

Electrical safety



Electrical risks can cause death, serious injury or shock. Either via direct or indirect contact with electricity.

The main hazards associated with electricity are:

- Electric shock and burns from contact with live parts
- Fire resulting from faulty electrical equipment or installations
- Fire or explosion where electricity could be the source of ignition in a potentially flammable or explosive atmosphere

What you need to know

The Perth Airport estate has a complex electrical infrastructure which consists of various electrical equipment systems, such as electrical installations in buildings, plant and equipment and high-voltage networks. Airport operations rely on critical electrical equipment systems with any outages causing major disruptions.

Licensing

Electrical work is only to be carried out by workers with the appropriate current electrical licence.

Employers and employees have a responsibility to ensure workers are lawfully permitted to carry out electrical work.

Supervision

Effective supervision of electrical work is required to ensure risks are managed appropriately. Effective supervision may include:

- Ensuring all workers are licensed to carry out the required work,
- Planning the job, risk assessment and mitigation,
- Ensuring workers have the necessary level of training, knowledge and skill.

The level of supervision required will vary dependant on:

- The type of work,
- Knowledge and skills of the workers,
- The competence of the supervising electrical worker.

Supervision of apprentices

Apprentices must be supervised. Dependant on the type of work, knowledge and skills of the workers, supervision will be either:

- **Direct supervision:** Constant guidance and monitoring in close proximity to the apprentice.
- **General supervision:** Periodic guidance and monitoring on the same work site.
- **Broad supervision:** Daily instruction and work verification.





Work on or near energised electrical equipment

No live electrical work can be undertaken at Perth Airport.

Work on or near energised electrical equipment may only be undertaken where the supervising electrical worker has determined it is the only practicable option. This may be because:

- The electrical equipment to be worked on needs to be energised for reasons such as testing, commissioning, switching and fault finding.
- It would put the health and safety of people at risk to de-energise the electrical installation (e.g. it may be necessary for life-saving equipment to remain energised and operating while electrical work is carried out on the premises).
- a risk assessment demonstrates that the risks can be reduced to a minimum practical level to enable the work to be performed safely.

In circumstances where work on or near energised electrical equipment is required it must be done on an exception basis in accordance with:

- The requirements of Electricity Licencing Regulations 1991 Regulation 55 (2)
- Approval from:
 - Perth Airport Electrical Infrastructure Manager or nominee and/or
 - Head of Airport Electrical Network & Strategy

Energy isolation Lock Out Tag Out (LOTO)

In most circumstances, work on or near energised electrical equipment is not permitted. At Perth Airport we require energy sources to be isolated and controlled prior to works commencing.

All persons carrying out energy isolation at Perth Airport must be “Trained and Authorised”.

“Trained” means a person having completed training as a Level 1 SIMPLE Isolator or Level 2 COMPLEX Isolator within the last 2 years and is recorded as trained on FlightPath.

“Authorised” means written approval or approved permit from Perth Airport to a person who;

- Has the requisite level of isolation training
- Is competent to isolate that specific piece or class of equipment
- Has knowledge of Perth Airport services, operations, infrastructure and interrelated responsibilities

Incident reporting and investigation

All hazards, incidents and near misses must be reported to your employer. Your employer must notify their Perth Airport representative of any such events.

The Electricity Licencing Regulations 1991 require that all electrical accidents that occur, irrespective of their seriousness must be immediately reported to:

- Your employer,
- Your employer must then report the incident to the relevant network operator.

All incidents must be investigated and a report provided to the appropriate Perth Airport representative.

