



DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Emergency Order No. 34, Notice No. 2; Docket No. FRA-2025-0885]

Southeastern Pennsylvania Transportation Authority Passenger Trains; Notice of Partial Relief from Emergency Order No. 34

AGENCY: Federal Railroad Administration, Department of Transportation.

ACTION: Notice of Partial Relief.

SUMMARY: This notice provides the Southeastern Pennsylvania Transportation Authority (SEPTA) with partial relief from the 30-day timeline to complete two of 14 conditions imposed by Emergency Order No. 34 (Order). The partial relief gives SEPTA until November 14, 2025 to complete Condition No. 8 and until December 5, 2025 to complete Condition No. 9. This notice also establishes three additional conditions that SEPTA must meet to continue safe operations of its passenger trains and, specifically, its Silverliner IV electric multiple-unit locomotives (Silverliner IV EMU). All other findings, conditions, and requirements of the Order remain in effect and unmodified by this notice.

FOR FURTHER INFORMATION CONTACT: Gary Fairbanks, Staff Director, Motive Power & Equipment Division, FRA, telephone: (202) 230-9594, email: gary.fairbanks@dot.gov; or Elliott Gillooly, Attorney Adviser, Office of the Chief Counsel, at (202) 897-8666, email: elliott.gillooly@dot.gov; or Michael Masci, Attorney Adviser, Office of the Chief Counsel, telephone: (202) 302-7177, email: michael.masci@dot.gov.

SUPPLEMENTARY INFORMATION:

Authority

Authority to enforce Federal railroad safety laws has been delegated by the U.S. Secretary of Transportation (Secretary) to the Administrator of FRA. 49 U.S.C. 103; 49 CFR 1.89(e). Railroads are subject to FRA’s safety jurisdiction under the Federal railroad safety laws. 49 U.S.C. 20101, 20103. FRA is authorized to issue emergency orders where “an unsafe condition or practice, or a combination of unsafe conditions and practices, causes an emergency situation involving a hazard of death, personal injury, or significant harm to the environment.” 49 U.S.C. 20104. Emergency orders may immediately impose “restrictions and prohibitions . . . that may be necessary to abate the situation.” *Id.*

Background

Silverliner IV EMUs and Passenger Train Safety Requirements

SEPTA operates approximately 225 Silverliner IV EMUs, which SEPTA acquired from General Electric between 1974 and 1976. EMUs are both locomotives and passenger cars, self-propelled by electric motors and also designed to be occupied by passengers. Accordingly, EMUs are subject to the requirements of the Locomotive Inspection Act (49 U.S.C. ch. 207), FRA’s Locomotive Safety Standards (49 CFR part 229), and FRA’s Passenger Equipment Safety Standards (49 CFR part 238). EMUs may operate individually but typically operate semi-permanently coupled together as a pair or triplet from a control cab. During peak commuting hours, multiple pairs or triplets of EMUs, or a combination of both, are typically operated together as a single passenger train, without a conventional locomotive as a primary means of motive power.

As detailed further in the Order, in 2025, there have been five instances of Silverliner IV EMUs in commuter service on SEPTA’s system catching fire or otherwise experiencing an emergency situation from a thermal event such as an electrical

component overheating and associated smoke.¹ Despite SEPTA's remedial actions, the recurrence of serious fires and other thermal events on Silverliner IV EMUs, as well as the gravity of the hazards presented, including cars destroyed by fire, passenger evacuations, and injuries to a crewmember and a firefighter this year, poses an imminent threat to safety, including the threat of serious harm to SEPTA's passengers, SEPTA's trains crews and other personnel, and emergency responders. FRA concluded that SEPTA's maintenance and operation of its passenger rail equipment required additional oversight and corrective action.

FRA therefore determined that public safety compelled the issuance of the Order consistent with FRA's authority under 49 U.S.C. 20104 and Federal railroad safety requirements. The Order required SEPTA to immediately provide each train crew with procedures specifying actions the crew shall take to identify and report any equipment defect or failure on a train the crew is operating in service (including, but not limited to, a propulsion system/traction motor fault indication light) and to remove any car from service in case of doubt after consultation with the mechanical department. The Order also detailed the following conditions SEPTA must meet to seek full relief from the Order.

No later than seven calendar (7) days after the date of the Order, unless otherwise specified, SEPTA must:

1. Develop a plan to determine the direct and contributing causes of each fire or thermal incident that has occurred in 2025 and identify the root causes, circumstances, personnel, funding, or other conditions that have caused the fires and thermal incidents to occur in this period. SEPTA shall implement this plan and provide FRA with a written report of its findings no later than October 30, 2025.

¹ Emergency Order Establishing Additional Requirements for Ensuring the Safe Operation of Southeastern Pennsylvania Transportation Authority Passenger Trains. 90 FR 48120 (Oct. 6, 2025).

2. Prepare and submit to FRA for approval an emergency mechanical inspection schedule of each Silverliner IV EMU. The schedule shall require that each Silverliner IV EMU in SEPTA's fleet be removed from service to complete a comprehensive inspection including, but not limited to, high-voltage control systems, propulsion system, and dynamic brake system, HVAC system, components and elements of safety and warning systems, high- and low-voltage cables, harnesses and connectors, and the condition of terminals and lugs, as well as any associated peripheral systems. The schedule shall prioritize cars into a number of groups and remove the first group from service no later than the date the emergency mechanical inspection schedule is submitted to FRA. The scheduled inspections shall be completed within 30 calendar days of the date of this Order.

3. Review its inspection, testing, and maintenance (ITM) plan required under § 238.107 and submit the plan to FRA with proposed amendments sufficient to ensure that mechanical failures of the type leading to fires or thermal incidents will be detected and repaired.

4. Update, as needed, SEPTA Supplemental Division Notice Number 7-20C and any other relevant operating rule to implement the requirements of this Order.

5. Require by issuance of a written notice to train crews that every engineer report any sluggish or poor performance of braking or acceleration or any anomalous vehicle behavior to the dispatcher within 5 minutes of the event.

6. Complete a stand-down and debriefing with every mechanical employee involved with the inspection, troubleshooting, maintenance, or repair of Silverliner IV EMUs to include review of all fire and thermal incidents, the known direct and indirect causes, and to solicit feedback from the employees to identify improvements that SEPTA can make in its maintenance programs and practices.

7. Conduct random quality audits of the performance of the mechanical department's completion of repair and maintenance work items. Audits must occur every day and cover more than one shift each day.

In addition, within 30 days of the Order, SEPTA must:

8. Complete all actions under the emergency mechanical inspection schedule that has been approved by FRA, including inspection of all Silverliner IV EMUs for precursor conditions that increase the likelihood of a fire or thermal incident.

9. Install thermal protection circuits at all critical locations on every Silverliner IV EMU to shut down propulsion and auxiliary circuits if higher than normal operating temperatures are detected.

10. Document all inspections and repairs made to the Silverliner IV EMU fleet and present a graphical depiction of significant defects identified to the employees performing the work to clearly show to the employees leading and trailing indicators.

11. Review all technical documents such as repair procedures, part lists, bills of materials, maintenance and modification instructions, tooling, and inventory requirements, and revise as needed to ensure all are up to date.

12. Ensure that the mechanical department reviews and updates employee training requirements and proficiency tests to address any deficiency identified in the implementation of this Order.

13. Complete, or cause to be completed, a comprehensive update of all root cause analyses begun in response to fire or thermal incidents and develop a corrective action plan to prevent their recurrence and implement continuous monitoring of mechanical systems performance.

14. Comply with all requirements of the revised ITM plan submitted to and approved by FRA.

On October 27, 2025,² with supplemental information provided on October 28, 2025,³ in accordance with the terms of the Order, SEPTA formally requested that FRA grant it partial relief from the following two conditions:

Condition No. 8: Complete all actions under the emergency mechanical inspection schedule that has been approved by FRA, including inspection of all Silverliner IV EMUs for precursor conditions that increase the likelihood of a fire or thermal incident.

Condition No. 9: Install thermal protection circuits at all critical locations on every Silverliner IV EMU to shut down propulsion and auxiliary circuits if higher than normal operating temperatures are detected.

Specifically, SEPTA requested until November 14, 2025, to complete Condition No. 8 and until December 15, 2025, to complete Condition No. 9. SEPTA also provided FRA with a status update for all 14 Conditions, showing that all other conditions will be completed by November 1, 2025, consistent with the Order.

In support of its request for partial relief, SEPTA explained that its mechanical crews are working diligently on the inspections but that the time-consuming nature and complexity of work requires additional time per car. SEPTA included its Emergency Inspection Procedures for the Silverliner IV EMUs and a schedule for the remaining inspections showing, on a car-by-car basis, how it intends to complete the work by November 14, 2025. Following SEPTA's completion of the other conditions resulting in the improved safety protocols for the operation of the Silverliner IV EMUs, FRA finds the short, requested extension for the completion of Condition No. 8, following SEPTA's schedule, is appropriate.

² Available at www.regulations.gov under Docket No. FRA-2025-0885.

³ *Id.*

In requesting the extension of Condition No. 9, SEPTA explained that it has located and procured the thermal wiring necessary to complete the work, but FRA understands there was a delay in the procurement preventing SEPTA from beginning the installation until mid-October. SEPTA also explained that training personnel to install and inspect the new circuits is requiring additional time. FRA understands the need to properly train personnel and competently install the thermal circuits and is therefore willing to provide an extension for the completion of Condition No. 9. However, FRA will not approve the full extension requested by SEPTA. Instead, FRA will approve an extension to December 5, 2025. SEPTA may seek further relief, consistent with the requirements of the Order, if it is unable to finish by December 5. However, FRA strongly encourages SEPTA to take all steps necessary to complete Condition No. 9 within the new deadline provided.

In considering SEPTA's request for partial relief, FRA evaluated whether additional conditions would be appropriate and consistent with the need to protect against the imminent threat to safety. FRA finds that the extension for Condition No. 8 and No. 9 should be accompanied by a comprehensive safety review provided for SEPTA's mechanical employees and train crews to ensure they have the most up-to-date information on the thermal incidents that occurred, the corrective actions SEPTA has implemented to date, and are reminded of the requirements of the Order. Accordingly, FRA has concluded that SEPTA must provide every mechanical employee and train crew a comprehensive safety review at the start of their first shift beginning on November 2, 2025.

FRA has reviewed the plan and resulting findings SEPTA has developed in response to Condition No. 1 of the Emergency Order. FRA recognizes that as equipment inspections continue, additional information will likely be identified and developed about the potential causes of the fires and thermal incidents. Accordingly, FRA is requiring

SEPTA to update that plan and the associated root cause analyses, as well as all relevant notices, processes, and procedures, to ensure those notices, processes, and procedures reflect best safety practices learned through the inspection process. The new condition will also require any updates to be communicated to SEPTA's mechanical employees and train crews through additional comprehensive safety reviews, as necessary.

Relief

In light of the foregoing, I grant SEPTA the following partial relief from the Order.

- SEPTA must complete the actions required by Condition No. 8 and document and certify completion of those actions no later than November 14, 2025.
- SEPTA must complete the actions required by Condition No. 9 and document and certify completion of those actions no later than December 5, 2025.

It is **ORDERED** that SEPTA take the following actions.

15. At the start of each train crew's first shift beginning on November 2, 2025, conduct a comprehensive safety review of issues related to the Order and associated mitigating measures put into place in response to the Order. This comprehensive safety review must be completed with each member of any crew called to operate a Silverliner IV EMU and the review must include, at a minimum: (1) the safety failures leading to FRA's imposition of the Order; (2) the requirements of the Order; and (3) the procedures train crews must follow to identify and report any equipment defect or failure on a train the crew operates. SEPTA shall retain records of each review conducted including, at a minimum, the content of the review and attendance. These records shall be made available to FRA upon request.

16. At the start of each mechanical employee's first shift beginning on November 2, 2025, conduct a comprehensive safety review of: (1) the mechanical issues that led to FRA's imposition of the Order; (2) the requirements of the Order; (3) the

inspection and test procedures developed in response to the Order; and (4) any significant findings from the root cause analysis completed under the Order and any other relevant “lessons learned” from inspections, repairs, or installations of thermal protection circuits completed to date. SEPTA shall retain records of each review conducted including, at a minimum, the content of the review and attendance. These records shall be made available to FRA upon request.

17. Until all Silverliner IV EMUs subject to this Order have been properly inspected, repaired, and equipped with the thermal protection circuits as required by the Order, SEPTA must, on at least a weekly basis, review and analyze the findings of those inspections and update the plan developed in response to Condition No. 1 and all relevant notices, processes, and procedures, to ensure the plan and those notices, processes, and procedures reflect best safety practices learned through the inspection process and root cause analysis. All updates or revisions must be communicated to mechanical employees and train crews through additional comprehensive safety reviews, as necessary.

The issuance of this Notice No. 2 does not preclude FRA from issuing future notices under the Order, or another emergency order governing SEPTA’s operations, or from taking any other actions permitted by the Order or otherwise allowed by law. All other conditions of the Order remain unmodified and in effect, including FRA’s authority to remove Silverliner IV EMUs from service.

Issued in Washington, DC on October 31, 2025.

David A. Fink,
Administrator.

[FR Doc. 2025-19783 Filed: 11/4/2025 8:45 am; Publication Date: 11/5/2025]