Federal Transit Administration

#### Headquarters

1200 New Jersey Avenue, S.E. Washington, D.C. 20590

## **SENT VIA EMAIL**

October 31, 2025

Mr. Scott Sauer General Manager Southeastern Pennsylvania Transportation Authority 1234 Market Street Philadelphia, P.A. 19107

Dear Mr. Sauer:

The Federal Transit Administration (FTA) is currently investigating four recent safety events involving serious overhead catenary system (OCS) safety failures at the Southeastern Pennsylvania Transportation Authority (SEPTA) that collectively resulted in 11 injuries and the evacuation of approximately 460 passengers, as well as significant service disruption and property damage:

- The September 25, 2025 (Media–Sharon Hill, D1/D2) pantograph separation and trolley roof penetration, which injured 11 people and is under investigation by the National Transportation Safety Board.
- The October 14, 2025 (Subway–Surface) dewirement and corresponding OCS failure that stranded four trains and required evacuation of approximately 155 passengers.
- The October 15, 2025 (Media–Sharon Hill, D1/D2) flipped pantograph that required the evacuation of five passengers, in an occurrence with characteristics similar to the September 25 event.
- The October 22, 2025 (Subway–Surface) broken OCS clips event that caused deenergization and evacuation of approximately 300 passengers.

FTA's investigations and recent inspections at SEPTA have identified serious weaknesses in SEPTA's program to ensure the safety and reliability of its electrified OCS for rail transit service. Specifically, SEPTA's procedures and standards governing OCS are not a formal inspection and maintenance program with defined task frequencies, acceptance/rejection tolerances, and auditable records. Moreover, SEPTA was unable to provide technical specifications regarding the OCS and its optimal performance.

Separately, the procedures in use are outdated or incomplete; technicians are not provided clear, verifiable criteria for wear limits or out-of-tolerance conditions; and standards-based technical specifications are not consistently referenced to establish performance targets and measurement thresholds. FTA also learned that the tools and equipment provided to support inspections may be out of calibration or out of service, leading to a heavy reliance on visual inspections. In practice, determinations about OCS conditions are often left to individual judgment rather than being governed by documented standards to ensure consistent application of the OCS. These gaps make it difficult for SEPTA to ensure its maintenance personnel accurately and consistently identify and prioritize defects for repair.

Given the high risk of harm to passengers, workers, and the public associated with OCS failures of this scale and frequency, FTA has determined that unsafe conditions or practices exist that present a substantial risk of death or personal injury requiring immediate remedial action.

### **Immediate Actions Required**

# 1) Immediate OCS Inspections and Repairs (Completed No Later than 5:00 p.m. on November 7, 2025 (the "Allowed Period"))

SEPTA must (a) conduct and document an urgent OCS condition assessment for its rail transit trolley system, (b) repair or mitigate all critical or major defects identified, and (c) submit a written report of its assessment and repair or mitigation activities to FTA and PennDOT documenting (a) and (b) above. If SEPTA is unable to fully complete a comprehensive inspection for any element or area within the Allowed Period, SEPTA's written report must clearly document gaps and limitations, apply risk-based interim mitigations (e.g., speed restrictions, temporary de-energization, or service suspensions), and provide a near-term plan to complete immediate inspection activities. FTA reserves the right to direct additional mitigations or to adjust the scope based on the information provided.

#### a) Conduct Inspection and Document Findings

SEPTA must **perform a complete inspection** of OCS assets supporting trolley operations using qualified personnel and calibrated tools and equipment. At a minimum, inspections must address:

- i) Contact wire height, condition, wear, and alignment;
- ii) Tensioning systems, counterweights, and mechanical terminations;
- iii) Insulators, hangers, and messenger hardware for signs of damage, cracking, or corrosion;
- iv) Anchor assemblies, pull-offs, registration arms, and bracket support structures;
- v) Electrical integrity of feeder and section insulators, including signs of arcing, burning, or carbon tracking;
- vi) Track-level protection devices and isolation switches; and

vii) Clearance and exposure to vegetation, debris, and environmental obstructions.

If any instruments or equipment required to conduct the inspection are unavailable or out of calibration and cannot be used to support the inspection, SEPTA must: (1) note the deficiency in its written report, (2) use the most rigorous practicable alternative method, and (3) implement interim mitigations commensurate with risk.

Where full coverage of OCS assets is not feasible within the Allowed Period, SEPTA may prioritize segments using risk indicators (e.g., recent dewirements, known defect clusters, high-speed or tight-radius sections, complex structures), but must apply protective mitigations on any uninspected or lower-confidence segments until fully inspected.

## b) Repair or Mitigate All Critical or Major Defects

SEPTA must **repair or mitigate all critical or major defects** that could compromise OCS integrity, electrical continuity, or pantograph interface immediately. SEPTA must maintain protective mitigations (e.g., speed restrictions, single-tracking, temporary de-energization, or suspension of service) until inspections and repairs of critical and major defects are completed and verified. SEPTA must provide written confirmation to FTA and PennDOT identifying defects repaired, dates and methods of repair, mitigations in place for any deferred items, a rationale for deferring items, and prerequisites for removing those mitigations. **Critical conditions discovered during the inspection must be reported to FTA and PennDOT within 24 hours.** FTA may conduct unannounced verification inspections to confirm the adequacy of the inspection, mitigations, and repairs.

#### c) Submit Written Report

SEPTA must **submit to FTA and PennDOT a written report** summarizing inspection results that includes:

- i) Locations inspected and inspection dates;
- ii) All limitations in inspections (assets not inspected, low confidence level in any inspection results), reasons for any gaps, and the plan and schedule to achieve full coverage;
- iii) Mitigations applied (e.g., speed restrictions, temporary de-energization, service limitations) with start dates, affected systems, and criteria for removal: and
- iv) A list of all repairs made, along with a risk-prioritized repair plan with target dates for identified deficiencies not repaired during the Allowed Period.

## 2) Enhanced Interim OCS Inspection Program (Until Program Implementation)

SEPTA must immediately establish and execute an enhanced OCS inspection regimen for all trolley lines. SEPTA must continue to execute this interim regimen until FTA has approved and verified implementation of SEPTA's formal OCS inspection and maintenance program (see Section 3). This enhanced program must include:

- i) Daily visual checks by qualified personnel of active service zones for wire contact, visible sag, or damaged components;
- ii) Weekly structured inspections using standard checklists to confirm the condition of hangers, insulators, tensioning, and pantograph interfaces;
- iii) Post-weather inspections following any severe weather, temperature extremes, or high-wind events; and
- iv) Immediate documentation and reporting of all OCS anomalies, faults, or arcing events to both the SEPTA Safety Department and Rail Operations Control Center, with escalation to senior management.

**SEPTA must provide weekly summaries** of enhanced OCS inspections and findings to FTA and PennDOT until the permanent program is operational.

## 3) Formal OCS Inspection and Maintenance Program (Action Plan Due No Later than 5:00 p.m. on December 1, 2025)

No later than 5:00 p.m. on December 1, 2025, SEPTA must submit to FTA for review and approval a detailed action plan and implementation schedule for formalizing and fully implementing a risk-based OCS inspection and maintenance program. The plan must include:

- a) Documented procedures and schedules for routine inspections of all OCS structural and electrical components;
- b) A program for monitoring pantograph-OCS interface performance, including head and carbon-strip condition, alignment geometry, contact force, and wear rates;
- A documented environmental hazard identification and mitigation process, including thermal sag, vegetation encroachment, debris accumulation, and clearance monitoring;
- d) Procedures and drills for rapid isolation and de-energization of traction power during OCS faults or emergencies;
- e) A preventive and return-to-service inspection program following any safety event, severe weather, or abnormal operating condition;
- f) Integration of all elements into SEPTA's SMS, including safety assurance, corrective-action tracking, risk assessment, and performance metrics; and
- g) A process for monthly reporting to FTA and PennDOT of OCS inspection results, defect trends, repairs completed, and verification activities.

This action plan must specify that SEPTA must complete development of the formal OCS inspection and maintenance program (procedures, schedules, monitoring plan) by January 28, 2026. Furthermore, this action plan must clarify that SEPTA will fully implement the program, including the completion of initial inspections under new procedures, the initiation of pantograph-OCS monitoring, and integration into SEPTA's SMS by April 28, 2026.

FTA may require a shortened implementation period (e.g., within 120 days) if conditions remain unsafe or inspection results warrant accelerated completion.

## 4) Ongoing Reporting and Verification

By November 28, 2025, and no later than the last business day of each month thereafter, SEPTA must submit monthly progress reports to FTA and PennDOT detailing:

- a) Status of immediate inspection and repair activities;
- b) Ongoing enhanced inspections and findings;
- c) Action plan development progress;
- d) Implementation milestones achieved; and
- e) Defect closure rates and verification outcomes.

FTA will conduct on-site and unannounced verifications to confirm inspection quality, corrective actions, and SMS integration. FTA will require reporting until it determines that reporting is no longer necessary.

#### Conclusion

The four recent OCS safety events across SEPTA's trolley network demonstrate a systemic and escalating failure in the safety and reliability of SEPTA's electrified rail transit infrastructure. Results of FTA's investigation and inspections indicate deficiencies in SEPTA's inspection, maintenance, and hazard management, as well as weaknesses in internal communication and return-to-service decision-making. Such deficiencies have created unsafe conditions or practices that present unacceptable risk to passengers, workers, and the public and demand immediate corrective actions.

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The measures required in this letter—including immediate inspections and repairs, enhanced interim OCS inspections, and development of a formal OCS inspection and maintenance program—are necessary to restore safe and reliable operation of SEPTA's trolley system.

Failure to complete the immediate inspections and repairs, to develop and implement the formal OCS inspection and maintenance program, or to provide required reports may result in FTA issuing special directives to SEPTA under 49 U.S.C. § 5329(h), which could impose restrictions and prohibitions up to and including restricting SEPTA's trolley service utilizing the OCS or placing SEPTA's trolley system out-of-service.

All SEPTA submissions should be uploaded to FTA's Special Directive Management Tool. Please direct questions to Mr. Daniel R. Gardella, Program Manager with FTA's Office of Safety Oversight and Compliance, at <a href="mailto:Daniel.Gardella@dot.gov">Daniel.Gardella@dot.gov</a>.

Sincerely,

Joe DeLorenzo

Jul. Ohn

Associate Administrator/ Chief Safety Officer

Office of Transit Safety and Oversight