). [↑](#footnote-ref-19)
18. Section 1.65 Update Supplement, File No. 0008694347 (filed Jan. 28, 2020). [↑](#footnote-ref-20)
19. Warren Havens Response to Section 1.65 Update Supplement by PTC-220, File No. 0008694347 (filed Jan. 28, 2020) (Havens January 28, 2020, Response). [↑](#footnote-ref-21)
20. Supplement to Warren Havens Response to Section 1.65 Update Supplement by PTC-220, File No. 0008694347 (filed Feb. 29, 2020) (Havens February 29, 2020, Supplement). [↑](#footnote-ref-22)
21. *Id.* at. 2-3. [↑](#footnote-ref-23)
22. 47 CFR § 1.65. [↑](#footnote-ref-24)
23. Section 1.65 Update and Response to Informal Filings, File No. 0008694347 (filed May 8, 2020) (PTC-220 May 8, 2020, Update). [↑](#footnote-ref-25)
24. *Id.* at 3. [↑](#footnote-ref-26)
25. Havens Response to PTC-220’s May 8, 2020 “Section 1.65 Update and Response to ‘Informal Filings’,” and Further Submission Including New Court Order, File No. 0008694347 (filed May 21, 2020). [↑](#footnote-ref-27)
26. Havens July 15, 2020 Informational Filing and Update and Petition for Leave to Supplement Record, File No. 0008694347 (filed July 15, 2020). [↑](#footnote-ref-28)
27. 47 CFR § 1.65. [↑](#footnote-ref-29)
28. Section 1.65 Update, File No. 0008694347 (filed Sept. 25, 2020) (PTC-220 September 25, 2020, Update). [↑](#footnote-ref-30)
29. Petition to Deny at 2. [↑](#footnote-ref-31)
30. *Id.* at 4. [↑](#footnote-ref-32)
31. *Id.* [↑](#footnote-ref-33)
32. PTC-220 September 25, 2020, Update. [↑](#footnote-ref-34)
33. *Applications of Verestar, Inc. (Debtor-In-Possession) for Consent to Assignment of Licenses to SES Americom, Inc.*, Memorandum Opinion, Order, and Authorization, 19 FCC Rcd 22750, para. 16 (IB & WTB 2004) (it is “long-standing Commission policy not to involve itself with private contract disputes”); *Chief Washakie TV*, 46 Rad. Reg. 2d 1594, n.7 (P&F) (1980) (pendency of ongoing litigation does not preclude Commission action on an application). [↑](#footnote-ref-35)
34. *Thomas K. Kurian*, Order, 24 FCC Rcd 4849, 4852, para. 9 (WTB MD 2009). [↑](#footnote-ref-36)
35. *Thomas K. Kurian*, Memorandum of Opinion and Order, 25 FCC Rcd 13863 (WTB MD 2010). [↑](#footnote-ref-37)
36. Environmental, LLC v. FCC, 661 F.3d 80 (D.C. Cir. 2011). [↑](#footnote-ref-38)
37. *Regents of University System of Georgia v. Carroll*, 338 U.S. 586, 602 (1950) (holding that the Commission is not the proper forum to litigate contract disputes between licensees and others); Listeners' Guild v. FCC, 813 F.2d 465, 569 (D.C. Cir. 1987) (endorsing “the Commission's longstanding policy of refusing to adjudicate private contract law questions”); *Applications of AT&T Inc. and Cellco Partnership d/b/a Verizon Wireless for Consent to Assign or Transfer Control of Licenses and Authorizations and Modify a Spectrum Leasing Arrangement*, Memorandum Opinion and Order, 25 FCC Rcd 8704, para. 139 (2010) (concluding that, “consistent with past practice, . . . the pendency of these legal proceedings should not cause us to delay our action on the pending AT&T-Verizon Wireless applications”); *PCS 2000, L.P.*, Memorandum Opinion and Order, 12 FCC Rcd 1681, 1691, para. 23 (1997) (deferring to the courts to adjudicate matters involving private rights).  [↑](#footnote-ref-39)
38. *Spanish International Communications Corporation*, Memorandum Opinion and Order, 3 FCC Rcd 4319, 4321, para. 11 (1988) (“[T]he Bureau's grant of a transfer or assignment amounts only to consent to the specific transaction proposed. In the absence of the issuance of a stay or injunction by a tribunal with proper jurisdiction, the parties to such applications are free to consummate the transaction at their own risk where matters are pending in other forums which may ultimately result in an unfavorable outcome for them.”). [↑](#footnote-ref-40)
39. Petition to Deny at 2-3. [↑](#footnote-ref-41)
40. *Id.* at 3. [↑](#footnote-ref-42)
41. Opposition at 3-4. [↑](#footnote-ref-43)
42. Reply at 5. [↑](#footnote-ref-44)
43. *Id.* at 6. [↑](#footnote-ref-45)
44. 329 U.S. 223 (1946) (*WOKO*). [↑](#footnote-ref-46)
45. *Id.* at 225. [↑](#footnote-ref-47)
46. 47 U.S.C. § 308(b) (“All applications for station licenses . . . shall set forth such facts as the Commission by regulation may prescribe.”). [↑](#footnote-ref-48)
47. 47 CFR § 1.948(c) (“In the case of an assignment of authorization[,] . . . the assignor must file an application for approval of the assignment on FCC Form 603.”). [↑](#footnote-ref-49)
48. PTC-220 May 8, 2020, Update at 2-3. [↑](#footnote-ref-50)
49. Petition to Deny at 3. [↑](#footnote-ref-51)
50. *Id.* [↑](#footnote-ref-52)
51. *Id.* [↑](#footnote-ref-53)
52. *Id.* [↑](#footnote-ref-54)
53. *National Railroad Passenger Corporation (d/b/a Amtrak)*, WT Docket No. 11-27, Order, 30 FCC Rcd 2038 (WTB MD 2015). [↑](#footnote-ref-55)
54. Public Interest Statement at 1 and n.2, citing Rail Safety Improvement Act of 2008, Pub. L. No. 110-432, § 104, 122 Stat. 4848 (2008), amended by the Positive Train Control Enforcement and Implementation Act of 2015, Pub. L. No. 114-73, § 1302, 129 Stat. 568, 576 (2015). [↑](#footnote-ref-56)
55. 49 U.S.C. § 20157(i)(5). [↑](#footnote-ref-57)
56. Public Interest Statement at 1-2. [↑](#footnote-ref-58)
57. Waiver Request at 3. [↑](#footnote-ref-59)
58. Waiver Request at 4-5. EOT “deployments typically consist of two units – one located at the rear of the train, which transmits the brake line air pressure information to the locomotive, and one at the front of the train, where the locomotive engineer receives such information.” *Id.* at 4. PTC-220 explains that “[t]he radio link enables the engineer to apply the brakes from both ends of the train simultaneously in an emergency.” *Id.* Distributed power systems involve “placing one or more locomotives within or at the end of a train to reduce in-train stresses related to braking and pulling.” *Id.* at 5. Railroads currently use 450 MHz band spectrum for EOT deployments and distributed power systems, but the railroads have found that as trains have become longer, this spectrum does not provide a reliable radio link. *Id.* at 4-5. PTC-220 seeks AMTS spectrum to provide reliable radio links for these vital safety systems. *Id.* [↑](#footnote-ref-60)
59. *Maritime Communications/Land Mobile, LLC*, Memorandum Opinion and Order, 29 FCC Rcd 10871, 10882, para. 29 (2014) (*MCLM Order*). [↑](#footnote-ref-61)
60. *MCLM Order*, 29 FCC Rcd at 10880, para. 25 (removing from a contested hearing, an application to assign AMTS spectrum for the Southern California Regional Rail Authority to implement PTC) and *Southern California Regional Rail Authority, Call Sign WQYR421*, Letter Order, DA 20-1259, 2020 WL 6305894 (WTB MD Oct. 23, 2020) (granting that application so that SCRRA and three railroads that operate as tenants on its rail network—Amtrak, the BNSF Railway, and the Union Pacific Railroad—could deploy PTC using AMTS spectrum). *See also Metropolitan Transportation Authority*, Proposed Order of Modification, 31 FCC Rcd 1436, at 1437-38, para. 3 (2016) (proposing modification of license to include spectrum in areas where MTA was unable to obtain suitable spectrum to implement PTC) and *Metropolitan Transportation Authority*, Order of Modification, 31 FCC Rcd 8862 (WTB MD 2016) (modification of license to include spectrum in areas of Connecticut and New York where MTA was unable to obtain suitable spectrum to implement PTC). [↑](#footnote-ref-62)
61. 47 U.S.C. § 309(a). [↑](#footnote-ref-63)
62. Reply at 6 (citing DC Bar Rule 1.9). [↑](#footnote-ref-64)
63. Havens January 28, 2020, Response at 2. [↑](#footnote-ref-65)
64. *Id.* [↑](#footnote-ref-66)
65. 47 CFR § 1.948(j)(1)(iii) (requiring that petitions to deny “be filed no later than 14 days following the date of the Public Notice listing the application as accepted for filing”). [↑](#footnote-ref-67)
66. 47 CFR §1.41 (the rule provides that “[e]xcept where formal procedures are required” under the Commission’s rules “requests for action may be submitted informally”). [↑](#footnote-ref-68)
67. PTC-220 May 8, 2020, Update at 3. [↑](#footnote-ref-69)
68. Declaration attached to PTC-220 May 8, 2020, Update. [↑](#footnote-ref-70)
69. PTC-220 May 8, 2020, Update at 3. [↑](#footnote-ref-71)
70. *Id.* at n.12, citing *Applications of TGE Communications, Inc.,* *et al*., Memorandum Opinion and Order, 3 FCC Rcd 2122, n.1 (1988). [↑](#footnote-ref-72)
71. Reply at 2. [↑](#footnote-ref-73)
72. *Id.* [↑](#footnote-ref-74)
73. Havens February 29, 2020, Supplement at 2-3. The Act of July 1, 1862 is titled “An Act to aid in the Construction of a Railroad and Telegraph Line from the Missouri River to the Pacific Ocean, and to secure to the Government the Use of the same for Postal, Military, and Other Purposes.” [↑](#footnote-ref-75)
74. *Id.* at 2. [↑](#footnote-ref-76)
75. PTC-220 May 8, 2020, Update at 3-4. [↑](#footnote-ref-77)
76. *Id.* at 4. [↑](#footnote-ref-78)
77. 47 CFR § 1.948(j)(1)(iii) (requiring that petitions to deny “be filed no later than 14 days following the date of the Public Notice listing the application as accepted for filing”). [↑](#footnote-ref-79)
78. 47 CFR § 1.41 (the rule provides that “[e]xcept where formal procedures are required” under the Commission’s rules “requests for action may be submitted informally”). [↑](#footnote-ref-80)
79. Rail Safety Improvement Act of 2008, Pub. L. No. 110-432, § 104, 122 Stat. 4848 (2008), amended by the Positive Train Control Enforcement and Implementation Act of 2015, Pub. L. No. 114-73, § 1302, 129 Stat. 568, 576 (2015). [↑](#footnote-ref-81)
80. 47 U.S.C. § 309(a). [↑](#footnote-ref-82)
81. Waiver Request. [↑](#footnote-ref-83)
82. 47 CFR § 80.92(a). [↑](#footnote-ref-84)
83. The AMTS rules define two station classes: coast stations and ship stations. 47 CFR § 80.5 (defining a coast station as a “land station in the maritime mobile service” and a ship station as a “mobile station in the maritime mobile service located on-board a vessel which is not permanently moored”). The Commission amended the AMTS rules in 1997 to permit AMTS stations to serve fixed, mobile, and handheld units on land, in addition to marine vessels. AMTS Second Report and Order, 12 FCC Rcd 16949, 16964-65 paras. 24-25. Because they are both fixed stations, we regulate PTC base and wayside stations as AMTS coast stations for licensing purposes. And because they are mobile, we regulate locomotive stations as AMTS ship stations for licensing purposes. [↑](#footnote-ref-85)
84. 47 CFR § 80.105. [↑](#footnote-ref-86)
85. *Id.* § 80.106. [↑](#footnote-ref-87)
86. *Id.* § 80.123(a). [↑](#footnote-ref-88)
87. *Id.* § 80.123(b). [↑](#footnote-ref-89)
88. *Id.* § 80.123(f). [↑](#footnote-ref-90)
89. *Id.* § 80.215(h)(5). [↑](#footnote-ref-91)
90. *Id.* § 80.385(a)(2). [↑](#footnote-ref-92)
91. Petition to Deny at 3. [↑](#footnote-ref-93)
92. Waiver Request at 3. [↑](#footnote-ref-94)
93. Railroads currently use 450 MHz band spectrum for EOT deployments and distributed power systems, but the railroads have found that as trains have become longer, this spectrum does not provide a reliable radio link. *Id.* at 4-5. PTC-220 seeks AMTS spectrum to provide reliable radio links for these vital safety systems. *Id.*  [↑](#footnote-ref-95)
94. *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, 2041, para. 11 (WTB MD 2015) (*Amtrak Part 80 Waiver Order*) and *Maritime Communications/Land Mobile, LLC and Southern California Regional Rail Authority File Applications to Modify License and Assign Spectrum for Positive Train Control Use, and Request Part 80 Waivers*, WT Docket No. 10-83, Order, 31 FCC Rcd 9826 (WTB 2016) (*SCRRA Waiver Order*). [↑](#footnote-ref-96)
95. 47 CFR § 1.925(b)(3); *see also WAIT Radio v FCC*, 418 F. 2d 1153, 1159 (D.C. Cir. 1969). [↑](#footnote-ref-97)
96. 47 CFR § 1.3. [↑](#footnote-ref-98)
97. *Maritel, Inc. and Mobex Network Services, LLC*, Report and Order, 22 FCC Rcd 8971, 8986-87, para. 26 (2007) (*Flexibility Order*). [↑](#footnote-ref-99)
98. 47 CFR § 80.92(a). [↑](#footnote-ref-100)
99. Waiver Request at 8. [↑](#footnote-ref-101)
100. *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, 2041, para. 11 (WTB MD 2015) (*Amtrak Part 80 Waiver Order*). [↑](#footnote-ref-102)
101. 47 CFR § 1.925(b)(3)(i). [↑](#footnote-ref-103)
102. Waiver Request at 8, citing 47 CFR § 80.105. [↑](#footnote-ref-104)
103. *Id.* at 10, citing 47 CFR § 80.123(b). [↑](#footnote-ref-105)
104. *SCRRA Waiver Order*, 31 FCC Rcd at 9837, para. 31 & n.106, citing Letter from Joseph C. Szabo, Administrator, Federal Railroad Administration, to Ruth Milkman, Chief, Wireless Telecommunications Bureau, FCC, WT Docket No. 10-83, at 2 (May 3, 2010). [↑](#footnote-ref-106)
105. *Id.* [↑](#footnote-ref-107)
106. 47 CFR § 1.925(b)(3)(ii). *See also County of Silverbow, Montana*, Order, 24 FCC Rcd 12547, 12565, para. 41 (PSHSB PD 2009) (*Silverbow Order*) (waiving Sections 80.105 and 80.106 to permit use of VHF Public Coast station frequencies in a Public Safety PLMR system). [↑](#footnote-ref-108)
107. Waiver Request at 8-9, citing 47 CFR § 80.106. [↑](#footnote-ref-109)
108. *Amtrak Part 80 Waiver Order*, 30 FCC Rcd at 2042, para. 13. [↑](#footnote-ref-110)
109. *Id*. [↑](#footnote-ref-111)
110. 47 CFR § 1.925(b)(3)(ii). *See also Silverbow Order*, 24 FCC Rcd at 12565, para. 41 (waiving sections 80.105 and 80.106 to permit use of VHF Public Coast station frequencies in a Public Safety PLMR system). [↑](#footnote-ref-112)
111. 47 CFR § 80.123(a). [↑](#footnote-ref-113)
112. Waiver Request at 9-10. [↑](#footnote-ref-114)
113. *Id.* at 9, citing *Amtrak Part 80 Waiver Order*, 30 FCC Rcd at 2042, para. 12. and *SCRRA Waiver Order*, 31 FCC Rcd at 9838, para. 34. [↑](#footnote-ref-115)
114. *Amtrak Part 80 Waiver Order*, 30 FCC Rcd at 2042, para. 12. [↑](#footnote-ref-116)
115. *SCRRA Waiver Order*, 31 FCC Rcd at 9838, para. 34. [↑](#footnote-ref-117)
116. 47 CFR § 1.925(b)(3)(ii). [↑](#footnote-ref-118)
117. *Id.* § 80.123(f). [↑](#footnote-ref-119)
118. Waiver Request at 10 and n.45, citing *SCRRA Waiver Order*, 31 FCC Rcd at 9839, para 36. [↑](#footnote-ref-120)
119. *Id.*, citing *Amtrak Part 80 Waiver Order*, 30 FCC Rcd at 2042, para. 13. [↑](#footnote-ref-121)
120. 47 CFR § 1.925(b)(3)(ii). [↑](#footnote-ref-122)
121. *Id.* § 80.385(a)(2). [↑](#footnote-ref-123)
122. Waiver Request at 10-11. [↑](#footnote-ref-124)
123. *Id.* at 9. [↑](#footnote-ref-125)
124. *Amtrak Part 80 Waiver Order*, 30 FCC Rcd at 2042-43, para. 14; *SCRRA Waiver Order*, 31 FCC Rcd at 9839, para. 37. [↑](#footnote-ref-126)
125. 47 CFR § 1.925(b)(3)(ii). [↑](#footnote-ref-127)
126. Waiver Request at 11-12, citing 47 CFR § 80.215(h)(5). [↑](#footnote-ref-128)
127. *Id.* at 12. [↑](#footnote-ref-129)
128. *Id.* [↑](#footnote-ref-130)
129. *Id.* (noting “it is the gain of the antenna and the input power that determine the magnitude, direction and breadth of the radiated power, but ultimately only radiated power can cause interference”). [↑](#footnote-ref-131)
130. *Id.* [↑](#footnote-ref-132)
131. *Id.* [↑](#footnote-ref-133)
132. *Id.* [↑](#footnote-ref-134)
133. 47 CFR § 1.925(b)(3)(ii). [↑](#footnote-ref-135)
134. *Id.* § 1.925(b)(3)(ii). [↑](#footnote-ref-136)
135. This includes all rules discussed above. [↑](#footnote-ref-137)
136. 47 CFR § 1.3. [↑](#footnote-ref-138)