

# **Shared Learning**

**Balfour Beatty** 

The Thameslink Programme (Issue Date: 20 January 2016 For Further Info Contact declan.keane@networkrail.co.uk

**Issue Number: TLP 050 Title: Over Head Line Events** 

Overview of Event 1: On 7th of August 2015, it was reported that the catenary wire from the Over Head Line Equipment (OLE) became detached as a train passed beneath the section, between Gasworks tunnel and Copenhagen tunnel, on the East Coast Main Line (ECML). This "dewirement" was identified when the train driver lost her line of sight, witnessing a flash. The train was immediately stopped and a visual inspection took place. During the inspection it was discovered that the catenary wire was draped over the third carriage.

Overview of Event 2: On 4th October 2015, Network Rail OLE Maintenance operatives were undertaking a patrol in the vicinity of St. Pancras Low Level Station when they discovered a detached turnbuckle assembly associated with a Section Insulator (SI) on the Moorgate Line. On further inspection they also identified a detached turnbuckle assembly on the adjacent Section Insulator.

## General Key Messages:

- Records and documentation it is essential that staged drawings, in line with AMP 08, are shared with the maintainer after installation has taken place
- Roles and Responsibilities it is necessary to ensure contingency arrangements are in place, should a key member of the project team leave
- Design Assurance and verification it is critical that all installations adhere to the specified design
- Quality of Installation it is essential that the quality of installation is carefully assessed prior to end of the shift and before handing back into operation

### **Underlying Causes:**

#### Event 1:

- Issues with how the work was planned meant that works had to be curtailed, and the wire run was left in a temporary state and not to design.
- It was identified through investigation that the follow up works were also poorly planned. It was noted that key personal left post the works and there was no handover or continuity to allow the outstanding works to be planned, which left the wire run in an incomplete state up until the event.
- Inadequate quality control on the design and installation, led to the wrong wire type being installed (catenary not contenary). The wire was left in position rubbing the registration arm which ultimately caused the dewirement.

#### Event 2:

- Due to resource shortages linesmen were drafted in who had not had previous experience installing OLE equipment on this project.
- Due to wrong positioning of the L-bracket and absence of correct tools, the Section Insulator's were incorrectly installed
- The turnbuckles did not have locking pins (the manufacturer has since issued new turn buckles with locking pins)

## Diagram/ Photo of event:

Location where catenary wire became detached





# **Actions Taken As a Result of Investigation:**

- More efforts have been afforded to robust planning in advance of the final items of work
- A robust interim hand back / maintenance process has been established
- A detailed review of supervision competency has taken place