Sydney Trains

Safety Alert

Sharing information to prevent incidents

Working near overhead wires

Target audience:

Sydney Trains workers, including contractors, who access and conduct work on roofs in the vicinity of Overhead Wires (OHW) and moving trains.

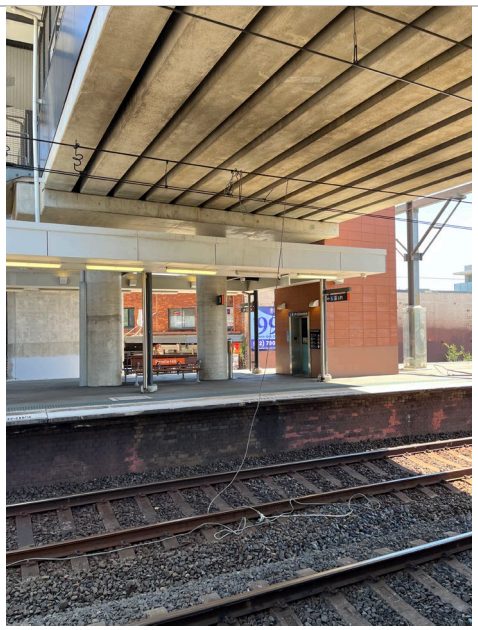
The Issue:

A workgroup was undertaking the annual height-safety certification on the concourse footbridge and platform canopy roofs at Pendle Hill Station. As part of their rope-access setup, the team used a 30-metre rope while moving between anchor points to complete inspections. Toward the end of the task, while retrieving the slack rope, the tail end fell over the edge of the roof and contacted the Overhead Wire (OHW), creating a significant electrical hazard.

Moments later, a train approached the station. The worker, recognising the danger, detached from the rope which subsequently became entangled in the pantograph of the lead car, pulling the pantograph off the train. The detached pantograph fell onto the platform, and the train's window was also damaged during the event.

This incident demonstrated the serious hazards working in the vicinity of OHW infrastructure - in this case inadequate rope containment and the failure to properly assess and control rope length allowed the rope to come near the OHW, exposing workers, passengers and rail operations to significant harm.

While no one was harmed in this incident, the potential consequences of this event were severe. The worker could have been pulled from the roof, and passengers or staff on the platform were at risk of entanglement in the rope or being struck by the falling pantograph. The incident highlights the need for rigorous risk assessment, strict rope-control measures, and heightened awareness when working near OHW to prevent electrical hazards and ensure safe rail-corridor operations.



Rope caught on OHW

Damaged Pantograph

What you must do:

- Implement effective rope containment controls whenever using rope equipment, ensuring measures are in place to prevent unintended movement or loss of control of the rope—particularly when working near OHW. Suitable controls may include securing excess rope and using highly visible containment devices such as Hi Vis rope backpacks.
- Ensure all work conducted near OHW (above, below, or beside) is appropriately risk assessed and controlled. Refer to GUI30 Working Near Electrical Equipment for guidance on electrical hazards, required controls, and safe work planning near OHW.
- Follow all requirements outlined in the SMS Working at Heights procedure when undertaking any work at height.
- Ensure the applicable Safe Work Method Statements (SWMS) and/or Safe Work Instructions (SWIs) identify adequate mitigation controls.
- Plan for the work to occur under electrical isolation and request a Permit to Work if equipment or materials have the potential to encroach on the Safe Approach Distances (SAD) to OHW. For advice on safe work methods near electrical assets, contact the Electrical Distribution Unit at railelectricalsafety@transport.nsw.gov.au.
- For any work carried out near OHW, ensure all workers have completed the required and annual refresher training:
    a. Electrical Safety Awareness (Sydney Trains Course ID: EAW01E) – for internal workers
    b. UETDREL006 – Work safely in the vicinity of live electrical apparatus as a non-electrical worker (Course ID: SAFW1191) – for external workers.

If you have any questions or require clarification, contact your Line Manager or Safety Risk and Assurance (SRA) Business Partner.

Jamie McDonald
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