Electrical Safety Procedure

Section 1 - Purpose and Scope

(1) This Procedure outlines requirements at The University of Queensland (UQ) for conducting electrical work and provides information about electrical safety precautions in place at UQ to reduce the risk of harm. This Procedure should be read in conjunction with the procedures related to Facility and Electrical Safety in the Policy and Procedure Library.

(2) This Procedure applies to UQ workers on all UQ campuses and sites, including controlled entities. For the purposes of this Procedure, the definition of UQ workers is broad and is intended to ensure UQ meets its responsibilities under the Work Health and Safety Act 2011 (Qld). The definition of UQ workers is provided in the appendix.

Legislative Context

(3) UQ's legislative compliance obligations in relation to electrical safety are provided under the Electrical Safety Act 2002 (Qld) and the Electrical Safety Regulation 2013 (Qld).

Definition of Electrical Work

(4) For the purposes of this Procedure, electrical work at UQ includes electrical work as defined in the Electrical Safety Act 2002 that is undertaken at UQ locations, including as part of:

a. maintenance and repairs to infrastructure and electrical equipment.
b. installation of electrical equipment/infrastructure.
c. manufacture of electrical equipment.
d. research and development activities.
e. teaching, learning and training.
f. emergency response.

Section 2 - Process and Key Controls

(5) All electrical work completed at UQ must meet regulatory requirements and comply with relevant UQ policies and procedures.

(6) A risk assessment in UQSafe must be completed before the commencement of any energised work (excluding testing), unless completing emergency works, in which case a Safe Work Method Statement must be followed.

(7) All other electrical work must have a risk assessment, or Standard Operating Procedure (SOP) or Job Hazard Analysis (JHA) or Safe Work Method Statement (SWMS) completed before being undertaken.

(8) Only persons that are appropriately licensed and qualified are permitted to undertake any electrical work at UQ locations. Students undertaking electrical work as part of their studies must be supervised by a UQ authorised electrical worker. Engineering students have limited exemptions that can be found in clause 37.

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(9) High voltage (HV) electrical work including installation, operation and maintenance of HV installations is only to be undertaken by the Property and Facilities Division (P&F), or specialist approved HV electrical contractors engaged by P&F. All workers must have the required training and competency prior to commencing (refer clauses 17-18).

(10) All work needing to be completed in HV and Low Voltage (LV) switch rooms must have written approval by the P&F precinct Client Facilities Manager (CFM) before any work commences via an Entry Permit (PF626).

(11) Electrical contractors undertaking electrical infrastructure work must be engaged by P&F. Specialised electrical work, such as work on ITS/research installations or equipment, or on electric vehicles may be undertaken by other electrical contractors, upon authorisation of local Health, Safety and Wellness Manager (HSW Manager) and must comply with all relevant UQ policies and procedures.

(12) Electrical contractors undertaking work as part of a construction project are under the control of the Principal Contractor.

Section 3 - Key Requirements

Part A - Risk Management

(13) The hierarchy of risk control must be considered for developing and implementing control measures. The control measures are developed and implemented by the UQ authorised electrical worker according to an approved UQSafe risk assessment, and/or Standard Operating Procedure (SOP) or Job Hazard Analysis (JHA) or Safe Work Method Statement (SWMS) depending on local area requirements. Refer to the Health and Safety Risk Assessment Procedure for more information.

Job Hazard Analysis (JHA) / Risk Assessments (RA) / Safe Work Method Statements (SWMS)

(14) JHA, RA or SWMS should be based on associated electrical risks which are dependent upon the class of hazards, tasks, things, or circumstances. They are to be completed by the competent and authorised UQ worker for the Organisational Unit and should outline the controls necessary to appropriately manage the risks associated with the electrical work.

(15) Further guidance in assessing electrical risks is initially available from UQ HSW Managers or Work Health and Safety Coordinators (WHSCs).

Part B - Controls

Isolation

(16) Equipment isolation points must be physically locked out with a padlock and locking device, with a tag or notice affixed to the lock or isolation point describing why and by whom the isolation was implemented (refer to the Lock Out Tag Out (LOTO) Isolation Safety Guideline). Isolation and tagging practices communicate the risks involved with the electrical equipment or the installation.

Competency and Training

(17) UQ workers working on electrical equipment/infrastructure must have the required licences along with the skills and knowledge to understand the hazards associated with the tasks. Organisational Units must ensure that all UQ workers involved in or potentially affected by the work activities are provided with information, training and instruction which is suitable and adequate having regard to:

a. nature of the work carried out.
b. nature of the risks associated with the work.
c. control measures implemented.
d. operational use of electrical equipment to relevant workers.

(18) Records of all training provided to UQ workers for working with electricity must comply with the Records Management Procedure.

Personal Protective Equipment (PPE)

(19) PPE must be used where determined to be an appropriate control measure, either in combination with other higher order controls or as a stand-alone measure, through the risk assessment, JHA or SWMS process or where stated in Regulations. Where electrical work is to be undertaken on or near exposed energised conductors or live conductive parts, the minimum requirement for PPE is:

a. eye/face protection
b. protective clothing and footwear
c. hand protection, such as insulating or flame-resistant gloves.

(20) The type and rating of PPE and tools used will be determined based on the risk assessment for the electrical equipment and the type of electrical work being performed.

(21) For low voltage work, the Safe working on or near low-voltage electrical installations and equipment standard (AS/NZS 4836:2011) should be considered as a basis of selecting appropriate PPE and tools. Insulating covers and mats used for electrical safety purposes must comply with the Insulating mats for electrical purposes standard (AS/NZS 2978). Similarly, insulated barriers must be of suitable material to effectively separate electrical workers from adjacent energised equipment.

Arc Flash (PPE)

(22) An arc flash is a release of electrical energy that causes an explosion which can reach temperatures of up to 20,000 degrees Celsius. Arc flashes may result in causing serious burns, injury, and death as well as damage to property and equipment.

(23) The Safe working on or near low-voltage electrical installations and equipment standard (AS/NZS 4836:2011) specifies situations where arc flash PPE might be required. Arc flash PPE is required where an elevated risk of arc flash is identified during the risk assessment. Additionally, arc flash PPE is required where electrical work is to be undertaken on a live or near exposed energised conductors or live conductive part carrying current exceeding 800 Amps.

Emergency Response

(24) A UQ Emergency Response Plan (ERP) must be developed by UQ workers familiar with emergency procedures at workplaces prior to commencing electrical work. The Work Health and Safety Regulation 2011 and the Managing the Work Environment and Facilities Code of Practice 2021 stipulate the need for emergency and rescue procedures when working with electrical hazards. ERPs should include:

a. effective response to an emergency.
b. evacuation procedures.
c. notifying emergency service organisations at the earliest opportunity.
d. medical treatment and assistance.

e. effective communication between the authorised person coordinating the emergency response and all persons in the workplace.
f. testing of the emergency procedures, including the frequency of testing.
g. information, training, and instruction to relevant workers in relation to implementing the emergency plan.

Part C - Reporting Electrical Injuries and Incidents

(25) Injuries or incidents that occur as a result of electrical equipment or electrical work must be reported in UQSafe. Criteria apply to some electrical injuries and incidents that require them to be notified initially to the Health, Safety and Wellness Division (HSW Division), and then to the electrical safety regulator. Refer to Health and Safety Incident and Hazard Reporting Procedure. For notifiable incidents and injuries involving electricity, an incident investigation will be undertaken (refer to the Health and Safety Incident Investigation Procedure).

Part D - Conduct of Electrical Work

Licence Requirements

(26) The Electrical Safety Act 2002 (Qld) defines an electrical work licence as a licence authorising an individual to perform electrical work (as defined in the Act).

(27) Authorised electrical workers, including electrical contractors, must hold valid and relevant licences and accreditation, and be trained and appropriately competent to undertake electrical work at UQ locations.

(28) UQ has an electrical contractor's licence for the design, manufacture, and supply of electrical equipment. UQ is required to keep their licence valid by engaging the following positions:

a. Qualified Technical Person (QTP)
b. Qualified Business Person (QBP).

(29) This licence is kept by the HSW Division.

(30) For more information on licence requirements for specific electrical activities, contact your local HSW Manager.

High Voltage (HV) Work

(31) High voltage (HV) electrical work including installation, operation and maintenance of HV installations is only to be undertaken by P&F, or specialist approved HV electrical contractors engaged by P&F.

(32) For access to HV equipment or substations where work will be undertaken, there are several permits/processes that must be obtained, completed, and approved by the relevant authorised person before any works can commence.

Energised work

(33) Energised or 'live' work will not be approved unless it is permitted electrical work under section 18 of the Electrical Safety Regulation 2013, which prohibits work on energised electrical equipment except under the following conditions:

a. the electrical equipment worked on provides a vital health and safety function.
b. it is necessary that the electrical equipment be energised for the work to be carried out properly.
c. for the purposes of required testing.
d. there is no reasonable alternative.

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(34) Electrical work on energised electrical equipment must only be conducted by UQ authorised electrical workers according to an approved risk assessment in UQSafe, unless completing emergency works, in which case a SWMS must be followed.

Testing / De-energising

(35) Before electrical work is performed on electrical equipment, it must be tested to ensure it is not energised. All precautions must be taken to prevent de-energised equipment from being inadvertently re-energised by isolating and locking out circuits/equipment intended to be worked on (refer to the Lock Out Tag Out (LOTO) Isolation Safety Guideline). All exposed conductors must be treated as live until tested and proven to be de-energised.

(36) For specific plant and equipment, additional precautions or steps may need to be taken to ensure safe de-energisation and re-energisation. These steps should be addressed by local SOPs or management plans.

Electrical Work Under Supervision

(37) The Electrical Safety Act 2002 provides an exemption for an engineering university student to perform electrical work as part of training under the supervision of teaching staff, which must be a practising professional engineer under the Professional Engineers Act 2002 (Qld) without the requirement to hold an electrical trade license. All safety requirements of an UQ authorised electrical worker will apply to the student and teaching staff. Organisational Units seeking this exemption must obtain explicit written permission from the Head of the Organisational Unit. The relevant supervisor (e.g. the practising professional engineer) must additionally complete a risk assessment in UQSafe including specific controls for managing the risks to staff, unlicenced students and others.

Restricted Access

(38) Controls must be in place to prevent unauthorised access to equipment while it is being repaired or maintained. Controls may include locked access, barricading and signage at entry to notify UQ workers and others of the electrical hazards. Refer to the Temporary Barricading and Signage Guideline for additional information.

Part E - Electrical Equipment

Purchasing Electrical Equipment

(39) All purchased electrical equipment must comply with the relevant legislation and Australian Standards.

(40) The purchase of electrical equipment must also comply with UQ's Safe Procurement and Acquisition of Plant and Equipment Procedure.

Residual Current Devices (RCDs)

(41) An RCD is a mechanical switching safety device that is designed to isolate the circuit when it detects leakage current over 30mA. Installations commissioned after 2018 require RCD protection for all final subcircuits, rated 32A or less, that are supplying socket outlets, lighting, direct-connected hand-held equipment, and direct-connected equipment that presents increased risk of electric shock.

Portable RCDs

(42) Portable RCDs should be used to provide an additional level of protection when undertaking tasks, or working in environments, which present an increased risk of damage to electrical equipment, which may result in electric shock.

Outlet Adaptors

(43) Double adaptors or piggyback plugs must not be used on UQ sites (refer to the Electrical Safety Regulation

2013 (Qld) s106).

(44) International electrical outlet/plug adaptors must not be used on UQ sites in spaces requiring testing and tagging. Equipment must be inspected, modified, and certified (where required) to suit Australian standards and to confirm equipment is deemed safe for use. Other considerations can be found in the Safe Procurement and Acquisition of Plant and Equipment Guideline.

Power Boards

(45) Power boards are permitted under the following conditions:

a. they must not be used to supply high current consumption devices (refer definitions);
b. they must be individually switched, and the board must have an appropriately rated overcurrent circuit breaker incorporated;
c. double pole self-switching type outlets that are switched on only when the power plug is inserted are acceptable where used for modular furniture (commonly seen on soft wiring systems associated with modular furniture);
d. multiple plug boards must not be daisy chained;
e. power boards must not be used in hostile environments or exposed to wet or moisture laden atmospheres; and
f. power boards must be regularly inspected and tested and tagged, as specified in the Electrical Testing and Tagging Guideline.

Extension Leads

(46) Extension leads are permitted under the following conditions:

a. used for temporary applications only;
b. not be of excessive length for the purpose (avoid coiling cable);
c. be of adequate current rating;
d. positioned such that they are protected against damage and do not create a trip hazard to persons entering the area; and
e. regularly inspected and tested and tagged, as specified in the Electrical Testing and Tagging Guideline.

Testing and Tagging

(47) All specified electrical equipment must be tested on a frequency of three (3), six (6), or twelve (12) months, or five (5) years to comply with the requirements of the environment they are being used in. For more details refer to the Electrical Testing and Tagging Guideline to identify the requirements and frequency of testing to comply with UQ requirements.

(48) Testing and tagging is to be facilitated by the Organisational Unit at the required intervals depending on the work environment. The supplier of testing and tagging services should be in line with the preferred electrical contractor. The cost is borne by the Organisational Unit and requested via an Archibus user funded request.

Privately Owned Appliances

(49) Staff and students are encouraged not to bring privately owned electrical equipment to work. Appliances listed below are examples of items deemed a higher risk with more potential to cause incidents such as fire and cannot be used on UQ sites:

a. portable heaters

b. refrigerators/mini bars
c. international adaptors not compliant with Australian Standards
d. desktop water features (e.g. fish tanks, lava lamps, etc).

(50) Privately owned electrical equipment that is required in the workplace must be approved by local HSW Manager to ensure its suitability for use and may need to be tested and tagged. The frequency of compliance testing will be determined by the environment which it is being used.

(51) Staff and students must only use personal electrical equipment at UQ locations that complies with Australian Standards and have a Regulatory Compliance Mark (RCM) or a State Approval number.

Manufacture and Alteration of Electrical Equipment

(52) The manufacture and alteration of electrical equipment is considered electrical work under the Electrical Safety Act 2002. UQ workers must not perform this type of electrical work unless licensed to do so under the Act.

Design of Electrical Equipment

(53) Organisational Units that design or manufacture plant for use at UQ, including for use in research and teaching, must ensure that:

a. UQ workers undertaking this work are competent, appropriately licenced and qualified;
b. a risk assessment is undertaken prior to design and manufacture that considers any risks that may arise throughout the life of the plant (e.g., from design/manufacture to disposal);
c. an Electrical Engineer may need verify the design of electrical equipment; and
d. Organisational Units are responsible for verifying that plant is manufactured as per approved designs.

Documentation

(54) All electrical equipment manufactured at UQ must be tested by a UQ authorised electrical worker to confirm that the equipment is compliant. Documented evidence of testing and compliance shall be developed.

Research Electrical Equipment

(55) All electrical equipment used for research purposes must be inspected to determine if special requirements are needed for the installation, commissioning, and modification. If the equipment has been designed and manufactured at UQ it must comply with all relevant standards regarding the use of the equipment. In addition, in these circumstances, UQ takes on the responsibilities of designer, manufacturer and supplier under the Electrical Safety Act 2002 which have specific obligations. Equipment designed and manufactured for research or educational purposes must have details recorded and be inspected to ensure it complies with all relevant standards.

Supply and Use of UQ-manufactured Electrical Equipment

(56) The supply (including lending, gifting and sharing) of UQ-manufactured electrical equipment is prohibited unless the equipment has completed compliance testing and Regulatory Compliance Mark (RCM) approval where required. The design, manufacture and supply of UQ-manufactured electrical equipment must comply with Electrical Safety Act 2002 and relevant standards. The Heads of Organisational Unit and UQ's Qualified Business Person (QBP) and Qualified Technical Person (QTP) must approve any supply or distribution of UQ-manufactured equipment.

(57) UQ-manufactured electrical equipment may only be used for UQ research or educational purposes (on or off UQ locations). For equipment being manufactured for operation at above extra low voltage, a UQ authorised electrical worker must be involved in the manufacture and commissioning of the equipment with any designs and commissioning records kept and updated regularly.

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(58) If the electrical equipment is to be supplied, UQ will take on the duties listed in sections 31 - 35, of the Electrical Safety Act 2002. Any information relating to the electrical equipment design, registration, installation, operation and/or maintenance must be provided with the plant to the reseller or buyer.

Part F - Electrical Infrastructure

(59) Electrical infrastructure must only be accessed and worked on by authorised P&F workers, and any contractors arranged by P&F. All compliance documentation must be supplied as soon as practicable after testing the completed electrical work.

Emergency Stop Switches

(60) Emergency stop switches that isolate the electrical supply must be installed at the entrance to every laboratory, and workshops where practical. Emergency stop switches must be:

a. easily accessible and clearly labelled; and
b. tested, and thereafter at intervals determined by regulation in consultation with Organisational Units. Refer to AS 2243.7-1991 Safety in Laboratories (section 3.1 Isolation and Emergency Switching).

Hazardous Areas

(61) Where electrical equipment is located within a hazardous area classification zone, specific requirements are required under AS/NZS 60079 Hazardous Area Standards. The Electrical Safety Regulation 2013 requires that an accredited auditor inspect electrical installations in hazardous areas prior to connection for the first time or reconnection. This work must be organised through P&F.

(62) Users of a hazardous area must not introduce any non-compliant equipment to the space.

Section 4 - Roles, Responsibilities and Accountabilities

Property and Facilities Division (P&F)

(63) P&F is responsible for the electrical installation in all buildings, including the provision, maintenance, repair, alterations and additions to the electrical installation, the safety of such installation, and compliance with the rules and codes of the relevant Electrical Regulating Authority, Australian Standards, and codes of practice.

(64) P&F is responsible for reviewing this Procedure as required, in collaboration with the HSW Division, to ensure its accuracy, relevance and effectiveness.

(65) Specifically, P&F is responsible for:

a. the installation and maintenance of the electrical infrastructure on all UQ campuses and sites;
b. providing technical consultancy to the HSW Division and others in relation to:
    i. establishing construction, installation, and equipment standards, and
    ii. establishing inspection and maintenance regimes for all electrical equipment and infrastructure owned or operated by UQ; and
c. conducting UQSafe risk assessments for P&F managed or controlled electrical installations and reviewing these risk assessment as required.

Chief Property Officer (CPO)

(66) The Chief Property Officer is responsible for:

a. ensuring any contractors or staff engaged to perform electrical work for P&F are Australian-licensed or Australian-registered/certified and competent to perform the work; and
b. the safe management and compliance of electrical systems, including installation, maintenance, testing and repair for electrical infrastructure in UQ owned properties (and to various limited extents, property and facilities under lease arrangements).

Senior Manager, Client Facilities (SMCF)

(67) The SMCF is responsible for:

a. UQ electrical workers under their supervision conducting tasks that involve electricity are suitably qualified, trained and authorised;
b. informing campus operation staff of this Procedure;
c. developing in consultation with UQ workers safe operating procedures for electrical work;
d. ensuring all electrical incidents and injuries are reported in UQSafe and investigations are undertaken in a timely manner;
e. implementing preventative and corrective maintenance programs for electrical safety; and
f. ensuing all contractors completing electrical works are appropriately qualified.

Client Facilities Manager (CFM)

(68) CFMs are responsible for managing electrical tasks within their precincts, including:

a. where required, issuing and authorising electrical permits for electrical work for P&F workers following completion of required documentation;
b. where appropriate, authorising access to sub-stations, plant rooms, instruments, and devices to UQ workers; and
c. ensuring all works are carried out in accordance with UQ’s health and safety policies and procedures and that staff take all reasonable care to ensure that their actions or omissions do not adversely impact on the health and safety of others at UQ.

Health, Safety and Wellness Division (HSW Division)

(69) The HSW Division is responsible for:

a. participating in investigations of electrical incidents where required with P&F;
b. reporting notifiable incidents and events to the Regulator;
c. supporting P&F in the ongoing development and implementation of this Procedure and providing health and safety advice to Organisational Units when required or requested; and
d. communicating this Procedure to Organisational Units and the HSW Safety Network for implementation.

Heads of Organisational Units

(70) Heads of Organisational Units are responsible for:

a. seeking advice from P&F or the HSW Division on implementing the requirements of this Procedure and notifying of any difficulties in implementation;

b. ensuring any contractors or staff engaged to perform electrical work in their area of responsibility are Australian-licensed or Australian-registered/certified and competent to perform the work;
c. approving the exemption for an engineering university student to perform electrical work as part of training under the supervision of teaching staff, which must be a practising professional engineer;
d. ensuring managers and supervisors in their areas of responsibility, who manage UQ workers required to work with electricity, are aware of this Procedure and the guidelines, and provide resources to meet the competency and training requirements of this Procedure; and
e. maintaining records of electrical testing and maintenance.

(71) If an Organisational Unit has assessed that an electrical contractor's licence is required for electrical work performed in their Organisational Unit, a nominated UQ authorised electrical worker is required to act as the "Qualified Technical Person" (QTP) and their name will be endorsed on the UQ electrical contractor's licence.

Managers and Supervisors

(72) Managers and supervisors are responsible for ensuring that UQ workers under their supervision conducting tasks that involve electricity:

a. are suitably qualified, trained and authorised; and
b. have been informed of this Procedure.

(73) In addition, managers and supervisors are responsible for ensuring:

a. UQSafe risk assessments are developed in consultation with UQ workers;
b. records of inspections and maintenance of all equipment is maintained and kept with electrical equipment;
c. electrical incidents and injuries are reported in UQSafe and investigations are undertaken in a timely manner;
d. no electrical work is undertaken in their area of responsibility unless there are the required training and licencing in place;
e. electrical work is appropriately supervised according to the task and persons involved;
f. all electrical requirements are met regarding this Procedure for the areas within their responsibility; and
g. any specialised electrical work is authorised and contractors provided with the applicable UQ procedures and processes.

HSW Managers and Work Health and Safety Coordinators

(74) HSW Managers and Work Health and Safety Coordinators (WHSCs) are responsible for:

a. ensuring all notifiable and serious electrical incidents are notified to the HSW Division;
b. undertaking or assisting in incident investigation in accordance with the Health and Safety Incident Investigation Procedure, where required;
c. providing guidance and advice to Organisational Units, in collaboration with P&F, on the implementation of this Procedure;
d. assisting managers, supervisors and UQ workers to conduct and review risk assessment for work in electrical tasks; and
e. consulting with HSW Division on any constraints to implementing the requirements of this Procedure.

UQ Authorised Electrical Workers

(75) UQ workers conducting electrical work are responsible for:

a. complying with the requirements of this Procedure and any information, training, or instruction they receive from their manager or supervisor;
b. reporting any electrical hazards to their supervisor and submitting these in UQSafe;
c. assisting managers and supervisors in conducting UQSafe risk assessments for electrical work;
d. conducting JHA before the commencement of any electrical work;
e. working within the bounds of their license and competency; and
f. ensuring they have a current and valid electrical licence.

UQ Workers

(76) UQ workers who are not authorised electrical workers must not expose themselves to electrical hazards or undertake any electrical work.

(77) They must follow any requirement of a risk assessment or local safe operating procedure regarding electrical hazards and report any electrical incidents or injuries in UQSafe.

Section 5 - Monitoring, Review and Assurance

(78) P&F is responsible for reviewing this Procedure as required, in collaboration with the HSW Division, to ensure its accuracy, relevance and effectiveness. Review of the Procedure will also be informed by feedback from Heads of Organisational Units, supervisors and managers.

(79) HSW Division will conduct periodic audits of Organisational Unit compliance with this Procedure, which may include checking:

a. the existence, adequacy and review of electrical safety risk assessments and Emergency Response Plans.
b. electrical work permit approvals.
c. UQ workers' compliance with electrical work permit requirements.
d. UQ workers' awareness of compliance obligations associated with this Procedure.
e. UQ workers' electrical work licensing and competency documentation.
f. management of contractors regarding electrical work at UQ.

(80) Local HSW Managers, Work Health and Safety Coordinators (WHSCs) and Health and Safety Representatives (for their nominated workgroup) will conduct regular inspections (at least annually) to review appropriate risk controls.

Section 6 - Recording and Reporting

(81) HSW Managers and Organisational Unit managers and supervisors will ensure:

a. all issues, faults and/or damage to UQ electrical infrastructure are reported to P&F Assist (email pfassist@pf.uq.edu.au; telephone 3365 2222) and documented through Archibus;
b. all incidents and near misses relating to electrical work and electrical equipment are reported in UQSafe;
c. non-compliance with this Procedure and/or relevant standard operating procedures (SOPs) is reported to the Head of Organisational Unit, who will notify the HSW Division;
d. approved electrical safety permits are recorded and held locally; and
e. UQ's Records Management Procedure is followed.

(82) The HSW Division reports on electrical incidents in regular reporting to senior management, including notifiable

incidents. HSW Manager/Safety Leads compile reports for their respective senior management.

Section 7 - Appendix

Definitions

Term	Definition
Competent Person	A person who has acquired through training, qualification or experience, or a combination of these, the training and knowledge and skills to carry out that task.
Electrical Work	Under the Electrical Safety Act 2002, electrical work means: • connecting electricity supply wiring to electrical equipment or disconnecting electricity supply wiring from electrical equipment; or • manufacturing, constructing, installing, removing, adding, testing, replacing, repairing, altering, or maintaining electrical equipment or an electrical installation. For the purpose of this Procedure, Extra Low Voltage is excluded from the definition of 'electrical work'.
Extra Low Voltage (ELV) work	Any work on equipment or infrastructure below 50 V AC, or 120 V DC ripple free.
Explosive Atmosphere Hazardous Areas (EEHA)/Hazardous Atmospheres (HA)	For the purpose of this Procedure, the term 'hazardous areas' is used to describe Explosive Atmosphere Hazardous Area and Hazardous atmospheres. Area in which an explosive atmosphere is present, or may be expected to be present, in quantities such as to require specifications for the construction, installation and use of equipment (based on AS/NZS 60079 series).
High Current Consumption Devices	Electrical equipment rated to draw a high level of current, or close to the devices plug top rating e.g. 2300 W device with a 10A plug top. Examples of these devices are kettles, heater banks, induction hot plates and portable air conditioning units.
High Voltage Installation	A group of items of electrical equipment permanently connected and can be supplied with electricity from the works of an electricity entity or from a generating source at voltages greater than 1000V AC RMS or 1500V ripple-free DC. This includes electrical equipment associated with protection and earthing systems up to and including any low voltage cables and switchgear associated with high voltage installations. High voltage installations do not include: • electric discharge illumination systems • x-ray equipment • high frequency equipment • high voltage wiring and electrical equipment enclosed within self-contained electrical equipment and supplied at low voltage where precautions have been taken to prevent contact with high voltage conductors.
Low Voltage (LV) Work	Any work on equipment or infrastructure above 50 V AC, or 120 V DC ripple free.
Qualified Technical Person (QTP)	An electrical tradesperson nominated on the electrical contractor licence to authorise electrical equipment to be designed and commissioned on UQ sites.
Qualified Business Person (QBP)	A nominated individual endorsed on the electrical contractor licence to authorise electrical equipment to be designed and commissioned on UQ sites.
Test and Tag	The testing and certifying of specified electrical equipment and testing of residual current devices (RCDs).
UQ Authorised Electrical Worker	UQ workers that have the required licence to complete electrical work on the organisation units equipment under Queensland law and approval by the relevant Organisational Unit.

Term	Definition
UQ Electrical Equipment	Electrical appliances connected permanently via fixed wiring or temporarily via outlet to UQ Electrical Infrastructure. Electrical equipment installed for the purposes of conveyance, control, measurement, or use of electricity, where electricity is or is to be supplied for consumption.
UQ Electrical Infrastructure	Wiring systems, switchgear, control gear, accessories, appliances, luminaires, and fittings used for such purposes as generation, conversion, storage transmission distribution or utilisation of electrical energy.
UQ Worker	For the purposes of this Procedure, includes: • staff - continuing, fixed-term, research (contingent funded) and casual staff; • contractors, subcontractors and consultants working under UQ systems and control (e.g. contingent workers); • visiting academics and researchers; • academic title holders, visiting academics, emeritus professors, adjunct and honorary title-holders, industry fellows and conjoint appointments; • higher degree by research students; and • volunteers and students undertaking work experience.

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