

## Working Near Exposed Live Wiring Risk Assessment

Business Name:		ABN:	
Business Address:			
Contact Person:	Phone:	Email:	

### THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THIS PROJECT

Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.

Full Name:		
Signature:	Title:	Date:

### CLIENT OR PRINCIPAL CONTRACTOR DETAILS

Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date Risk Assessment supplied to Project Manager:	

RISK MATRIX									
LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION	HIERARCHY OF CONTROLS	
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			<b>Elimination</b> Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	<b>Substitution</b> Replace the hazard.	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts.	Isolation Isolate People from the hazard	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.	<b>Engineering</b> Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	<b>Administrative</b> Change	
								<b>PPE</b>	

### Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. Eliminate the hazard or redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or higher-level authorisation is required.
3H	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
1L	Proceed, following standard operating procedures. Monitor and keep records.

### Consequence Scale:

Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
Catastrophic	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
Major	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
Moderate	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
Minor	First-aid only, no lost time	negligible delay	Isolated non-conformance
Insignificant	No injury	no schedule impact	Deviation caught and corrected on site

### Notes on Hierarchy of Controls:

Remember to apply controls in the preferred order shown by the coloured pyramid:

- Eliminate**
- Substitute
- Isolate
- Engineering
- Administrative
- PPE

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

*aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.*

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
1. Preparation	Inadequate training, Poor planning	3H	<ul style="list-style-type: none"> <li>- Ensure all workers are adequately trained in electrical safety</li> <li>- Develop a detailed work plan with hazard identification and risk control</li> <li>- Provision of personal protective equipment (PPE) suitable for electrical work</li> <li>- Conduct a site induction focusing on electrical risks</li> <li>- Verify appropriate licensing and qualifications of all personnel</li> <li>- Review electrical plans and blueprints prior to commencement</li> <li>- Confirm availability of first aid and emergency procedures</li> <li>- Schedule work to avoid live wiring where possible</li> <li>- Ensure availability of phase separation barriers</li> <li>- Review and ensure access to current electrical standards</li> </ul>	2M
2. Site Inspection	Slips and trips, Unknown electrical sources	3H	<ul style="list-style-type: none"> <li>- Conduct a walk-through to identify potential tripping hazards</li> <li>- Highlight and demarcate live wires clearly</li> <li>- Use signage to warn of high-risk areas</li> <li>- Verify all electrical equipment is in good condition</li> <li>- Ensure non-conductive materials are used around live areas</li> <li>- Plan for clear egress paths</li> <li>- Confirm drip loops are installed on wires</li> <li>- Use bright visibility barriers around hazards</li> <li>- Ensure ventilation is checked to avoid overheating</li> <li>- Inspect all wiring for wear and tear</li> </ul>	2M
3. Electrical Isolation	Unisolated conductors, Unintentional power sources	4A	<ul style="list-style-type: none"> <li>- Follow lockout/tagout procedures to secure power</li> <li>- Use voltage testers to confirm de-energized state</li> <li>- Identify and isolate all sources including renewables</li> <li>- Instruct workers to use non-conductive tools</li> <li>- Ensure supervision during isolation tasks</li> <li>- Implement remote shutdown where possible</li> <li>- Verify isolation with a second worker in attendance</li> <li>- Use pre-approved isolation checklists</li> </ul>	2M

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			<ul style="list-style-type: none"> <li>- Affix lockout devices clearly marked with worker ID</li> <li>- Record isolation time and date for auditing</li> </ul>	
4. Live Work Requirement Assessment	Fault currents, Electric arc	4A	<ul style="list-style-type: none"> <li>- Perform a visual inspection of the equipment to ensure it is in good working order.</li> <li>- Verify that all safety barriers and guards are in place and functioning.</li> <li>- Ensure that all workers are properly trained and qualified for the task.</li> <li>- Implement a strict lockout/tagout procedure to prevent accidental energization.</li> <li>- Use appropriate personal protective equipment (PPE) such as arc flash suits, gloves, and face shields.</li> <li>- Establish a safe work area and restrict access to authorized personnel only.</li> <li>- Perform a risk assessment before starting the work and update it as needed.</li> <li>- Have a rescue plan in place in case of an emergency.</li> <li>- Communicate clearly with all team members throughout the process.</li> <li>- Stop work immediately if any unsafe conditions are identified.</li> </ul>	2M
5. Tool and Equipment Check	Faulty tools, Unusable equipment	3H	<ul style="list-style-type: none"> <li>- Inspect all tools and equipment before use to ensure they are in good working order.</li> <li>- Replace or repair any damaged or faulty tools immediately.</li> <li>- Use only approved and certified equipment for the task.</li> <li>- Ensure that all equipment is properly maintained and calibrated.</li> <li>- Store tools and equipment in a safe and organized manner.</li> <li>- Report any issues with tools or equipment to the supervisor.</li> <li>- Do not use tools or equipment if you are unsure of their safety or functionality.</li> <li>- Keep work areas clean and free of clutter to prevent tripping hazards.</li> <li>- Follow all safety protocols and procedures for using tools and equipment.</li> <li>- Regularly inspect and maintain all equipment to prevent failures.</li> </ul>	1L
6. Work Area Setup	Obstructed pathways, Insufficient lighting	3H	<ul style="list-style-type: none"> <li>- Clear all pathways and work areas of any obstructions.</li> <li>- Ensure that the work area is well-lit and that all workers have adequate visibility.</li> <li>- Mark off the work area with caution tape or barriers.</li> <li>- Post warning signs to alert others of the work area.</li> <li>- Use proper signage and lighting to guide traffic flow.</li> <li>- Keep emergency exits clear and unobstructed.</li> <li>- Maintain a clean and organized work environment.</li> <li>- Regularly inspect the work area for potential hazards.</li> <li>- Adjust lighting as needed to ensure optimal visibility.</li> <li>- Establish a clear communication system for workers in the area.</li> </ul>	1L

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7. Pre-Task Hazard Analysis	Changing conditions, Workers unaware of new risks	3H		2M
8. Working in Confined Spaces	Oxygen deficiency, Shock	4A		2M
9. Task Execution	Human error, Mechanical failure	4A		2M

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10. Post-Task Review	Undiscovered latent faults, Equipment left unsecured	3H		1L
11. Final De-Brief and Reporting	Poor communication, Incomplete incident documentation	3H		1L
12. Dismantle and Clean-up	Injury due to debris, Return of unauthorised personnel	3H		2M

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13. Retrieval of Lockout/Tagout Devices	Re-energising faults, Improper notification	4A		2M
14. Restoration of Power	Unexpected power restorations, Equipment failure on start	4A		2M
15. Post-Restoration Monitoring	System instability, Delayed response to faults	3H		1L

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			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
16. Incident Investigation	Lack of transparency, Delayed reporting	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	1L
17. Continuous Improvement	Complacent culture, Lack of feedback utilization	3H	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	1L



## EMERGENCY RESPONSE – CALL 000 FOR EMERGENCIES

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

## LEGISLATIVE REFERENCES

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES IF ANY STATE THAT ARE NOT APPLICABLE

### Queensland & Australian Capital Territory

Work Health and Safety Act 2011

Work Health and Safety Regulations 2011

Legislation QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws>

Codes of Practice QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice>

Legislation ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations>

Codes of Practice ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice>

### Victoria

Occupational Health and Safety Act 2004

Occupational Health and Safety Regulations 2017

Legislation VIC: <https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations>

Codes of Practice VIC: <https://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice>

### New South Wales

Work Health and Safety Act 2011

Work Health and Safety Regulations 2017

Legislation NSW: <https://www.safework.nsw.gov.au/legal-obligations/legislation>

Codes of Practice NSW: <https://www.safework.nsw.gov.au/resource-library/list-codes-of-practice>

### Western Australia

Work Health and Safety Act 2020

Work Health and Safety Regulations 2022

Legislation Western Australia: <https://www.commerce.wa.gov.au/worksafe/legislation>

Codes of Practice WA: <https://www.commerce.wa.gov.au/worksafe/codes-practice>

### Northern Territory

Work Health and Safety (National Uniform Legislation) Act 2011

Work Health and Safety (National Uniform Legislation) Regulations 2011

Legislation NT: <https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws>

Codes of Practice NT: <https://worksafe.nt.gov.au/laws-and-compliance/codes-of-practice>

### Safe Work Australia Links

Law and Regulation (All States): <https://www.safeworkaustralia.gov.au/law-and-regulation>

Model Codes of Practice: <https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice>

### Model Codes of Practice

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work

### South Australia

Work Health and Safety Act 2012 (SA)

Work Health and Safety Regulations 2012 (SA)

Legislation for SA: <https://www.safework.sa.gov.au/resources/legislation>

Codes of Practice for SA: <https://www.safework.sa.gov.au/workplaces/codes-of-practice#COPs>

### Tasmania

Work Health and Safety Act 2012

Work Health and Safety (Transitional and Consequential Provisions) Act 2012

Work Health and Safety Regulations 2012

Work Health and Safety (Transitional) Regulations 2012

Legislation for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations>

Codes of Practice for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice>

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.