

6/04/2020

# Electrical incident

16 March 2020

## Incident overview

A 24-year-old electrician suffered serious burns to his forearms, hands and face when he touched a live electrical circuit and caused an arc flash explosion. The incident took place at a data centre under construction in Macquarie Park.



Portable load bank involved in the incident

## The investigation

- SafeWork NSW inspectors responded to the incident.
- SafeWork NSW commenced an investigation to determine the cause and circumstances of the incident.

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## 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](#).

This includes eliminating or minimising electrical risks, so far as is reasonably practicable.

In NSW, it's prohibited to work on live electrical equipment unless one or more [exceptions](#) apply.

The [code of practice for managing electrical risks](#) in the workplace outlines when working live in permitted, and how to do it.

Working de-energised eliminates significant electrical risks.

To isolate electrical supply, you must:

- consult with the person who manages or controls the workplace about timing of the work, and tell anyone who may be affected
- identify the circuit that needs to be isolated
- disconnect active conductors from the relevant source - there may be multiple sources - and stand-by systems, generators and photovoltaic systems, as well as auxiliary supplies, from other boards
- if a removable or rack-out circuit breaker or combined fuse switch is used, make sure it's racked-out or removed, then locked open and danger tagged
- earth each high-voltage exposed part after proven de-energised
- lock the isolating switch, or remove and tie back relevant conductors, to protect those carrying out the electrical work
- tag the switching points, to provide general information to those at the workplace
- test that the relevant circuits have been de-energised, along with any other relevant conductors, and re-test as necessary.

'Test for 'dead' before you touch', always.

## Further information

- [Electrical work guidance material](#)
- [Electrical safety video](#)
- [Electrical arc flash hazard management guideline](#)