

Learning Alert 24-63 Peckforton Service Strike

Incident Summary

A subcontractor was attempting to move a trench box to the next area ready for the new pipework installation. While moving the box over an extra metre towards the fence line, the excavator operator removed some material from the side of the box and placed it in an area which was located directly above the HV cable in the area.

At approximately 10.45am the excavator operator started moving the spoil back in front of the trench box to backfill, the bucket of the of the excavator contacted the HV cable buried in the area, the cable made a popping sound and started smoking. No injuries occurred and the excavator operator and banksman left the area and reported the incident to the site manager. On further investigation, the 11KV cable was found to be damaged. The site team contacted the Client, STW and contact with Scottish Power was made.

All work on site was stopped and the area was made safe and isolated from entry.

Scottish power attended site and confirmed that a single phase on the cable had been damaged by the excavator bucket.

There was a backup generator on site that was due to be collected, this was used to get the site back in process until the power could be restored.

The HV electrical feed to the site is on a ring main, so this was switched over on the transformer at approx. 4pm to restore the power.

Scottish power completed the repair to the damaged cable at 8PM.



Photo 1: Cable Damage

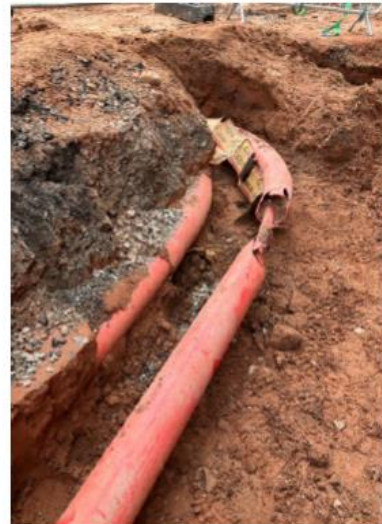


Photo 2: Cable Damage

Root Causes

Systematic failure of the SSOW for the task in hand, with inadequate information regarding hazards and control measures.

Learnings – What do we need to do differently?

All known services on site must be protected and/or highlighted to ensure the working area is separated from these services. If any excavation needs to be completed in these areas, this must be completed by vacuum excavation or hand dig only, and a separate full risk assessment must be carried out. Ensure all RAMS (Risk Assessments and Method Statements) are specific to the working area they are used in. RAMS must not cover multiple jobs or areas on site, as risks vary in separate locations.

A specific set of RAMS ensures that all relevant information is accurately captured and hold points can be included and completed when needed. Before RAMS are briefed, check the following.

- Are they specific to the working area?
- Do they include all relevant service information for the working area?
- Are HOLD points included, and relevant for the task?
- Have service drawings been used to produce the RAMS and all associated risks within the working area captured and included?
- Has Intuity been used to review the RAMS?
- Have they been checked by site management?
- Have they been briefed and fully understood by the site team?

When change of management occurs, all live RAMS and permits should be reviewed where necessary by the new site management team. All RAMS on site should be reviewed every 30 days and briefed to the site teams accordingly. All permits must be completed at the point of works with up-to-date service drawings in place. All permits must be completed individually and not as a generic document. The service drawings must be clear and key services in the area highlighted. The permit must include as much information as possible, including local landmarks, i.e. buildings, tanks, and any other easily identifiable areas on site so that the drawing is clear to understand. Before a permit is issued, check the following.

- Are there any known services that are uncharted in the working area?
- Are the service drawings for the working area currently accurate and updated?
- Does the attached service drawing make the working area easily identifiable? Are all buildings and other landmarks in the area highlighted?
- Has a CAT & Genny survey been completed? And are all services marked up in the correct colours in the working area?
- Has all the available information been gathered in the ground disturbance permit? Furthermore, has the permit been finalised in the working area?

All the above questions must be answered before any ground disturbance permits are issued for the works to proceed.

When issuing a ground disturbance permit, ensure that all personnel involved with the work has a clear understanding of the permit to work system, and the working area that the permit is issued in. Ensure that the working team understands their individual and collaborative roles and responsibilities in the working area, and that a Safestart is completed at the point of works.

