

**UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION**

**DOCKET NO. FRA-2023-0064
POSITIVE TRAIN CONTROL SYSTEMS
NOTICE OF PROPOSED RULEMAKING**

**COMMENT SUBMITTED BY
THE ASSOCIATION OF AMERICAN RAILROADS AND
THE AMERICAN SHORT LINE AND REGIONAL RAILROAD ASSOCIATION**

The Association of American Railroads (AAR) and the American Short Line and Regional Railroad Association (ASLRRA) (jointly, the Associations), on behalf of themselves and their member railroads, submit the following comments in response to the Federal Railroad Administration's (FRA's) October 28, 2024, Notice of Proposed Rulemaking (NPRM) proposing to amend Federal Railroad Safety regulations that address temporary situations where positive train control (PTC) technology is not enabled.¹

Statement of Interest

AAR is a non-profit trade association whose membership includes freight railroads that operate 83% of the line-haul mileage, employ 95% of the workers, and account for 97% of the freight revenues of all railroads in the United States; and passenger railroads that operate intercity passenger trains and provide commuter rail service. ASLRRA is a non-profit trade association representing the interests of about 600 short line and regional railroads. Short lines operate nearly 50,000 route miles in the United States, serving customers who would otherwise be cut off from the national railroad network. The Associations' members will be directly affected by the proposed changes because they will be required to operate in a manner that is consistent with the regulations once finalized.

¹ 89 Fed. Reg. 85462 (Oct. 28, 2024).

General Comments

The Associations support the need for relief for operating under unplanned system outages as was previously provided for in 49 CFR § 236.1029(g)(2). To wit, five railroads recently submitted a joint request to amend their respective PTC Safety Plans (PTCSPs) to FRA requesting such relief, which was denied by FRA. (See Docket Nos. FRA-2010-0039, FRA-2010-0045, FRA-2010-0051, FRA-2010-0056, and FRA-2010-0060.) While the Associations support a rulemaking that provides this necessary and logical relief, FRA's proposed rule seeks to impose additional conditions not contained in the now expired § 236.1029(g)(2), which unnecessarily constrain the effectiveness of such provisions. The Associations submit the following comments and request FRA's consideration of the changes proposed herein.

I. Proposal to amend 49 CFR 236.1029(g).

It is unduly burdensome to require railroads to operate at restricted speed after 24 hours.

The Associations recognize the importance of ensuring rail safety and addressing PTC outages promptly. However, imposing significant restrictions, such as limiting operations to restricted speed after 24 hours of an unplanned PTC outage, as proposed in paragraph (g)(1)(ii) of § 236.1029, will not expedite the restoration process. Additionally, increasing operational restrictions after 24 hours does not directly enhance safety. Resolving PTC outages requires a careful balance between timeliness and precision. In the rare event that a PTC outage extends beyond 24 hours, it is likely due to an unprecedented issue, given the railroads' extensive experience managing PTC systems to limit the duration of unplanned outages.

The existing speed restrictions under the en route failure rule in § 236.1029(b) already provide a significant incentive for railroads to quickly identify and resolve any unplanned PTC outages (AAR previously collected and shared examples with FRA from each of the railroads in December 2023). One Class I railroad conducted a network analysis, which showed a delay of over 9 hours to its most time-

sensitive trains over its main line when operating under en route failure conditions. It found that less prioritized traffic would experience significantly higher delays. The analysis showed approximately a 25% increase overall in transit time. This estimate represents the bare minimum impact on overall network velocity if all trains were held to en route failure speeds for a significant period and evidences the significant impact speed restrictions have on a freight rail network, thus demonstrating that railroads do not need an additional incentive to restore PTC operations. Moreover, if the en route failure speed restrictions are safe enough to operate for the first 24 hours of an unplanned PTC outage, then those same restrictions should be safe enough for any train operating after 24 hours.

Limiting any train on a network (or portion of a network) to restricted speed after 24 hours, as proposed in paragraph (g)(1)(ii), would have significant negative impacts that are tantamount to shutting down the railroad. Any railroad that is dealing with an unplanned PTC outage lasting for more than 24 hours would already be facing a cascading set of issues across its network due to the en route failure speed restrictions. Requiring that railroad to operate at restricted speed after 24 hours would have widespread network consequences, not only slowing traffic to unusable levels on the impacted track segment, but also affecting network velocity across alternative routes, which will negatively impact a railroad's ability to serve its customers and keep critical goods moving to their destination. Slowing network velocity to restricted speed levels would not allow for trains to get from one crew change location to another without re-crews. Staffing levels would not support the numbers of trains that would need to be re-crewed to support this method of operation.

While the Associations understand that FRA discussed the two-tiered framework with APTA and other commuter and passenger railroads, FRA did not discuss this framework with the Class I freight railroads or with short line railroads subject to the PTC rule. It is unclear why FRA chose not to have those discussions with Class I railroads, but it is clear that FRA's failure to consult Class I railroads resulted in a significant blind spot concerning the impacts of requiring trains to operate at restricted

speed on a Class I freight rail network. Likewise, FRA's lack of communication with short line railroads subject to the PTC rule leaves the Agency without information on how restrictive speeds would impact those operations. The reality is that a much smaller commuter rail network can recover from a restricted speed limitation much faster than a larger freight rail network.

There is no safety basis during an unplanned outage to require each train to attempt to reinitialize at the next available forward location.

Proposed paragraph (g)(3) of § 236.1029 would require a railroad to attempt to reinitialize the PTC system of every train at the next forward, available location, including a mainline, if the unplanned PTC outage is due to a loss of communications or lack of navigational information. Attempting to reinitialize the PTC system requires the train to come to a complete stop. It is unreasonable to require a railroad that is having an unplanned PTC outage due to a communications issue or navigational issue to have every train on the impacted lines stop and attempt to reinitialize the PTC system at the next forward location, including a main line, if a railroad knows the communication or navigational issue is not yet resolved. Any railroad suffering from an unplanned PTC outage will be using all means necessary to reinstitute its PTC system with the utmost haste. This will include testing of the system in controlled environments, and this testing should show whether the system is functioning again. Only when these test conditions show that the system is operating again should the railroad be attempting to reinitialize its trains. FRA's proposal in the NPRM will only cause additional—and unnecessary—delays to freight and passenger operations during an unplanned PTC outage.

FRA's proposed basis for denying relief or imposing additional operating restrictions and other conditions to address recurring unplanned outages is impermissibly vague.

Proposed paragraph (g)(5) of § 236.1029 would allow FRA "to impose additional operating restrictions and other conditions to address recurring issues that result in multiple trains' PTC systems failing to initialize and to deny the relief under paragraph (g)(1) of this section for recurring issues that result in multiple trains' PTC systems failing to initialize." In the preamble, FRA attempts to explain the

requirement by noting that it “could require the applicable railroads and PTC system vendors and suppliers to take certain actions or satisfy additional reporting requirements, as they resolve the recurring issues.” However, this example does not clarify what types of actions FRA can take under this provision. It is left entirely to the discretion of FRA to determine what restrictions, or other conditions, would be appropriate, and to whom those restrictions would apply. FRA should delete this proposed paragraph because it is impermissibly vague and unnecessary for safe operations.

FRA fails to explain what is meant by “recurring issue.”

Proposed paragraph (g)(5) of § 236.1029 also introduces a new term to the regulatory text by focusing on “recurring issues” that result in initialization failures in multiple trains. FRA does not explain how it will determine if “multiple trains’ PTC systems failing to initialize” constitutes a recurring issue. Railroads already conduct root cause analyses for failures and deploy corrective actions or mitigations as a result, but these analyses often will not be completed until after the PTC system is restored, so it is unclear how FRA will determine if an issue is recurring during the outage. Additionally, as the FRA has noted, “PTC systems are comprised of many subsystems;” and the complex interactions between these subsystems necessitate that FRA clearly define what qualifies as a “recurring issue.”

II. Proposal to create 49 CFR 236.1021(m)(4).

FRA should modify the scope of proposed 236.1021(m)(4).

Proposed paragraph (m)(4) of § 236.1021 would establish a process for requesting and obtaining approval to continue train movements during “a short-term outage related to repair, maintenance, an infrastructure upgrade, or a capital project.” FRA states that “PTC system outage includes, but is not limited to, any scenario when the onboard PTC apparatus or subsystem, wayside subsystem, communications subsystem, or back office subsystem would be disabled[.]” The Associations

recommend adding “or other activities requiring a planned outage” in order to capture any other situations where utilization of this process may be appropriate.

The RFA process makes it impossible for railroads to efficiently plan temporary outages to perform PTC system upgrades, maintenance, and other work.

FRA states that its objective in this rulemaking is to “establish clear, uniform processes, rather than addressing issues that arise in a reactive and piecemeal manner.” However, the process that FRA proposes to establish would be slow, unpredictable, inefficient, and ad hoc in nature. The changes in proposed paragraph (m)(4) of § 236.1021 would require railroads to submit an RFA for planned outages that would be subject to public comment instead of simply providing operating parameters for these scenarios. 89 Fed. Reg. at 85477. Railroads are not able to predict when FRA will act on or approve planned outage requests. Indeed, in the preamble, FRA states that the 45-day clock for reviewing and approving an RFA under § 236.1021(m) will not start on the date of the RFA filing if the railroad does not include any of the contents “explicitly required” in paragraph (m)(2)(i)-(v) or the additional content requirements proposed in (m)(4)(ii)(A)-(I). 89 Fed. Reg. at 85468. As an initial matter, this is problematic because FRA does not state when or how it will communicate to the railroad that all the required content has been provided. But this is also troubling because many of the nine additional content requirements in proposed paragraph (m)(4) are subjective. As such, railroads are subject to the whims of whomever is reviewing the RFA on behalf of FRA. Railroads need to have certainty from FRA to quickly schedule and efficiently complete necessary upgrades, repairs, and other maintenance to their PTC systems. The Associations recommend as an alternative to the cumbersome RFA process that a railroad be able to notify FRA at least 15 days in advance of a change that might result in a regional or systemwide PTC outage and, if FRA does not object within the 15 days, the railroad would operate according to conditions already provided for in the regulation.

Many of the content requirements for temporary planned outage RFA's
are unnecessary, onerous, and subjective in nature.

In proposed paragraph (m)(4)(ii) of § 236.1021, FRA includes nine content requirements that a railroad must address in its RFA. The nine content requirements are in addition to the existing content requirements in paragraph (m)(2) that a railroad must also address in its submission under proposed paragraph (m)(4). The Associations do not oppose reasonable requirements to facilitate the safe movement of trains and equipment. However, the conditions in the NPRM are designed to discourage railroads from conducting operations on territories where they are performing temporary planned outages. Indeed, most of the requirements are duplicative, overly burdensome, and/or completely divorced from any safety rationale.

As an example, proposed paragraph (m)(4)(ii)(A)—which would require a railroad to describe the technical necessity for the proposed temporary outage—is duplicative of the existing RFA requirement in § 236.1021(m)(2)(i) which already requires a railroad to provide a summary of the proposed changes and the reason for the proposed change. Specifically, existing § 236.1021(m)(2)(i) states that a railroad RFA must include “[a] summary of the proposed changes to any safety-critical elements of a PTC system, including a summary of how the changes to the PTC system would affect its safety-critical functionality, how any new hazards have been addressed and mitigated, whether each change is a planned change that was previously included in all required analysis under § 236.1015 or an unplanned change, and the reason for the proposed changes, including whether the changes are necessary to address or resolve an emergency or urgent issue.”

In proposed paragraph (m)(4)(ii)(B), FRA would require a railroad to describe not only “[t]he physical limits and PTC system functions that would be affected by the proposed temporary outage,” but would also require a railroad to conduct “an analysis that demonstrates the affected physical limits and affected functions pose the least risk to railroad safety, compared to other options.” FRA provides little explanation about what type of analysis it would expect a railroad to provide. In the preamble to

the NPRM, FRA states that “FRA needs to understand the exact location(s) that will be impacted, including milepost limits and other descriptors. Identifying the precise PTC system functions that would be impacted is also essential for FRA to understand the scope of the temporary outage, as an outage might impact only a narrow set of PTC system capabilities.” It is one thing to require the scope of the PTC outage (such as identifying whether the outage will impact the entire PTC system or just certain subdivisions). But any additional information is duplicative of the information that railroads are required to provide pursuant to existing § 236.1021(m)(2) and is, otherwise, simply not necessary for FRA to make an assessment on whether a railroad can continue to operate trains during a temporary planned outage. Indeed, this requirement could have the unintended effect of delaying important safety or security updates to PTC systems. Additionally, the Associations note that the analysis would require railroads to “compare other options.” FRA does not state what this comparison would require. There will be inherent and latent risks associated with a railroad’s failure to upgrade its PTC systems but the nature of those risks are not necessarily apparent on a case-by-case basis, so a railroad would not necessarily be able to provide this type of information in a detailed analysis.

Proposed paragraph (m)(4)(ii)(C) in § 236.1021 would require a railroad to include an explanation as to how a planned temporary outage is consistent with railroad safety and in the public interest. Railroads have many reasons to request a planned outage. Most of those reasons are highly technical, such as switching back-office service providers. Such changes are pursued for legitimate reasons, and inherently implicate a generalized public interest in providing necessary updates and maintenance of the system through the planned outage because of the positive impact on railroad safety. Historically, FRA has interpreted the standard in 49 U.S.C. 20103(d)(1) of “in the public interest and consistent with railroad safety” in the context of waivers as being focused on better—i.e., more efficient or effective—ways to achieve rail safety, which is consistent with the reasons why railroads conduct planned outages, and providing additional information would serve no safety benefit.

In proposed paragraph (m)(4)(ii)(D), FRA would require an analysis that demonstrates the proposed time of the planned outage poses the least risk to railroad safety. FRA states in the preamble that it “expects railroads to submit an RFA, seeking to disable its PTC system temporarily with continued rail service...**only when ceasing operations would not be feasible**” (emphasis added). This language suggests that FRA will deny a railroad’s request if FRA believes a railroad is capable of performing the upgrade or maintenance when trains are not operating. FRA’s proposed approach imprudently encroaches on the railroads’ ability to make their own operating decisions. While Class I railroads are incentivized to perform upgrades, maintenance, and other work on PTC systems at times that minimize the impacts on operations, they also operate in a 24/7/365 environment. In such an environment, the decision of when it is appropriate to perform work on a PTC system is complex, multifactorial, and situationally dependent. FRA is not properly positioned to substitute its judgment of what is feasible when it comes to determining—from both a safety and commercial perspective—if a railroad is capable of ceasing operations, or not, to perform work on its PTC system.

In proposed paragraph (m)(4)(ii)(E), FRA would have railroads perform yet another analysis; this time on how the proposed duration of the temporary outage is the minimum time necessary. It is not clear what type of analysis a railroad would need to include to justify the time frames for the proposed planned outage. In the preamble, FRA states that railroads must show “how the length of the proposed temporary outage is the minimum amount of time needed based on the circumstances, which could include outlining a precise schedule and the number of hours involved in each phase and justifications for each timeline.” It is overly burdensome to require this level of detail for a planned PTC outage, and it will likely set railroads up for failures to meet specific schedules, particularly given that FRA is requiring information that will often, at best, be estimates. A more reasonable approach is for a railroad to provide the estimated time of the outage, but even with an estimate there could be circumstances where the project takes longer (or shorter) than expected.

The preamble also states about proposed paragraph (m)(4)(ii)(E) that, “FRA will deny an RFA that seeks to disable a PTC system for an unreasonable, extensive period.” The phrase “unreasonable, extensive period” is entirely subjective, as FRA provides no guidance on what “an unreasonable, extensive period” is. Additionally, the Associations note that FRA seems to be under the impression that railroads are not incentivized to run trains with an operable PTC system. However, this is not the case, and FRA fails to point to a single circumstance where a railroad unreasonably delayed returning a PTC system to operability consistent with existing regulations after performing planned work on the system. Railroads have heavily invested—and continue to heavily invest—in PTC systems. For example, BNSF has voluntarily installed PTC on an additional 2,801 miles of its track with plans to continue rolling out PTC to additional non-mandated subdivisions as appropriate. Further, railroads are incentivized to limit the extent of outages as some energy management systems only function when PTC is operational. An average Union Pacific train operating between Chicago and Los Angeles during a PTC outage without energy management systems would consume over 600 more gallons of fuel than a train using an energy management system. If there is a planned outage, the railroad is likely performing necessary maintenance or an upgrade to improve the functionality of the PTC system, and the railroad will want to quickly return to the benefits of the operational PTC system.

In proposed paragraph (m)(4)(ii)(G), FRA would require a railroad to identify the applicable speed limit of any train operating during the proposed outage down to the type of train and commodity transported. Again, this is an overly burdensome request for an outage that might be only a few hours long. The analysis may take longer than the outage itself, and depending on the systems affected, it may even be difficult to provide this kind of train-specific data. Additionally, the commodity type(s) being transported does not impact the safety of the train operation during the outage, so there is no safety basis for FRA to require the provision of this information.

In proposed paragraph (m)(4)(ii)(H), FRA would require each railroad filing an RFA under paragraph (m)(4) to provide additional safety measures that “ensure each type of PTC-preventable accident or incident does not occur.” Again, FRA provides little guidance as to what measures it seeks, other than referencing “absolute blocks” or “other technology” to limit speeds. Railroads operate safely every day in territory not governed by PTC. While PTC provides a safety overlay, non-PTC routes are safe because of adherence to railroad operating rules and practices, which includes compliance with existing signal systems. Therefore, the Associations are unclear on what FRA believes is required during the temporary outage to allow the railroad to continue to operate safely while also completing the required PTC system work.

For these reasons, the Associations recommend deleting these content requirements in paragraph (m)(4) as overly burdensome, duplicative, and unnecessary.

FRA must protect confidential records submitted in an RFA
pursuant to proposed paragraph (m)(4).

In the preamble, FRA underscores the importance of ensuring that railroads’ filings contain non-confidential information for public review and comment. However, some of the additional information FRA is proposing to require would necessitate that railroads conduct detailed safety analyses. Those analyses could result in railroads sharing sensitive operational information that may need to be redacted from the public versions of its RFA filing for safety and security reasons.

III. Proposal to create 49 CFR 236.1006(b)(6).

FRA should clarify that the non-revenue passenger equipment movement exception must be conducted in a way that is consistent with the host railroad’s operating requirements.

FRA proposes adding paragraph (b)(6) to 49 CFR § 236.1006, which would allow for certain movements of non-revenue passenger equipment. Specifically, the proposed amendment would allow non-revenue equipment to operate to a maintenance facility or yard without active PTC technology if

there are no passengers on the equipment and the equipment is being moved to a maintenance facility for the purpose of repairing or exchanging a PTC system provided that the movement also satisfies seven additional requirements (e.g. 49 mph speed limit, an absolute block is established in front of the equipment, no working limits are established on any part of the route, etc.). The Associations ask for FRA to clarify that—if the passenger equipment is operating as a tenant on a host railroad—the passenger operation must obtain permission from the host railroad to utilize this exception, as each host railroad is responsible for establishing the PTC operating requirements for its tenants consistent with the other limited exemptions in existing paragraph (b)(6).

FRA should revise and clarify its proposal to eliminate all working limits along a route taken by non-revenue passenger equipment.

Proposed paragraph (b)(6)(iii) of § 236.1006 specifies that there cannot be any working limits established under part 214 of this chapter or any roadway workers on any part of the route. In the preamble to the NPRM, FRA emphasizes that “roadway workers may not perform any work on the route where the nonrevenue passenger equipment operates subject to this proposed exception, until after the equipment arrives at its destination, the maintenance facility or yard.” 89 Fed. Reg. 85462, 85466. This provision would impose substantial delays and add costs on track and signal-related maintenance and upgrades without a corresponding safety benefit.

Amtrak estimates that a work gang costs about \$23,000 to \$35,000 per shift. The proposed rule is expected to increase the number of maintenance-of-way gangs that would not be put to productive use during their shift. Amtrak estimates that the proposed rule would result in a few hundred thousand dollars in lost productivity each time it is used. This would be millions a year, and tens of millions over a 10-year period.

FRA’s Part 214 regulations establish protocols and procedures for protecting the safety of roadway workers, and FRA has provided no explanation in the NPRM to support its blanket ban on the establishment of working limits or the presence of roadway workers when non-revenue passenger

equipment is transported to a maintenance facility or yard for the purpose of repairing or exchanging a PTC system. The provision appears to have been pulled from existing § 236.1006(b)(5), which applies to trains involved in freight switching service or freight transfer train service. These types of movements are not analogous to non-revenue passenger equipment that may be travelling much longer distances over main line track to reach the repair location or traveling to or from a storage location before or after providing passenger service. In such circumstances, Part 214 allows a railroad to use train approach warning procedures to protect the roadway workers, and it would be impractical to restrict the ability of railroads to establish working limits or have roadway workers present along the entire route. Similarly, there is no safety basis to prevent work from taking place after the train exits the work limits. Again, non-revenue passenger equipment is not analogous to a freight switching movement or transfer trains, where there may be regular movement back and forth as the train is assembled. Therefore, there is no safety justification for requiring a railroad to wait until the non-revenue passenger equipment reaches its destination to allow roadway work to resume.

The Associations also seek clarification that the phrase “any part of the route” in proposed paragraph (b)(6)(iii) does not include track that is adjacent to the route of the non-revenue passenger equipment. Section 214.336 establishes roadway worker requirements for adjacent tracks. Establishing a blanket prohibition on work zones for the adjacent tracks would be overly burdensome for the same reasons as stated above.

Thank you for your consideration of these comments.

Respectfully submitted,



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