Serious Injury

- Incident date: 24/07/2018
- Event: Electrical incident resulting in an arc flash
- Location: Bidwill

**Incident Overview**

A 31-year old male worker was undertaking excavation works using an electrical hammer drill to remove concrete which covered a shallow trench. The work was being undertaken near low voltage cables and an 11kV high voltage cable, all of which were energised at the time. The worker struck the 11kV cable and an arc flash occurred. He sustained serious burns to his upper body and face.

Over 13,600 homes were affected, with power restored to the majority of homes soon after the incident. The remaining homes were supplied with power from a generator until the damaged 11kV cable could be repaired.

SafeWork NSW, NSW Ambulance, NSW Police Force and the Independent Pricing and Regulatory Tribunal (electricity supply regulator), responded to the incident. The worker was conveyed to hospital and is receiving treatment for his injuries.

Photographs: Trench excavation site where works were being undertaken.

**The site**

The site is located at Bidwill, in Sydney’s West. Activities undertaken at the site included excavation work and the running of electrical cable inside the trench. The site was under the control of a contractor who had been engaged by the electrical network operator to undertake the works.
The investigation

SafeWork NSW Inspectors responded to the incident.

SafeWork NSW has commenced an investigation to determine the cause and circumstances of the incident.

Our Prosecution Guidelines (January 2018) outlines our approach to prosecutions and Safe Work Australia’s National Compliance and Enforcement Policy provides guidance on their approach to compliance. These documents set out factors that will be considered in determining the investigative approach and appropriate outcome.

Safety Information

Businesses are reminded of their duty to identify hazards and manage risks to health and safety in accordance with the provisions of the Work Health and Safety Act 2011 and Work Health and Safety Regulation 2017.

Each year, we respond to incidents where workers have been exposed to risks associated with working near underground electrical assets. Many of these incidents involve energised cables being struck by plant, which can result in serious injuries including burns, electric shock or death.

Businesses are reminded of their duty to ensure, so far as is reasonably practicable, that no person, plant or thing at the workplace comes within an unsafe distance of an underground electric line. If it is not reasonably practicable to ensure the safe distance of a person, plant or thing from an underground electric line, you must make sure that:

- a risk assessment is conducted in relation to the proposed work
- the control measures implemented are consistent with the risk assessment and any requirements of the electrical network operator responsible for the electric line.

Being aware of the risk of electric shock or serious burns from striking live electricity cables while excavating is critical. When undertaking excavation works, know the environment, know your tools and equipment, and know the steps to take to get the job done safely and without causing damage.

If you don’t know, don’t dig, and follow the four P’s of safe excavation:

- Plan
- Pothole
- Protect
- Proceed.

Further information

The guide to working near underground assets has detailed information for businesses, workers, and other parties involved in construction work near underground assets.

Awareness video: Don’t Know Don’t Dig

The information contained in this publication is based on knowledge and understanding at the time of writing. No conclusions should be drawn from the information in this publication about the cause of the incident or the culpability of any party.
About this information release

We have issued this information to draw attention to the occurrence of a serious incident in the construction industry. Investigations are ongoing and further information may be published as it becomes available.

The information contained in this publication is based on knowledge and understanding at the time of writing. Users are reminded of the need to ensure any information upon which they rely is up to date and to check the currency of the information with the appropriate SafeWork NSW officer or the user’s independent adviser. No conclusions should be drawn from the information in this publication about the cause of the incident or the culpability of any party.

All photographs were taken by the Independent Pricing and Regulatory Tribunal.