

Failure to plan properly: electrician sustains serious burns (UK HSE)

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Following a UK Health and Safety Executive (HSE) prosecution, a retail company was fined £1,000,000 after an electrician suffered serious burns to 15 per cent of his body when he was caught in an explosion. An electrical contracting company was also fined by the court.

What happened?

The HSE reports that an electrician was using a metal spanner to repair an electrical fault at a supermarket warehouse. The spanner he was using came into contact with a live busbar (metallic strip) linked to the power distribution causing an electrical explosion. The electrician sustained serious injuries which included burns to his arms, hands, thighs, legs, and face. He was placed in an induced coma for two weeks and had to undergo several skin grafts. As a result of the incident the electrician was unable to work for five months.

What was the cause?

An HSE investigation found that:

- The electrician had been attempting to connect a generator to a low voltage supply in order to allow his employer's client to operate some of its core site functions whilst high voltage maintenance was being undertaken.
- The work was complex involving several contractors and required co-ordination of different working parties with specific time limited requirements.
- There was insufficient planning between parties beforehand including who was in charge of each site, coordination of work and exchange of relevant documentation.
- The client (the retail company) had failed to appoint a suitably competent person to plan and carry out the work to connect temporary generators to their distribution board at the premises.
- The electrical contractor's work methods fell well below the required standards:
 - Electrical work commenced without proper planning.
 - The power supply to the circuit was not stopped prior to the incident.
 - Live working was allowed to take place, this meant that the power supply could be switched on or off at any point, putting workers at risk of electric shock.

The HSE inspector said: *"This incident has had life-changing consequences on the victim and his family. It could have been avoided if the companies involved had taken the time to appropriately plan and coordinate tasks to ensure the circuit was dead, eliminating the risk of electrocution to workers. Working with electricity is a high-risk activity and safety must be a priority."*

IOGP Life Saving Rules:



Bypassing safety controls



Energy isolation

IMCA has published this incident, *not only* to highlight the importance of safety in electrical work, but primarily to draw attention to the risks inherent to complex work involving multiple contractors and simultaneous operations.

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