

Arc Flash – 11Kv Line

What happened?

During Geotechnical investigations a 49t excavator has traversed underneath an 11kV overhead powerline and come into close vicinity causing the line to arc. This resulted in minor damage to an auto grease line and the boom of the excavator and caused the fuses to the line to blow causing a power outage to the surrounding area.

The works had been ongoing for a number of days preceding the event with pre-planned routes for access to each test pit location having previously been decided. However, adverse weather on the 5th of May resulted in the Landowners caretaker advising the crew to access the next test pit location via a different route than was planned to avoid causing significant damage to the property. A risk assessment for the change in route was not completed.

Australia

What did we learn?

1. Newly identified hazards on site were inadequately assessed and associated risks were not fully understood due to a lack of training.
2. Procedures and SWMS don't adequately address or provide reference to working overhead services and hazard assessment to manage onsite changes
3. Poor procedures and instructions: procedural development and clarification required within Company Work Practices and permit system for working near overhead services
4. Safe Work Instructions inadequate: the Safe Work Method Statements (SWMS) utilised for the task didn't adequately address appropriate controls or guidance on working near overhead services

