

Scope of Work Activity Covered by this Work Method Statement

This Work Method Statement outlines the main hazards and risks associated in a

Electrical Testing

Instructions for Safe Work Method Statements

A Safe Work Method Statement (SWMS) is a document that sets out the work activities to be carried out at a workplace, the hazards arising from these activities and the measures to be put in place to control the risks. All work must be carried out in accordance with this SWMS. This SWMS must be kept and be available for inspection. All persons must read, understand and sign off this Work Method Statement.

Applicable High Risk Construction Work Activities (highlighted). A SWMS is required for all high risk work activities.

A risk of a person falling more than 600mm	Demolition of a load-bearing structure.	Work on a tele-communications tower
Work in or near a shaft or thrench with an excavated depth over 1.5m or in a tunnel	Temporary load-bearing support structures for structural installations or repairs	Work on or near a pressurised gas distribution mains or piping
Work on or near chemical, fuel or refrigerant lines	Work on, in or adjacent to a road, railway, shipping lane or other traffic corridor in use by traffic other than pedestrians	Y Work on or near energised electrical installations or services
Likely to involve disturbing asbestos	Work in or near a confined space	Work in an area with movement of powered mobile plant
Work in areas with artificial extremes of temperature	Work in or near water or other liquid that involves a risk of drowning	Work in an area that may have a contaminated or flammable atmosphere
Use of explosives	Tilt-up or precast concrete elements	Diving work

Personal Protective Clothing & Equipment (PPE) Required

Safety Boots		Insulated Gloves	
Safety Glasses		High Visibility Clothing / Vests	

Required Qualifications/Verifications

Qualification	Requirement	Qualification	Requirement
Grant Transformers/Star Delta WHSQE Induction	All Personnel	Verification of Competency - Electrical Testing	All Personnel

Required Inspections & Maintenance Checks

Plant and equipment used on site includes, but is not limited to:

Plant and/or Equipment	Inspection and maintenance checks required	Plant and/or Equipment	Inspection and maintenance checks required
Forklift	Safety check prior to use. Maintenance & Safety Checks in accordance with Manufacturers Specifications	Electrical Equipment	Tag & Test. Safety check prior to use. Maintenance & Safety Checks in accordance with Manufacturers Specifications
Hoists	Hoist inspections in accordance with Manufacturer's instructions Safety check prior to use.	Impact Drivers	
Ladders	Safety check prior to use	Extension Leads	Tag & Test Safety check prior to use

Inspections of plant to be carried out before commencement of work, as per listed hazard controls for pre-start checks.



SWMS Develop By:	Mark Veenendaal - qca	Person Responsible for Ensuring Compliance:	Engineering Manager
SWMS Consulted With:	Factory/Manufacturing Managers	Person Responsible for Monitoring:	Factory Manager
SWMS Approved By:	Engineering Manager		

Formal communication of Site Safety Rules will occur primarily in three ways:

1. As part of the implementation of this WMS, all parties that in the workgroup to be present for a brief meeting.
2. As new person(s) (employees, subcontractors, etc.) enter the site for the first time they will be briefed on the Site Safety Rules that they must comply with and sign induction form stating that they are aware of the site specific hazards.
3. At regular ‘toolbox’ meetings – employees will be reminded of the safety site rules, new and existing potential hazards and also constantly reminded of the importance of striving for a hazard free work place.

Electrical Testing Responsibility Matrix Transformers

Factory Testing (FAT – Workshop / Manufacturing Scope)

Test / Activity	Typical Tests	Responsibility	Notes
Routine Electrical Tests	Winding Resistance, Ratio, Polarity	Engineer / Technician	As per IEC 60076
Insulation Resistance (IR)	Windings to earth / between windings	Engineer / Technician	Controlled environment
Functional Checks	Tap changer, alarms	Engineer / Technician	Non-installed equipment
Loss Measurements	No-load / Load losses	Engineer / Technician	Test bay
Visual & Mechanical	Assembly, connections	Technician	QA/QC checks
Documentation	FAT Reports	Engineer	Certified before dispatch

Key Principle: Factory testing is conducted on non-installed equipment and does not require a licensed electrician.

Site Testing (SAT – Installation & Commissioning Scope)

Test / Activity	Typical Tests	Responsibility	Notes
Cable Termination	LV/HV connections	Licensed Electrician	Electrical installation work
Insulation Resistance (IR)	Installed cables/system	Licensed Electrician	Compliance testing
Continuity Testing	Earthing & bonding	Licensed Electrician	Safety requirement
Functional Testing	Controls & interlocks	Electrician / Engineer	Under supervision
Protection Testing	Relay / trip checks	Electrician / Protection Tech	Injection testing
Energisation (Live Testing)	Transformer energisation	Licensed Electrician	High-risk activity
Final Verification	Compliance checks	Electrical Nominee	Regulatory oversight

Key Principle: Once equipment is installed, connected, or energised, the work falls under AS/NZS 3000 and electrical licensing requirements.



Responsibility Summary

Scope	Responsibility
Factory Testing (FAT)	Engineer / Technician
Site Installation	Licensed Electrician
Live Testing / Energisation	Licensed Electrician (under EC Licence)
Compliance & Oversight	Electrical Nominee

Risk Rating Matrix

Consequence Likelihood	Low (C1) No Injury most probable outcome Losses <\$500 Environmental impact small, localised and contained	Minor (C2) FAI most probable outcome Losses >\$500 & <\$15,000 Environmental impact contained requiring minor remedial action	Moderate (C3) MTI or LTI most probable outcome Losses >\$15,000 & <\$50,000 Environmental impact - medium term contained impact requiring considerable remedial action	Major (C4) LTI most probable outcome Losses >\$50,000 & <\$100,000 Environmental contamination off site Considerable remediation required	Critical (C5) Fatality(s) most probable outcome Losses >\$100,000 Irreversible/irreparable environmental contamination
Negligible/Rare (L1) A similar incident is unlikely to occur again	L2	L3	L4	M5	M6
Unlikely (L2) A similar incident could occur in the next 5 years	L3	L4	M5	M6	H7
Possible (L3) A similar incident could occur in the next 1 year	L4	M5	M6	H7	H8
Likely (L4) A similar incident could occur in the next 6 months	M5	M6	H7	H8	E9
Almost Certain (L5) A similar incident could occur in the next 1 month	M6	H7	H8	E9	E10
Risk Score	Risk Rating	Required Action			Hierarchy of Controls
2-4	Low Risk	Manage and monitor by routine internal procedures			1 - Elimination Complete elimination of risk
5-6	Moderate Risk	Specific monitoring or pcedures to be implemented. Management responsibility to be specified and strategies implemented as part of day to day activities			2 - Substitution Replacement of material, processes, substances
7-8	High Risk	Immediate action to be implemented by Operations and WHS Management General Management notified			3 - Engineering Designing risks out Isolation of risks
9-10	Extreme Risk	Immediate action to be implemented Detailed research and planning required by Operations & WHS Management Top Management notified			4 - Administrative Adjusting the time or conditions of risk exposure. Includes training options. 5 - Personal Protective Equipment Provision of PPE where other options are not practicable

Relevant Legislation, Standards & Codes of Practice relating to the work:

NSW Work Health & Safety Act November 2011

NSW Work Health & Safety Regulations September 2025

NSW Code of Practice -	First Aid in the Workplace	January, 2020
NSW Code of Practice -	Hazardous Manual Tasks	August, 2019
NSW Code of Practice -	How to Manage Work Health and Safety Risks	August, 2019
NSW Code of Practice -	Managing Electrical Risks in the Workplace	August, 2019
NSW Code of Practice -	Managing Noise & Preventing Hearing Loss at Work	December, 2022
NSW Code of Practice -	Managing the Risk of Falls at Workplaces	August, 2019
NSW Code of Practice -	Managing the Risks of Hazardous Chemicals in the Workplace	December, 2022
NSW Code of Practice -	Managing the Risks of Plant in the Workplace	December, 2022
NSW Code of Practice -	Managing the Work Environment and Facilities	August, 2019
NSW Code of Practice -	Work Health and Safety Consultation, Cooperation and Coordination	December, 2022

AS/NZS 3000:2018 - Electrical Installations (Wiring Rules)

AS/NZS 3012:2019 – Electrical Installations – Construction and Demolition Sites

AS/NZS 3760:2022 - In-Service Safety Inspection and Testing of Electrical Equipment and RCDs

Relevant Legislation, Standards & Codes of Practice relating to the work:

WA Work Health & Safety Act November 2020

WA Work Health & Safety Regulations (General) March 2022

WA Code of Practice -	First Aid in the Workplace	July, 2022
WA Code of Practice -	Hazardous Manual Tasks	July, 2022
WA Code of Practice -	How to Manage Work Health and Safety Risks	July, 2022
WA Code of Practice -	Managing Noise and Preventing Hearing Loss at Work	September, 2023
WA Code of Practice -	Managing Risks of Hazardous Chemicals in the Workplace	July, 2022
WA Code of Practice -	Managing Risks of Plant in the Workplace	July, 2022
WA Code of Practice -	Managing the Risk of Falls at Workplaces	May, 2023
WA Code of Practice -	Managing the Work Environment and Facilities	January, 2023
WA Code of Practice -	Work Health and Safety Consultation, Cooperation and Coordination	September, 2022

AS/NZS 3000:2018 - Electrical Installations (Wiring Rules)

AS/NZS 3012:2019 – Electrical Installations – Construction and Demolition Sites

AS/NZS 3760:2022 - In-Service Safety Inspection and Testing of Electrical Equipment and RCDs

Task	Hazard	Probability	Consequence	Ranking	Control	Person Responsible	Probability	Consequence	Ranking
		Inherent Risk						Residual Risk	
Conduct Electrical Tests	Electric Shock Hazard from inadvertent contact with live parts or undetected voltages	4	5	E9	1 - Ensure the area is clear of obstructions so as to allow for easy access and exit. □ 2 - All conductive parts of the electrical installation or materials in contact with conductive parts (such as concrete, water, timber) to be treated as live until tests prove de-energised □ 3 - Any person exposed to, or accessing energised electrical parts, or applying potential lethal test currents shall be assessed as competent to conduct electrical testing □ 4 - Non-qualified personnel shall be prevented from entering the work-site by the installation of barriers or fencing □ 5 - Required PPE and equipment must be used at all times. This includes, but is not limited to: * Non-synthetic clothing of non-fusible material and flame resistant. Clothing made from conductive material or containing conductive threads shall not be worn. * Rubber mats * Approved rubber gloves insulated to the highest potential voltage expected at the location. * Non-conductive foot wear, for example steel capped boots or shoes manufactured to a suitable standard. * Eye protection. Non-conductive frames and lenses with suitable impact resistance and light filtering to prevent damage to the eyes. 7 - Remove metal objects from the body that can conduct electricity and retain heat such as rings, body piercings and watches.	Management Supervision Work Team	1	5	M6
Conduct Electrical Tests	Electrical Shock Electrocution Eye Injury Body injury by entrapment in rotating machinery Burn injury	4	5	E9		Management Supervision Work Team	1	5	M6
Conduct Electrical Tests	Electrical Shock Electrocution Eye Injury Body injury by entrapment in rotating machinery Burn injury	4	5	E9		Management Supervision Work Team	1	5	M6
Implementation		4	4	H8	1 - Company policies and procedures 2 - Company Induction 3 - SWMS Briefings and Sign Off by Operators. Any changes during consultation are incorporated into the SWMS and workers briefed on changes 4 - All relevant permits and approvals obtained prior to commencement of work.	Management Supervision Work Team	1	1	L2

Task	Hazard	Probability	Consequence	Ranking	Control	Person Responsible	Probability	Consequence	Ranking
		Inherent Risk						Residual Risk	
Monitor		4	4	H8	1 - SWMS to be reviewed annually for effectiveness & application to site 2 - Compliance to the SWMS is monitored using a system of routine or random workplace inspections 3 - In the event that the work is not being carried out in accordance with the SWMS, all work will cease immediately. SWMS are reviewed to identify non-compliance and ensure the method in the SWMS is the most practical and safest way of doing the task. The SWMS is revised if another method is identified as being a safer option, before work resumes 4 - Feedback to be given by all staff and improvements to be included in revision of SWMS 5 - In the event of changes to SWMS, workers are briefed on changes and sign off on revised SWMS	Management Supervision Work Team	1	1	L2
Review		4	4	H8	SWMS are reviewed under the following circumstances: 1 - Following an incident 2 - If the SWMS is deemed impractical through consultation with workers 3 - If new hazards have been identified 4 - If the work method has changed including changes to the workplace, environment, a system of work, a process or a procedure 5 - On restarting the activity after a significant break 6 - At the request of a HSR 7 - Annually if none of the above	Management Supervision Work Team	1	1	L2



Sign Off

The representatives of Grant Transformers/Star Delta listed below have been involved in the creation and implementation of this Safe Work Method Statement (SWMS) and will make sure all work is carried out in accordance with this document. All workers listed below have the appropriate licence/qualifications and/or experience required to perform each job task:

Workers Name	Role	Signature	Date