

# SAFE WORK METHOD STATEMENT



national electrical and communications association

Removal of metering equipment SWMS					
Organisational Details	Company Name:			Approval Date:	Click or tap to enter a date.
	Company Address:			Next Review Date:	Click or tap to enter a date.
	Director / Manager Name:			Contact Number:	
	Type of SWMS:	Generic (multiple projects, jobs, or work requests) <input type="checkbox"/>	Site specific (complete section below) <input type="checkbox"/>		
Site Specific Details	Principle Contractor:	n/a <input type="checkbox"/>	Contact Number:	n/a <input type="checkbox"/>	
	Site Manager or Supervisor Name:	n/a <input type="checkbox"/>	Contact Number:	n/a <input type="checkbox"/>	
	Site Address:	n/a <input type="checkbox"/>	Contact Number of the PCBU's:	n/a <input type="checkbox"/>	
SWMS Details	What high risk work activities are covered by this SWMS?	Work on or near energised electrical installations or services			
	What is the scope of the works?	Scope of work includes the physical work of installing, maintaining, repairing, altering, removing, or adding to an electrical installation.			
	Who else was consulted/involved in preparing this SWMS?	Workers / employees <input type="checkbox"/>	Principle Contractor <input type="checkbox"/>	NECA <input type="checkbox"/>	
	Additional compliance measures:	Pre-start Hazard Risk Assessment <input type="checkbox"/>	Toolbox Talk <input type="checkbox"/>	Workplace Safety Inspection <input type="checkbox"/>	
Sign off	Person responsible for ensuring compliance with SWMS:			Responsible persons signature:	
	Contact Number:				
	Date:	Click or tap to enter a date.			

Purchase from  
safetyspecialists.com.au

The National Electrical and Communications Association, its employees, officers, and agents do not accept any liability for the results of any action taken or omission made in reliance upon, based on or in connection with this SWMS. To the extent legally possible, the National Electrical and Communications Association, its employees, officers, and agents refuse all liability arising by any breach of any duty in tort (including negligent misstatement) or as a result of any errors or omissions contained in this document or use of this document.

# SAFE WORK METHOD STATEMENT



national electrical and communications association

Training / Licencing Requirements		Personal Protective Equipment	
Construction industry general induction (White Card)	<input type="checkbox"/>	Senior First Aid Training	<input type="checkbox"/>
Working at Heights	<input type="checkbox"/>	Asbestos Awareness	<input type="checkbox"/>
Elevated Work Platform class SL	<input type="checkbox"/>	Elevated Work Platform class VL	<input type="checkbox"/>
Elevated Work Platform class BL	<input type="checkbox"/>	Elevated Work Platform licence class WP	<input type="checkbox"/>
Electrical trades Licence	<input checked="" type="checkbox"/>	Air Conditioning / Refrigeration Trade Licence	<input type="checkbox"/>
(Other):	<input type="checkbox"/>	(Other):	<input type="checkbox"/>
(Other):	<input type="checkbox"/>	(Other):	<input type="checkbox"/>
(Other):	<input type="checkbox"/>	(Other):	<input type="checkbox"/>
Arc Rated clothing HRC 1 (ATPV 4cal/cm <sup>2</sup> min)	<input type="checkbox"/>	Arc Rated clothing HRC 2 (ATPV 8cal/cm <sup>2</sup> min)	<input type="checkbox"/>
Arc Rated clothing HRC 4 (ATPV 40cal/cm <sup>2</sup> min)	<input type="checkbox"/>	Double insulated gloves	<input type="checkbox"/>
Low Voltage Rescue Kit	<input type="checkbox"/>	First Aid Kit	<input type="checkbox"/>
Insulated Mat	<input type="checkbox"/>	Lock Out Tag Out kit	<input type="checkbox"/>
Safety boots	<input type="checkbox"/>	Respiratory equipment	<input type="checkbox"/>
Safety Helmet	<input type="checkbox"/>	Barricading and signage	<input type="checkbox"/>
Communication equipment	<input type="checkbox"/>	Harness and other fall protection equipment	<input type="checkbox"/>
(Other):	<input type="checkbox"/>	(Other):	<input type="checkbox"/>
(Other):	<input type="checkbox"/>	(Other):	<input type="checkbox"/>

Purchase from safety specialists.com.au

# SAFE WORK METHOD STATEMENT



national electrical and communications association

<b>Chemicals</b>	PVC Cement	<input type="checkbox"/>	Diesel Fuel	<input type="checkbox"/>	Proton Fuel	<input type="checkbox"/>
	Silicone Spray	<input type="checkbox"/>	Multi-Purpose Grease	<input type="checkbox"/>	Silicone	<input type="checkbox"/>
	MAPP Gas / LPG	<input type="checkbox"/>	Oxygen / Acetylene	<input type="checkbox"/>	Multi-Use Lubricant Spray (VSD-40)	<input type="checkbox"/>
	Nitrogen	<input type="checkbox"/>	Refrigerants	<input type="checkbox"/>	(Other):	<input type="checkbox"/>

## Multi-Jurisdictional Reference Material

Jurisdictions	☑/☒	Safety Legislation	Regulator and Contact Number	Codes of Practice
<b>Harmised Jurisdictions</b>	<b>NSW</b>	☑ Act: Work Health and Safety Act 2017 (NSW) Regulation: Work Health and Safety Regulation 2017 (NSW)	Regulator: SafeWork NSW Number: 13 10 50	<p>Note: To have legal effect in a jurisdiction a model Code of Practice must be approved as a code of practice in that jurisdiction. To find if a model Code of Practice has been approved in a particular jurisdiction, check with the relevant work health and safety regulator.</p> <p>Model Codes of Practice:</p> <ul style="list-style-type: none"> <li>• Work health and safety consultation co-operation and co-ordination.</li> <li>• First Aid in the workplace</li> <li>• Managing risks of hazardous chemicals in the workplace</li> <li>• How to management and control asbestos in the workplace.</li> <li>• Managing electrical risks in the workplace. Managing the work environment and facilities.</li> <li>• How to manage work health and safety risks.</li> <li>• Managing risks of plant in the workplace.</li> </ul>
	<b>ACT</b>	☑ Act: Work Health and Safety Act 2011 (ACT) Regulation: Work Health and Safety Regulation 2011 (ACT)	Regulator: WorkSafe ACT Number: 13 12 81	
	<b>QLD</b>	☑ Act: Work Health and Safety Act 2011 (Qld) Regulation: Work Health and Safety Regulation 2011 (Qld)	Regulator: Workplace Health and Safety Queensland Number: 1300 369 915	
	<b>NT</b>	☑ Act: Work Health and Safety (National Uniform Legislation) Act 2011 (NT) Regulation: Work Health and Safety (National Uniform Legislation) Regulations (NT)	Regulator: NT WorkSafe Number: 1300 019 115	
	<b>SA</b>	☑ Act: Work Health and Safety Act 2012 (SA) Regulation: Work Health and Safety Regulations 2012 (SA)	Regulator: SafeWork SA Number: 1300 365 255	
	<b>TAS</b>	☑ Act: Work Health and Safety Act 2012 (Tas) Regulation: Work Health and Safety Regulation 2012 (Tas)	Regulator: WorkSafe Tasmania Number: 1300 366 322	
	<b>CTH</b>	☑ Act: Work Health and Safety Act 2011 (Cth) Regulation: Work Health and Safety Regulations 2011 (Cth)	Regulator: Comcare Number: 1300 366 979	
	<b>NZ</b>	☑ Act: Health and Safety at Work Act 2015 (NZ)	Regulator: WorkSafe New Zealand Number: 0800 030 040	
<b>VIC</b>	☑ Act: Occupational Health and Safety Act 2004 (Vic) Regulation: Occupational Health and Safety Regulations 2017 (Vic)	Regulator: WorkSafe Victoria Number: 1800 136 089	Preventing electric shocks to electricians.	
<b>WA</b>	☑ Act: Occupational Safety and Health Act 1984 (WA) Regulation: Occupational Safety and Health Regulations 1996 (WA)	Regulator: WorkSafe WA Number: 1300 307 877	Code of Practice for Persons working on or near energised electrical installations	
<b>Standards</b>	AS/NZS 3000:2018 (Wiring Rules), AS/NZS 4836:2011 (Safe working on Electrical Installations), AS/NZS 3012:2010 (Electrical Installations – Demolition & Construction Sites) NENS-09- "Guide to the selection, use and maintenance of PPE for electrical arc hazard", ISSC14- Guide to electrical workers' safety equipment. AS/NZS 4836:2011 Safe working on or near low-voltage electrical installations and equipment.			
<b>SWP</b>	NECA SWP-011 Electrical Isolation (Lockout Tagout) NECA SWP-035 Test for de-energised (DEAD)			

Document Reference Number: ASP2-B-O-A2-112  
 Document Name: Removal of Metering Equipment SWMS  
 NECA Version: 6 (2021)  
 Page: Page 3 of 9

The National Electrical and Communications Association, its employees, officers, and agents do not accept any liability for the results of any action taken or omission made in reliance upon, based on or in connection with this SWMS. To the extent legally possible, the National Electrical and Communications Association, its employees, officers, and agents refuse all liability arising by any breach of any duty in tort (including negligent misstatement) or as a result of any errors or omissions contained in this document or use of this document.

# SAFE WORK METHOD STATEMENT



national electrical and communications association

Hierarchy of Controls						Definitions				
						<b>Elimination</b>	This control measure involves eliminating or removing the risk in its entirety			
						<b>Substitution</b>	This form of control involves substituting a safer process or material for the hazardous process/material identified.			
						<b>Isolation</b>	This control involves separating the hazard or hazardous work practice from employee's other work areas. This may involve sectioning off the area by erecting barriers or by relocating either the hazardous work practice or the other employees and their work practices.			
						<b>Engineering</b>	This method of control involves designing and/or adding physical safety features to plant or equipment.			
						<b>Admin</b>	This type of control is most effective when used in conjunction with measures mentioned above or as an interim control whilst more effective control measures are developed and implemented.			
						<b>PPE</b>	PPE is not a particularly effective control method and should only be used: <ul style="list-style-type: none"> <li>• When all other control measures are impractical; or</li> <li>• In conjunction with other more effective, control measures.</li> </ul>			
Risk Level Matrix						Risk Analysis				
		Consequence					Likelihood		Consequence	
		1	2	3	4	5				
Likelihood	5	M	H	H	H	H	1	Rare	1	Insignificant
	4	M	M	M	H	H	2	Unlikely	2	Minor
	3	L	M	M	H	H	3	Moderate	3	Moderate
	2	L	L	M	M	H	4	Likely	4	Major
	1	L	L	L	M	M	5	Almost Certain	5	Catastrophic

Purchase from safetyspecialists.com.au

The National Electrical and Communications Association, its employees, officers, and agents do not accept any liability for the results of any action taken or omission made in reliance upon, based on or in connection with this SWMS. To the extent legally possible, the National Electrical and Communications Association, its employees, officers, and agents refuse all liability arising by any breach of any duty in tort (including negligent misstatement) or as a result of any errors or omissions contained in this document or use of this document.

# SAFE WORK METHOD STATEMENT

## Notes / Definitions

**On or near:** AS/NZS 4836:2011 (Safe working on Electrical Installations) defines 'on or near' as: A situation where an electrical worker is working on or near exposed energised conductors or live conductive parts and there is a reasonable possibility that the electrical worker's body, or any conducting medium the electrical worker may be carrying or touching during the course of the work, may come closer to the exposed energised conductors or live conductive parts than 500 mm. The term 'on or near exposed energised conductors or live conductive parts' does not apply if the uninsulated and energised part is safely and securely shielded by design or segregated and protected with barricades, or insulated shrouding or insulating material to prevent inadvertent or direct contact.

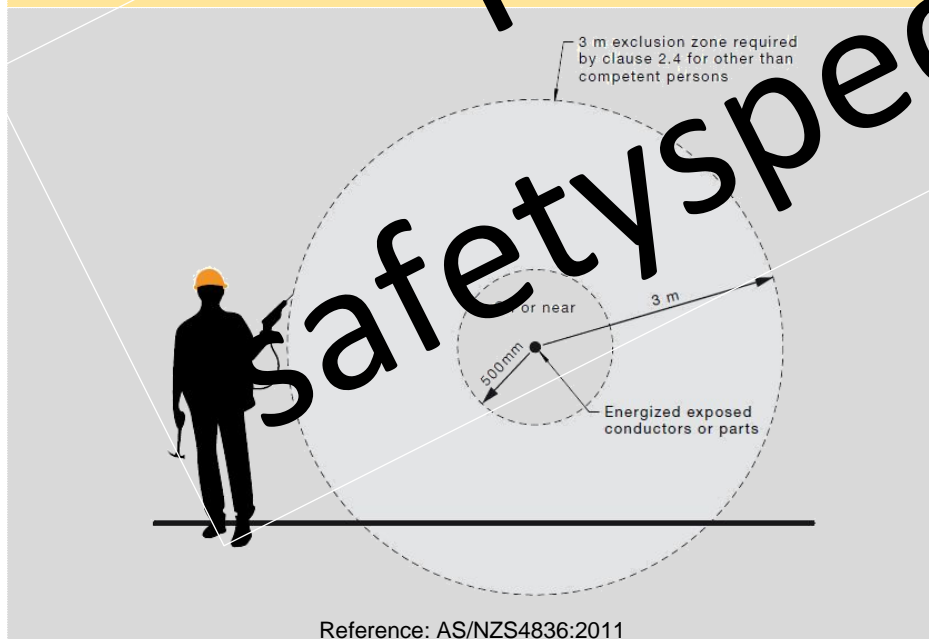
**Electrical work on energised electrical equipment—when permitted (NSW ACT, Qld, NT, SA, Tas & Cth):** Model WHS Regulation clause 15—A person conducting a business or undertaking must ensure that electrical work on energised electrical equipment is not carried out unless:

- it is necessary in the interests of health and safety that the electrical works carried out on the equipment while the equipment is energised, for example, it may be necessary that life-saving equipment remain energised and operating while electrical work is carried out on the equipment,
- it is necessary that the electrical equipment to be worked on is energised in order for the work to be carried out properly,
- it is necessary for the purposes of testing to ensure the equipment is de-energised,

there is no reasonable alternative means of carrying out the work.

Illustration of 500mm 'On or near' and 3m exclusion zone

Typical tags, personal red lock, and multi-lock device



# SAFE WORK METHOD STATEMENT



national electrical and communications association

## Safety Observer Notes

### NECA - Safety Observer

Where this SWMS, risk assessments, procedures, or legislative requirements determine that a safety observer is necessary for any work on or near exposed energised conductors or live conductive parts, then work shall not be undertaken without the presence of a Safety Observer.

- The triggers for the requirement of a Safety Observer are:
  1. *Work areas/sites of reduce mobility.*
  2. *Separation from earth cannot be maintained.*
  3. *Work on high fault level equipment and situations, where incident energy of above 5J/cm<sup>2</sup> (1.2cal/cm<sup>2</sup>) is possible.*
  4. *Existing wiring in aged and /or poor condition, poorly installed and 'messy' and generally non-compliant.*
  5. *Work on exposed energised conductors or live conductive parts.*
- The presence of a Safety Observer is one of the risk control measures to ensure electrical safety when electrical work on energised circuits and electrical equipment is being carried out.
- The Safety Observer shall:
  - a) be able to warn and, if necessary, stop the work before the risks become too high
  - b) not carry out any other work or function that compromises their role as a Safety Observer, i.e. the Safety Observer shall not observe more than one task at a time
  - c) be able to communicate quickly and effectively with the electrical workers performing the work.
  - d) be capable of helping in the case of emergency as well as being competent to perform electrical rescue and cardiopulmonary resuscitation as required. On an energised electrical installation, the safety observer shall be competent to perform their task and shall also be competent in electrical rescue and cardiopulmonary resuscitation (CPR).
  - e) be suitably attired in personal protective equipment appropriate to the situation.
  - f) not have any known temporary or permanent disabilities that would adversely affect their role and performance.

### Ausgrid – Safety Observer

The safety observer must be an electrically qualified, authorized person who knows the hazards and appropriate safety controls associated with the work.

The safety observer must have satisfactory completed initial or annual refresher training and assessment in the following national units of competence:

- provide first aid in an ESI environment (UETTDRRF10).
- release and rescue of a person from live apparatus as appropriate to the work being undertaken.
- g. rescuing a person from a pole (UETTDRRF02), EWP (UETTDRRF03), steel tower (UETTDRRF04), or low voltage panel (UETTDRRF06).
- provide cardiopulmonary resuscitation (HLTAID001)

### Ausgrid - Safety Observer exemption

You may work within 0.5m from live exposed low voltage mains and apparatus without a safety observer, or with a safety observer who is not electrically qualified, only if the following conditions are met:

- A documented risk assessment details the appropriate risk controls measures so the work can be carried out safely without an observer, or with an observer who is not electrically qualified, and
- Safe methods of working and documented procedures are approved for the work without a safety observer, or with an observer who is not electrically qualified, for example:
  - Approved operating work.
  - Carrying out the following testing (proving de-energised, verifying isolation, identifying neutral, proving polarity, measuring voltage or current, verifying correct phasing).
  - Emergency disconnection of overhead service cables (when working aloft below the lowest exposed low voltage conductor).
  - Visual inspection of mains and/or apparatus.

### Endeavour Energy - Observer / Safety Observer

Is a worker whose sole duty is to observe the work that is in progress and to ensure that work is carried out in accordance with approved procedures and these Rules. A safety observer may carry out the duties of a nominated rescuer if competent to do so. A nominated rescuer who during the last 12 months has:

- had training in emergency procedures; and
- demonstrated competency to carry out those procedures; and
- been instructed in the hazards of the work and the necessary precautions.

### Essential Energy - Safety Observer

A person deemed competent to observe the task and specifically assigned the duty of actively observing (see active observation) and warning against unsafe approach to live exposed conductors or other unsafe conditions (refer to CEOP2354 - Role of a Safety Observer).

# SAFE WORK METHOD STATEMENT



national electrical and communications association

#	Job Step / Process / Activity	Identify Hazards	Risk Level (R) and the Residual Rating (RR)				Identify Controls / Action Required	Person Responsible
			L	C	R	RR		
1	Undertake / confirm workplace risk assessment HRA (document record) and secure area.	<ul style="list-style-type: none"> <li>Site specific issues</li> <li>Worker safety</li> <li>Public access and unauthorised persons</li> </ul>	3				<ul style="list-style-type: none"> <li>Refer to:                             <ul style="list-style-type: none"> <li>'SUPP-B-MA-GT-100 General Trade Work SWMS'</li> <li>'SUPP-B-MA-AR-100 Site Assessment and Set Up SWMS'</li> </ul> </li> <li>Check test equipment and PPE.</li> <li>Consult with workers involved.</li> <li>Clear area and use appropriate barricades and signage.</li> <li>Observe 'Energised Work' policy.</li> </ul>	All Workers
2	Ensure correct paperwork for permission to connect metering.	<ul style="list-style-type: none"> <li>Unauthorised connection or disconnection of supply</li> </ul>	2	3	M	L	<ul style="list-style-type: none"> <li>Private treaty with owner/ property controller and tenant required for outage and permanent disconnection.</li> </ul>	Supervisor
3	Notify property controller, tenants of outage.	<ul style="list-style-type: none"> <li>Dangers created by sudden loss of supply</li> <li>Disconnection of life support customer supply</li> </ul>	2	3	M	L	<ul style="list-style-type: none"> <li>Contact Metering Provider if notification of outage is required and cannot be agreed by tenant, owner, property controller and installer. The Metering Provider can organise notice of an outage/ meter change, this requires a minimum of 4 days' notice to the customer.</li> <li>Advise all site personnel that might be affected by the power outage of work to be carried out.</li> <li>Have machinery and heavy loads shutdown for the period of outage, as appropriate.</li> </ul>	Supervisor
4	Install independent earth, more than 2m from earth metal objects including earth stake and waterpipes.	<ul style="list-style-type: none"> <li>Electric shock</li> <li>Damage to underground services</li> </ul>	2	4	M	L	<ul style="list-style-type: none"> <li>Use hand pressure only to push in temporary earth stake (no hammering).</li> <li>Wear appropriate PPE as identified in risk assessment.</li> </ul>	Electrician

Purchase from safetyspecialists.com.au

# SAFE WORK METHOD STATEMENT

5	Test to ensure metallic surround is not energised at switchboard.	<ul style="list-style-type: none"> <li>Electric shock</li> <li>Arc flash</li> </ul>	3	4	H	L	<ul style="list-style-type: none"> <li>Carry out correct test – refer to:                             <ul style="list-style-type: none"> <li>'SUPP-B-MA-E-100 Electrical Isolation SWMS'</li> <li>'SUPP-B-MA-E-101 Electrical Testing SWMS'</li> <li>'SUPP-B-MA-E-102 Verification Testing SWMS' and</li> <li>'ASP2-B-MA-A2-101 Prove De-energised'.</li> </ul> </li> <li>Test from independent earth to metallic switchboard surround and customer's earth.</li> <li>Conduct test appropriately using CatIV voltmeter.</li> <li>Prove meter operation prior to use and after zero result.</li> <li>Stand on insulated mat.</li> <li>Wear appropriate PPE as identified in risk assessment including eye protection and wearing rated and tested insulating gloves and leather outer gloves.</li> <li>Ensure rescue kit is ready for immediate access and safety observer/rescuer is present and focused.</li> </ul>	Electrician/ Safety Observer
6	Identify metering equipment to be removed.	<ul style="list-style-type: none"> <li>Removal of incorrect meter</li> </ul>	3		M	L	<ul style="list-style-type: none"> <li>Check meter number against work order.</li> </ul>	Electrician
7	Identify if switchboard material contains asbestos.	<ul style="list-style-type: none"> <li>Disturbing Asbestos Containing Material (ACM)</li> <li>Exposure to loose asbestos fibre.</li> </ul>	5	4	H	M	<ul style="list-style-type: none"> <li>Where asbestos is identified – follow Asbestos Management Plan and refer to:                             <ul style="list-style-type: none"> <li>'ASP2-B-MA-A2-113 - Installation of metering equipment on ACM Meter panels SWMS'</li> </ul> </li> </ul>	All Workers
8	Take meter reading prior to disconnecting.	<ul style="list-style-type: none"> <li>Loss of usage data</li> </ul>	3	2	L		<ul style="list-style-type: none"> <li>Read and record meter usage data prior to de-energising.</li> </ul>	All Workers
9	Test polarity of installation at Meter and main switch (use an independent earth).	<ul style="list-style-type: none"> <li>Electric shock</li> <li>Arc flash</li> </ul>	3	4	H	L	<ul style="list-style-type: none"> <li>Confirm correct voltage; test from independent earth to each active and neutral, test from actives to neutral, test between actives (3 points for single phase or 10 points for three phase).</li> <li>Conduct test appropriately using CatIV voltmeter.</li> <li>Prove meter operation prior to use and after zero result.</li> <li>Stand on insulated mat.</li> <li>Wear appropriate PPE as identified in risk assessment including eye protection and wearing rated and tested insulating gloves and leather outer gloves.</li> <li>Ensure rescue kit is ready for immediate access and safety observer/rescuer is present and focused.</li> </ul>	Electrician/ Safety Observer



