

Shared Learning from a Formal Investigation



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Title: **Stafford Up Arrival Siding ; Staff electric shock from OLE ; 05/11/13**

For further information contact Derek Ian Spencer, Senior Investigator, derek.spencer3@networkrail.co.uk



Overview of Event

- On 05 November 2013, at Stafford Up Arrival Line No.2 a driver/operator/maintainer (DOM) employed by Harsco Rail sustained an electric shock following accessing the roof of RGH-20C Switch and Crossing rail grinder No.DR79262.
- The DOM climbed onto the roof of DR79262 without an electrical isolation of the 25 kV overhead lines in place which caused him to suffer serious burns. These were primarily to his right leg with further burns to his torso.
- There was no evidence to show that the injured person had completed a written risk evaluation of the tasks and to check for the presence of OLE as part of the hazards at the location. He simply climbed up to the roof using wet handrails and electrical boxes and the connections between the vehicles.
- Equipment on top of the machine consists of exhaust rain caps, louvers above various fans, air-horns and antennas for communication. None of these were scheduled to be checked on a daily or weekly basis and no defects had been recorded by the machine operators.
- Post incident, the machine returned to service and no problems have been found with this unit. Therefore there was no requirement for him to access the roof.
- Access to the roof would require him to unlock a cover to the ladders which, as a process, should have caused the injured person to reflect upon his actions. Equally, had he have intended to use wooden ladders, he should have thrown an anchored line over top of the machine and this alone would have prompted him that OLE was present notwithstanding the documentation that he should have completed beforehand.
- The DOM's attitude, when observed, was recorded as good but overconfidence where unsupervised operations are continuously conducted may have been factor.

Underlying Causes:

Hazard perception

- The DOM's hazard perception had become impaired.
- And he failed to comply with a number of procedures and processes that were in place for his personal safety.
- The DOM rarely accessed the roof and this was probably a factor in not considering the hazards that were present.

Planning

- He did not plan his work and simply climbed on equipment attached to the machine to reach the roof.
- The DOM did not complete the Designated Person's form or sidings risk assessment that could have prompted him of the presence of overhead line equipment and the requirement for an electrical isolation to be in place.

Storage or stabling of vehicles/machines

- The DOM was more used to undertaking maintenance work within non-electrified sidings.
- The stabling of the vehicle under live 25 kV lines presented inherent risks.

Other issues noted

- The DOM had not fully applied the prescribed arrangements to protect himself from other trains that may have entered the sidings.

Key Message: Consideration should be given to storing or stabling vehicles/machines on non-electrified sidings where vehicle maintenance is to be carried out.