WHSMS Managing Electrical Risk Procedure

Section 1 - Governing Policy

(1) This Procedure is governed by the Work, Health, Safety and Wellbeing Policy.

Application

(2) This Procedure applies to the management of electrical risks on ACU campuses.

Electrical Risks

(3) Electrical risks are risks of death, shock or other injury caused directly or indirectly by electricity. The most common electrical risks and potential causes of injury present within ACU working and learning spaces are:

a. electric shock causing injury or death. The electric shock may be received by direct or indirect contact, tracking through or across a medium, or by arcing. For example, electric shock may result from indirect contact where a conductive part that is not normally energised (such as a metal toaster body) becomes energised due to a fault; and
b. fire resulting from an electrical fault.

(4) Electric shocks may also lead to other injuries, such as falls from ladders. Other injuries or illnesses may include muscle spasms, palpitations, nausea, vomiting, collapse and unconsciousness.

(5) Workers using electricity may not be the only ones at risk – faulty electrical equipment and poor electrical installations can lead to fires that may also cause injury or death to others.

ACU Responsibilities

(6) ACU shall manage electrical risks by ensuring:

a. Power and lighting circuits are protected by the appropriately rated circuit breaker to prevent overloading. A Residual Currency Device (RCD) or Residual Circuit Breaker with Over Current Protection (RCBO) must also be installed on power and lighting circuits.
b. All power points are clearly labelled with the Circuit Breaker (CB)/RCD or RCBO ID Number/ Reference and the electrical schedule inside the switchboard updated and accurate.
c. Electrical leads are arranged so they will not be damaged. Avoid running leads across floors or the ground, through doorways and over sharp edges, and using lead stands or insulated cable hangers to keep leads off the ground.
d. That whenever residual current devices (RCDs) or circuit breakers are triggered, the causes are investigated and documented within a Riskware Action Plan, before the circuit is re-energised.
e. That tools and cables are not used in damp conditions, unless they are specially designed for those conditions.
f. That circuits where portable electrical equipment can be connected are protected by appropriately rated RCDs.
g. That electrical equipment and circuits are inspected and tested as required.

h. That electrical work is only undertaken by licenced electricians.

Inspection, Testing and Defective Equipment

(7) This section outlines the requirements for the inspection, testing and removal of defective equipment from use.

Visual Inspections

(8) ACU staff should visually inspect any electrical equipment in their immediate vicinity, particularly those items which they regularly use. Regular visual inspections can identify obvious damage, wear or other conditions that might make electrical equipment unsafe. Many electrical defects are detectable by visual inspection.

(9) Whenever staff members identify an electrical defect, they should stop using the equipment and visit Service Central and assign a case to Facilities Management, who will determine what actions to take.

Inspection and Testing

Existing Equipment

(10) The campus Facilities Manager or Nominee shall arrange for the regular inspection and testing (testing and tagging) of electrical equipment and RCDs/RCBOs on the campus, by a competent person(s). They will undertake the testing in accordance with Australian Standards.

(11) The Facilities Manager or Nominee shall ensure the competent person maintains a register of electrical equipment that has been tested which includes the following details:

a. the location of the equipment;
b. the Tag Number; and
c. the outcome of the inspection and testing.

(12) A copy of the register shall be made available to the Facilities Manager or Nominee upon request.

New Equipment

(13) The campus Facilities Manager or Nominee will ensure that new electrical equipment that is purchased between scheduled inspections is tagged. The tag should indicate that the equipment is ‘New to Service’ and when the equipment was brought into service.

Permitted and Not Permitted Equipment

(14) The following equipment is permitted to be used:

a. double adapters; and
b. if working outdoors, a temporary power plug is permitted, but must have an integrated RCD.

(15) The following equipment is not permitted:

a. power decks; and
b. under desk strip, oil or similar radiant heaters.

(16) Additionally, toasters will not be replaced whenever they have come to the end of their service life.

Defective Equipment

(17) Whenever defective electrical equipment is identified, it shall be tagged out of use with an appropriate service

tag such as “DANGER. DO NOT USE” and removed from use. It shall not be returned to service until repaired by a licenced electrician and assessed as safe to return to service. If the equipment is to be discarded the plug shall be cut off, preventing inadvertent use.

Electrical Switchgear

(18) The campus Facilities Manager or Nominee shall arrange for thermographic surveys of electrical switchgear to be undertaken annually. Although there is no mandatory requirement for a thermographic survey, it is recommended that surveys are undertaken as a preventive measure, mitigating the risk of fire, as part of ACU’s responsibility to manage electrical risks.

Electrical Work

(19) The Facilities Manager or Nominee shall ensure that only licenced electrical contractors or electricians are engaged for work.

(20) The isolation procedure, detailed within the WHSMS High Risk Activities Management Procedure, should be followed whenever electrical equipment needs to be isolated and the work activity is not under the full control of the licenced electrical contractor or electrician.

(21) Facilities Management staff are permitted to undertake the following activities:

a. open an electrical switchboard to reset a CB or RCD or RCBO (this task should not be attempted more than twice consecutively)[1];
b. work on Extra Low Voltage (ELV) systems (below 50VAC or 48VDC) if they feel competent and after suitable instruction from the campus Facilities Manager;
c. make safe or isolate electrical hazards/cables to make safe in preparation for an electrician;
d. support or assist a qualified electrician to perform works if under supervision; and
e. remove lighting diffusers, globes, starters etc, but cannot remove covers or panels that expose live wires or cable connection terminals.

> [1] No other ACU staff member is allowed to open or access an electrical switchboard distribution board or similar.

(22) Only electrically qualified personnel may remove electrical safety panels from switchboards.

Section 2 - Revision made to this Procedure

(23) The University may make changes to this policy from time to time to improve the effectiveness of its operation. In this regard, any staff member who wishes to make any comments about this policy may forward their suggestions to People and Capability.

Section 3 - Further Assistance

(24) Any staff member who requires assistance in understanding this Procedure should first consult their Nominated Supervisor or Manager who is responsible for applying the WHSMS Implementation Procedure within their work area. Should further information or advice be required staff should visit Service Central.

Section 4 - Associated Information

(25) For related legislation, policies, procedures and guidelines and any supporting resources please refer to the Associated Information tab.

Status and Details

Status	Current
Effective Date	19th December 2023
Review Date	30th April 2024
Approval Authority	Vice-Chancellor and President
Approval Date	19th December 2023
Expiry Date	Not Applicable
Responsible Executive	Angelle Laurence Chief People Officer
Responsible Manager	Angelle Laurence Chief People Officer
Enquiries Contact	Bernardine Lynch ER and Safety Committees and Policy Officer People and Capability