

# Learning from experience

## A near miss involving pitching a marquee near a high-voltage underground cable

### What happened?



A marquee for catering was being pitched by a marquee contractor for a music event on Forestry Commission land. The marquee had been pitched in the same spot at the same time of year, for the last six years. The cable was put underground in 2006.

However this time the marquee was pitched slightly further back to allow for more room at the entrance. As it was a windy day the contractor decided to pitch the marquee using long metal tent pegs for use in stormy weather.

The contractors drove a tent peg through the high-voltage underground cable. It damaged the cable insulation, but did not break/touch the main core of the cable. The power didn't fail immediately, but went off at 6am, one day after the pitching operation, when water in the ground shorted out the power. The contractors did not know they had struck the cable.

Temporary power was routed to the site to supply the various buildings and facilities. It wasn't until the event was over and all the equipment was removed that the reason for the power failure was discovered.

### What could have happened?

Contact with the underground electricity cable could have resulted in death from burns or by electrocution.

### What went wrong?

The risk assessment produced for site set up shows electric shock as a medium risk activity and the identified controls should have been enacted.

- The cable and any other underground services should have been marked on the ground.
- A formal pre-commencement meeting should have been held with all those in potential contact with underground cables as shown on the constraints map.
- No site map or constraints map were given to the contractor.
- Management systems were unclear as to who should do what between the contractor and the Forestry Commission.
- A better site for the activity should have been identified on the contract map.
- Cat Scan and Genny should have been used as a final check on the area before erecting the marquee.

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## What can we learn from this?

Carry out site planning on all work sites that have underground power lines.

- Always hold a pre-commencement meeting.
- Do a site specific risk assessment. Refer to industry guidance, such as Avoiding Danger from Underground Services - HSE guide and Pipelines and gas supply industries FAQ when identifying control measures.
- Communicate with all workers on the site.
- Cat scan and Genny as final control



Damage to insulation cable by tent peg or spike

Location of spike hole in the ground



Exploratory dig site to locate damaged cable and repair it