Electrical Safety Management Plan

Table of Contents

Purpose and Scope

This Electrical Safety Management Plan (ESMP) sets out how [Company Name] will manage electrical risks so far as is reasonably practicable in accordance with applicable Work Health and Safety (WHS) legislation, regulations, Codes of Practice and Australian Standards.

The ESMP applies to all electrical work, electrical equipment and electrical installations under the management or control of [Company Name], including:

- Electrical and solar installation, maintenance, testing and commissioning
- Manufacturing and production plant, fixed and portable equipment, and automated systems
- Mining and resources operations, including surface and underground electrical infrastructure
- Air conditioning and refrigeration systems, including high-efficiency and commercial installations

This plan covers all workers, including employees, labour hire personnel, contractors, apprentices, trainees, visitors and other persons at the workplace who may be affected by electrical hazards.

Objectives

The objectives of this Electrical Safety Management Plan are to:

- Eliminate or minimise electrical risks to workers and others
- Provide a structured framework for electrical risk management in all operations
- Ensure compliance with WHS legislation, Electrical Safety legislation (where applicable) and Australian Standards
- Define responsibilities and accountabilities for electrical safety
- Provide safe systems of work for electrical tasks and work near electrical installations
- Ensure electrical equipment and installations are designed, installed, tested, used and maintained safely
- Provide processes for incident reporting, investigation and continual improvement in electrical safety performance

References and Applicable Legislation

This ESMP should be read in conjunction with relevant WHS and Electrical Safety legislation, Codes of Practice and Australian Standards, including (as applicable in each jurisdiction):

- Work Health and Safety Act and Work Health and Safety Regulations
- Electrical Safety Act and Electrical Safety Regulation (where applicable)

- Safe Work Australia Codes of Practice, including but not limited to:
  - Managing Electrical Risks in the Workplace
  - Managing the Risk of Falls at Workplaces
  - Managing Risks of Plant in the Workplace
  - Confined Spaces
  - Hazardous Manual Tasks
- Australian/New Zealand Standards, including but not limited to:
  - AS/NZS 3000 Electrical Installations (Wiring Rules)
  - AS/NZS 3012 Electrical installations – Construction and demolition sites
  - AS/NZS 3760 In-service safety inspection and testing of electrical equipment
  - AS/NZS 4836 Safe working on or near low-voltage electrical installations and equipment
  - AS/NZS 4777 Grid connection of energy systems via inverters (for solar and embedded generation)
  - AS/NZS 3007 Electrical equipment in mines and quarries
  - AS/NZS 5149 Refrigerating systems and heat pumps – Safety and environmental requirements

[Company Name] will review and update this ESMP when relevant legislation, Codes or Standards are amended or replaced.

Definitions

For the purpose of this ESMP, the following definitions apply:

- **Electrical equipment** – Any apparatus, appliance, cable, conductor, fitting, insulator, material, meter or wire used for controlling, generating, supplying, transforming or transmitting electricity.
- **Electrical installation** – A group of items of electrical equipment permanently electrically connected and that can be supplied with electricity from the works of an electricity supply authority or from a generating source.
- **Electrical work** – Work on electrical equipment or an electrical installation, including installation, alteration, repair, maintenance, testing or fault-finding.
- **Competent person** – A person who has acquired through training, qualification or experience the knowledge and skills to carry out the task safely and is familiar with relevant standards and procedures.
- **Authorised person** – A person who has been formally authorised by [Company Name] to perform specified electrical tasks or to access specific areas.

- **De-energised** – Not connected to a source of electrical supply and discharged of any stored electrical energy.
- **Energised (live) work** – Electrical work performed on equipment that is connected to a source of electrical supply or is capable of being energised.
- **Lockout/Tagout (LOTO)** – A system of isolation involving the placement of locks and tags on energy-isolating devices to prevent the inadvertent energisation of equipment.
- **Residual Current Device (RCD)** – A device designed to isolate supply to protected circuits, socket-outlets or electrical equipment in the event of an earth leakage current.
- **High voltage (HV)** – Nominal voltage exceeding 1,000 V AC or 1,500 V DC.
- **Low voltage (LV)** – Nominal voltage exceeding 50 V AC or 120 V DC but not exceeding 1,000 V AC or 1,500 V DC.

Roles, Responsibilities and Consultation

Officers and Senior Management

Officers and senior managers of [Company Name] must exercise due diligence to ensure that [Company Name] complies with its WHS duties in relation to electrical safety by:

- Providing adequate resources for implementation of this ESMP
- Ensuring appropriate electrical safety policies, procedures and systems of work are developed and maintained
- Ensuring electrical safety risks are identified, assessed and controlled
- Ensuring information, training, instruction and supervision are provided
- Monitoring the effectiveness of electrical risk controls and compliance
- Reviewing electrical incident data, audit findings and corrective actions

Managers and Supervisors

Managers and supervisors are responsible for day-to-day implementation of this ESMP by:

- Ensuring only licensed and competent persons undertake electrical work
- Ensuring work is planned, risk assessed and carried out in accordance with safe work procedures
- Confirming that isolation, lockout/tagout and testing procedures are followed
- Ensuring plant and electrical equipment are inspected, tested and maintained
- Providing and enforcing the use of appropriate personal protective equipment (PPE)
- Conducting regular workplace inspections focusing on electrical hazards