

ELECTRICAL SAFETY AUTHORISATIONS

Authorisations Manual

Electrical Safety & Performance

October 2017



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1.0 INTRODUCTION

1.1 Purpose

This manual has been developed for workers and their managers to outline the purpose of authorisation functions, detail the various authorisation functions requirements for work on or near the network, the process of becoming authorised and the requirements to access the network.

Note: This document is designed to be viewed on an electronic device to enable enlarging of small print and accessing of hyperlinks throughout the text.

1.1.1 Work 'on or near'

Only persons authorised or under the direct supervision of an authorised person may work on or near Endeavour Energy's network.

Ordinary Person Clearance

A person without sufficient training or experience to enable them to avoid the dangers which electrical apparatus may create must maintain 3 metres up to 132kV or within a substation access control point

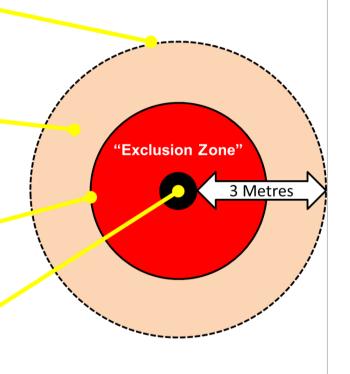
Working Near

A situation where there is a reasonable possibility of a person, either directly or through any conducting medium, coming within the relevant safe approach distances

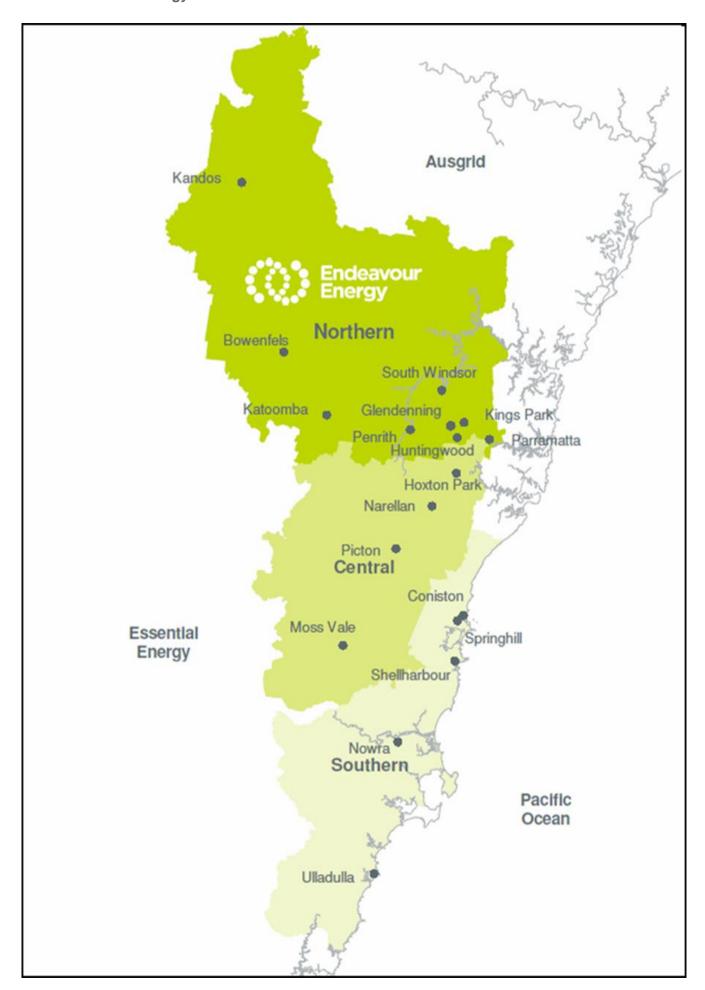
Safe Approach Distance (Working On)

Persons shall not allow any portion of their bodies or any object which they are in contact with (except when using approved equipment for testing, operating or working on live electrical apparatus) to come within the safe approach distances of live exposed electrical apparatus

Conductor or Apparatus (Working On)



1.1.2 Endeavour Energy Franchise Area



1.2 Safety management

Authorisation functions are developed as part of an overall safety management system. They provide assurance that individuals working on or near the network have the necessary knowledge and skills to perform particular tasks (or functions) safely.

The authorisations framework incorporates various functions that define the competency requirements for performing tasks on or near the network. These are broken into categorised profiles such as switching, permit recipients, substation access requirements and trade-based role outcomes, etc.

The authorisations framework additionally contains specific functions deemed as having a significant impact on network integrity, high risk tasks or requiring a high level of ongoing competency management.

The competency requirements are designed to provide assurance for the ability of an individual to adequately identify, assess and control electrical safety hazards. They do not, however, provide assurance of the quality of work outcomes.

The authorisations framework is designed to assist the understanding of the competency requirements required for various tasks. It does not substitute the necessary oversight managers must have over their workers when working on or near Endeavour Energy's network.





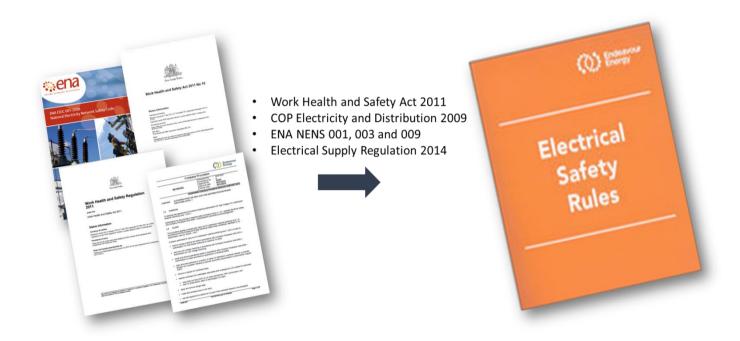
1.3 Electrical Safety Rules

Authorisation functions are developed in accordance with the Endeavour Energy Electrical Safety Rules as detailed within *Company Procedure GAM 0089 Authorisations Governance and Management.*

Endeavour Energy establishes and maintains Electrical Safety Rules (ESR) that form part of its Electricity Network Safety Management System, produced to meet the requirements of the *Electricity Supply (Safety and Network Management) Regulation 2014.*

These rules provide the minimum safe working practices for persons, when working or testing on or near electrical apparatus associated with the distribution of electricity.

It is the responsibility of the authorised persons working on or near the network to ensure that they understand and apply the requirements of the ESRs.



- Endeavour Energy Electrical Safety Rules July 2016
- Endeavour Energy Electrical Safety Rules associated procedures

If you have an enquiry about electrical safety, please contact: electrical.safety@endeavourenergy.com.au



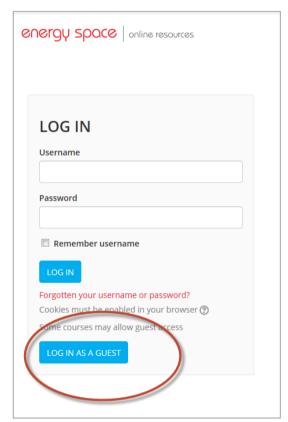
1.4 Mandatory asbestos awareness training

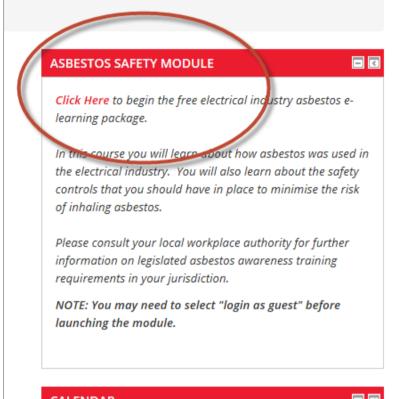
All authorisations where asbestos containing material is likely to be encountered require the worker to undertake a basic asbestos safety introduction e-learning module.

This module is free and will take between 20-30 minutes to complete. Applicants will need to print a copy of the completed certificate to submit with their authorisation application.

For the free asbestos awareness e-learning module, please visit: https://lms.energyspace.com.au/mod/scorm/view.php?id=155353

Please log in as a guest and follow the instructions below:





2.0 PRINCIPLES OF AUTHORISATION

2.1 Competency

Each authorisation function has a series of competency requirements that must be satisfied. The specific competency or suite of competencies required for authorisation functions is explained further within Schedules 1-11.

Competency essentially means the consistent transfer and application of knowledge and skill to the standard of performance ability required in the workplace. Competency may be demonstrated by successful completion of theoretical and/or practical assessment of skills as nominated in the relevant procedure. Contributing factors that supplement technical competence include professional and personal attributes which should be viewed holistically in terms of competence rather than in isolation.



Competency recognition may be applicable for any authorisation function subject to the specifications, review and endorsement of the Manager Electrical Safety & Performance. Such recognition must be determined through either recognition of current competency (RCC) and/or recognition of prior learning (RPL).

RCC and RPL assessments may be a formal competency assessment undertaken by a Registered Training Organisation (RTO) to align with national units of competency, or alternatively for non-formal training outcomes, an assessment to determine the alignment of current competency with specified learning outcomes.

The Manager Electrical Safety & Performance will specify and review training courses and competency outcomes required to provide the required competencies for each individual authorisation.



2.2 Line manager support of competency

It is a requirement under NSW Work Health and Safety obligations that a person is competent to perform the tasks they are employed to undertake. Endeavour Energy's electrical safety authorisation framework provides a competency management process for workers to enable specific tasks relating to work on the network to be carried out.

It is the line manager's responsibility to satisfy themselves that the worker has received appropriate training and is competent to hold an authorisation function initially, and has also maintained the necessary competency each year when the authorisation is renewed.

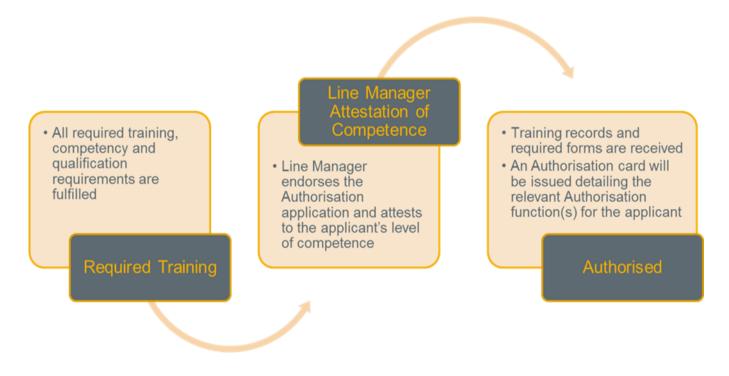
There are a range of requirements specified for each authorisation function. These generally include a qualification, certain specialised initial training courses, and a range of refresher training that needs to be completed each year.

In addition to training, managers must also attest to the competency of workers to carry out various tasks. Specifically, managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks of significant complexity on the network (relevant to the specific functions to be held) in order to maintain knowledge and/or skills in order to adequately identify, assess and control electrical safety hazards.

There are various ways that a manager may satisfy themselves that their staff have maintained competency such as (but not limited to):

- having a comprehensive oversight over work schedules/programs
- regular workplace and onsite interactions
- documenting safety toolbox talks, collating workplace forms and other documented evidence
- independent 3rd party references from a previous employer/supervisor
- verification of competency assessments (VOC)

This is a three stage process where an individual completes all necessary required training in addition to holding any required qualification(s), the individual's line manager attests to the competence of the individual, and finally, submits the necessary documentation for the authorisation to be issued.



3.0 TRAINING REQUIREMENTS

3.1 Endeavour Energy Technical Training Delivery

Endeavour Energy is a registered training organisation (RTO) that offers qualifications and national unit of competency outcomes such as Cardiopulmonary Resuscitation (CPR), Low Voltage Rescue, First Aid and various rescue training that is required for authorisation. These annual refresher units that are necessary for authorisation are offered by Endeavour Energy to external candidates for a fee.

Endeavour Energy also provides specialist training courses, these courses incorporate areas where organisational context is required at a high level and particular subject matter expertise is required. It should be noted that these training courses cannot be delivered by any other provider and are offered by Endeavour Energy free of charge. The training courses offered exclusively by Endeavour Energy's Technical Training Delivery Branch include the following:

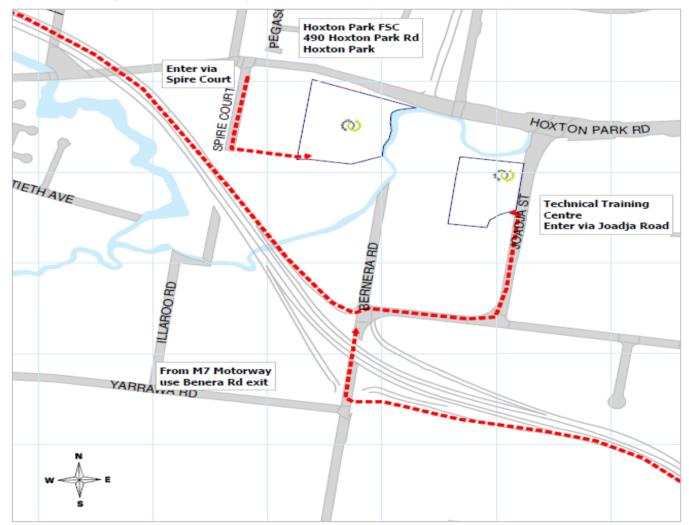
- Initial Electrical Safety Rules training
- Substation entry training
- Access Authority training
- LV and HV switching training

Contact:

Email: technical.training@endeavourenergy.com.au

Phone: 9853 7522

Endeavour Energy Technical Training Delivery is located at 109 Joadja Road Prestons 2171 NSW.





3.2 External Registered Training Organisations (RTOs)

Within Schedules 1-11 shown further in this document, certain authorisation functions require national unit of competencies in order to gain the necessary training for authorisation such as CPR, Low Voltage Rescue, First Aid, etc.

This training is more general in nature and in most cases national standards of training are available such as a recognised qualification or unit of competency outcome. There are a range of RTOs that can offer qualifications and national unit of competency outcomes that are required for authorisation.

These units of competency and a list of available training providers can be found at http://training.gov.au/. This training largely relates to rescue and resuscitation type requirements within the electricity supply industry under the 'UET12 - Transmission, Distribution and Rail Sector Training Package' - http://training.gov.au/Training/Details/UET12

3.3 Endeavour Energy Accredited Registered Training Organisations (RTOs)

Endeavour Energy facilitates an arrangement where external training providers are accredited to deliver training as a third party provider to employees of contracted companies (external) to work on or near the company's network.

Specific training is managed through this process where a heavy reliance of industry subject matter expertise is required however; there are no national units of competency available.

At present, Endeavour Energy has non-exclusive arrangements with:

- vegetation management/arboriculture specialists in order to deliver Close Approach Vegetation Control (CAVC) training and assessment
- civil specialists to undertake verification of competency (VoC) assessments on personnel operating powered excavation plant/equipment
- RTOs with capability and experience in the electricity supply industry to deliver ESR refresher training to Accredited Service Providers (Initial ESR may only be delivered by Endeavour Energy)





RTO name		ESR Refresher	CAVC	Excavation VOC
Coates / Admire Workplace Safety www.coateshire.com.au/training/ (02) 9612 0200 http://admireworkplacesafety.com.au/ (02) 4869 5663	Admire Workplace Safety Coateshire	Accredited to deliver		
IAC 1300 887 317 www.iacsafetyservices.com.au/	SAFETY SERVICES*	Accredited to deliver		Accredited to deliver
Pipeline Training Australia (02) 9679 0066 www.pipelinetraining.com.au/	TRAINING AUSTRALIA	Accredited to deliver		Accredited to deliver
TAFE – Hunter Institute 131225 www.hunter.tafensw.edu.au/pages/default _aspx	HUNTER TAFE§	Accredited to deliver		
TAFE – (SWSI) (02) 9643 4500 https://swsi.tafensw.edu.au/	TAFE SWSi South Western Sydney Institute	Accredited to deliver		
Enersafe Training (02) 8602 2000 https://www.enersafe.com.au/	ENERSAFE	Accredited to deliver		
Ausgrid Training Services (02) 8745 1555 www.ausgrid.com.au	Ausgrid	Accredited to deliver		
NECA Training (02) 9188 4424 http://neca.asn.au/nsw/content/training-5	neca	Accredited to deliver		
Essential Energy Training Services 13 23 91 www.essentialenergy.com.au	essential energy	Accredited to deliver		
Power Safety Training (formerly Workspace Training) (07) 3288 8800 www.powersafetytraining.com.au	Post Power Safety Training	Accredited to deliver	Accredited to deliver	
Interlink Training 1300 731 669 www.interlinktraining.com.au	InterLink Training Professional Training Columbia		Accredited to deliver	



4.0 REQUIREMENTS FOR SUPERVISION

4.1 General

A person who is not authorised to undertake a particular task must only undertake that task where they are under the appropriate level of supervision (as determined by risk assessment) of a person who is authorised to carry out the function.

This supervision is to be such that the non-authorised person remains under the appropriate level of supervision of the authorised person for the duration of the task requiring authorisation. Numbers to be supervised must be manageable.

The level and pattern of control exercised over a person who does not hold the required authorisation must be identified through risk assessment, and can be classified under the following:

- <u>direct supervision</u> this includes dedicated oversight of all activities performed whilst conducting direct supervision with the supervising worker remaining in direct visual and audible contact at all times
- <u>general supervision</u> a situation in which the supervising worker is not constantly reviewing the un-authorised worker but remains in frequent face-to-face contact during the task/s to confirm that they are working within the requirements of the ESRs. The supervising worker must be contactable for assistance or instruction. Required in all cases where the person being supervised is not authorised to work on or near Endeavour Energy's network.
- <u>broad supervision</u> broad supervision is only suitable for workers who have previously demonstrated an ability to conduct autonomous work. In this situation, the supervising worker need only make occasional face-to-face contact but should continue to provide instruction.



General Information on apprentice supervision: NSW Department of Industry Supervising your apprentice or trainee



5.0 ACCESSING THE NETWORK

5.1 **Network Access Card**

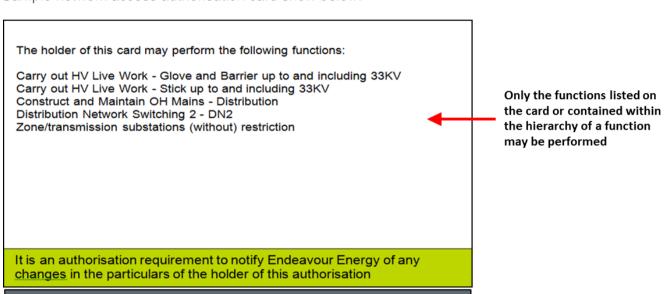
In order to provide evidence of appropriate authorisation, a network access authorisation card must be issued listing the specific functions a person is authorised to carry out.

The functions will be listed on the back of the card (a complete list of authorisation functions is shown further in this document).

Authorisation functions exist within a hierarchy. In some cases, higher level authorisations provide authorisation to carry out other functions. It should be noted that if a higher level authorisation is held, the lesser level authorisation functions will not be listed on the card.

An overview of the authorisation hierarchy is shown further in this document.

Sample network access authorisation card show below:



Network Access Authorisation



This card certifies that John Smith

is authorised to carry out the functions listed on the reverse associated with work under the Electrical Safety Rules on or near the Endeavour Energy electricity network while employed by Endeavour Energy.

Ty Christopher General Manager Asset Management

Anniversary: 18/03/2018



Authorised persons must provide their date of birth, passport quality recent photo of themselves (jpg format) and their legal first and last name.



6.0 AUTHORISATION FUNCTIONS

6.1 **Authorisation hierarchy**

Authorisation functions exist in a hierarchical order where more advanced level authorisations include the ability to carry out the work of the authorisation functions below it.

Further information can be found within the scope statements in the schedule documents (7.4 - 7.14)

Example 1:

A Distribution Network Switcher 3 - DN3 will only have 'Switch DN3' displayed on the authorisation card however; is able to carry out the following additional functions without them specifically being displayed on the card:

- Hold Low Voltage Access Authority (LVAA)
- Hold Access Authority for Work (AAW)
- Install and Remove Working Earths
- Install and Remove Operational Earths
- Switch DN1(OH)
- Switch DN1(UG)
- Switch DN2



Example 2:



A person authorised to Construct and Maintain UG Mains - Distribution will only have 'Construct and Maintain UG Mains – Distribution' however; is also able to carry out the following additional functions without them specifically being displayed on the card:

- Disconnect and Reconnect Class 2A
- Work on Underground Service Conductors - Class 2B

Example 3:

A person authorised to Construct and Maintain OH Mains - Transmission Towers will only have 'Construct and Maintain OH Mains - Transmission Towers' however; is also able to carry out the following additional functions without them specifically being displayed on the card:

- Disconnect and Reconnect Class 2A
- Work on Overhead Service Conductors -Class 2C
- Construct and Maintain OH Mains -Distribution
- Construct and Maintain OH Mains -Transmission





Schedule 1 - Permit Recipient and Earthing Authorisations



This schedule applies to persons required to hold an electrical permit and/or apply earthing and short circuiting equipment.

- Permits (known as Access Authorities) provide an administrative protocol for electrical apparatus to be isolated and enable work to be carried out on deenergised apparatus. Generally speaking, worksite coordinators/supervisory personnel hold these authorisation functions.
- Earthing is an integral step in providing safe access to deenergised HV apparatus under an Access Authority. This is a fundamental component of establishing permit requirements for worksite safety and is an activity that is carried out under the direction of authorised switching officers in order to assist the switching process.

Further detail in section 6.4

- Hold Low Voltage Access Authority (LVAA)
- Hold Access Authority for Work (AAW) Personal Issue
- Hold Access Authority for Work (AAW)
- Hold Access Authority for Test (AAT)
- Cancel and Reissue Access Authorities
- Install and Remove Working Earths
- Install and Remove Operational Earths

Schedule 2 - Distribution Switching Authorisations

This schedule applies to persons carrying out switching activities on the distribution network (up to and including 22kV) including overhead conductors and underground cables.

These authorisation functions require a high level of technical competence, knowledge of network configurations and understanding of various switchgear operations.

Authorised switchers are responsible for issuing Access Authorities to work parties and establishing safe worksite conditions to access de-energised apparatus.

Further detail in section 6.5



- Low Voltage Network Switching
- Distribution Network Switching Level 1 (OH) DN1 (OH)
- Distribution Network Switching Level 1 (UG) DN1 (UG)
- Distribution Network Switching Level 2 DN2
- Distribution Network Switching Level 3 DN3



Schedule 3 - Transmission Switching Authorisations



This schedule applies to persons carrying out switching activities on the transmission network (up to and including 132kV).

Similar to distribution switching activities, these authorisation functions require the same high level of technical competence, knowledge of network configurations and understanding of various switchgear operations on a more complex scope at much higher voltages.

Authorised switchers are responsible for issuing Access Authorities to work parties and establishing safe worksite conditions to access de-energised apparatus.

Further detail in section 6.6

- Protection Mandatory Isolations (PMI)
- Transmission Mains Switching TM
- Transmission Substation Switching (Limited up to 22kV) TS1A
- Transmission Substation Switching (Limited up to 132kV) TS2A
- Transmission Substation Switching (Unrestricted up to 22kV) TS1
- Transmission Substation Switching (Unrestricted up to 132kV) TS2

Schedule 4 – System Operator Authorisation

This schedule applies to persons required to operate Endeavour Energy's network using Supervisory Control and Data Acquisition (SCADA) and associated computerised equipment systems.

System Operators oversee all network activity in order to manage system safety, reliability and security.

Further detail in section 6.7

System Operators (Control Room)

Schedule 5 - Substation Entry Authorisations

This schedule applies to the requirements to access/enter electrical substations.

These authorisation functions detail the requirements for entry into an electrical station in addition to the competencies/attributes for supervising others within an electrical station.

Workers seeking authorisation with the ability to supervise others within an electrical station must be able to demonstrate sufficient supervisory and risk identification experience, training, or a combination of both.





- Access distribution substations (including low voltage ancillary equipment)
- Access to zone/transmission substations personal entry only
- Access to zone/transmission substations Supervise non-invasive work
- Access to zone/transmission substations (without restriction)



Schedule 6 - Vegetation Management Authorisations



This schedule applies to the requirements for various techniques in managing vegetation near powerlines.

As part of a carefully managed twelve month cycle, we employ the services of trained horticulturalists, arborists and tree trimmers so we can continue to deliver a safe and reliable electricity supply.

Included in the schedule are a range of supporting activities that assist the overall vegetation management function and the relevant competencies required for this high risk work environment.

Further detail in section 6.9

- **Chipper Operator**
- Vegetation Controller Scoper/Auditor
- Ground Machinery Operator/Observer
- Vegetation Control Specialised Machinery Operator/Observer
- Vegetation Control Ground Vegetation Control
- Vegetation Control EWP Operator/Observer
- Vegetation Control Within tree (climbing)
- Close Approach Vegetation Control Ground Vegetation Control
- Close Approach Vegetation Control EWP Operator/Observer
- Carry out Tree Management Activities

Schedule 7 – Overhead Line and Ground Line Inspection Authorisations

This schedule applies to the requirements for carrying out inspections of network assets and identifying defective equipment. These authorisations require careful analysis of asset condition in addition to the consideration of the surrounding environmental factors that may impact reliability and performance.

Whilst the majority of inspection techniques are limited to visual inspection, some invasive techniques such as drilling are employed to determine the internal structural integrity of timber pole.

Groundline inspectors may also carry out preservative chemical treatments to timber poles requiring comprehensive knowledge of safe chemical handling procedures.

Further detail in section 6.10



- Carry out Desktop Overhead Line Inspection (Carry Out OLI)
- Carry out Overhead Line Inspection (Carry Out OLI)
- Carry out Overhead Line Inspection and Ground Line Inspection (Carry Out OLI/GLI)
- Carry out Pole-top (EWP) Inspections of Wood Poles



Schedule 8 - Service and Metering Authorisations



This schedule applies to the requirements for carrying out low voltage service and metering work including the testing, installation and maintenance of service conductors and associated equipment.

The authorisation functions range from work on overhead and/or underground service conductors in addition to the installation of metering equipment in low voltage switchboards.

Note: the ability to perform service and metering work is also included within the relevant trade based functions detailed in Schedule 10.

Further detail in section 6.11

- Carry out Trade Assistance (Non-Electrically Qualified) Class 2X
- Disconnect and Reconnect Class 2A
- Work on underground service conductors Class 2B
- Work on overhead service conductors Class 2C
- Install Type 5 and 6 metering Class 2D

Schedule 9 - Plant and Equipment Authorisations

This schedule applies to the requirements for operating and/or observing plant and equipment near overhead powerlines and underground cables.

- Operate/Observe plant near overhead powerlines details the competency requirements for safe work practices with observers for close approach activities using plant within 3 metres of powerlines.
- Observe excavation work near the network details the requirements for the identification and locating of underground services through site inspections and interpretation of relevant plans/drawings.
- Carry out excavation work combines the observe excavation requirements in addition to verification of competency that a person carrying out excavation work near underground services can operate plant safely and maintain control over the movement of powered excavation equipment.

Note: Some trade based authorisation functions listed in Schedule 10 may include the ability to operate/observe plant near overhead powerlines and/or observe excavation work near the network.

Further detail in section 6.12



- Operate or Observe Plant Near Overhead Electrical Apparatus
- Observe Excavation Work Near the Network
- Carry Out Excavation Work Near the Network



Schedule 10 - Trade Based Authorisations



This schedule serves as a competency profile for electrical tradespeople carrying out a range of specialist tasks or trade based functions on the network. There are seven streams within this schedule with similar trade groupings in order to provide adequate quidance on competency requirements and scope specifications.

The streams include:

- non-trade qualified (assistant type roles)
- electrical testing and inspection (limited scope for qualified personnel carrying out minor nonconstruction type activities)
- communications technicians (non-electrical network activities limited to work for the purpose of communications equipment only)
- transmission technologists (work on primary and secondary network activities)
- distribution substation activities (workers constructing and maintaining distribution substations, switchgear and associated equipment)
- linework (installation, maintenance and inspection poles, structures and associated hardware used on poles and structures)
- cable jointing (laying, installation and maintenance of underground cables and the installation and maintenance of electrical equipment)

Further detail in section 6.13

Note: The trade based functions listed may include limited energised low voltage connection work however; do not include energised overhead linework practices detailed in Schedule 11. Further information in the specific scope requirements in the schedules.

- Carry out trade assistance functions (Ground)
- Carry out trade assistance functions (Overhead)
- Carry out electrical testing and inspection (Ground)
- Carry out electrical testing and inspection (Overhead)
- Inspect and Accept Electricity Network Assets
- Construct & Maintain Under Ground Mains Distribution
- Construct & Maintain Under Ground Mains Transmission
- Construct & Maintain Overhead Mains Distribution
- Construct & Maintain Overhead Mains Transmission
- Construct & Maintain Overhead Mains Transmission Tower
- Construct & Maintain Distribution Substation Equipment and Connection Work
- Construct, Maintain & Test Secondary Systems
- Construct, Maintain & Test Primary Substation Equipment
- Install, Maintain and Test Communications Equipment on or Near the Network (Ground)
- Install, Maintain and Test Communications Equipment on or Near the Network (Overhead)



Schedule 11 - Live Overhead Linework Authorisations

This schedule details the competency requirements for all live work including low voltage and high voltage energised work.

Low Voltage Live Line Work includes any work involving the:

- re-positioning of energised conductors / change of tension or loading to energised conductors including energised cross arm replacements
- stringing, augmentation or displacement of energised conductors
- re-configuration of bonding arrangements on energised OH conductors including making or breaking shackle points (making/breaking bonds/use of bonding sticks for the purpose of switching is covered within the scope of Low Voltage Network Switching)
- energised pole change-overs

High Voltage Live Line Work is broken into four streams:

- Live Stick HV working techniques up to and includina 22kV
- Live Stick HV working techniques up to and including 66kV
- Live Glove and Barrier HV working techniques up to and including 22kV
- Live Glove and Barrier HV working techniques up to and including 33kV

Further detail in section 6.14

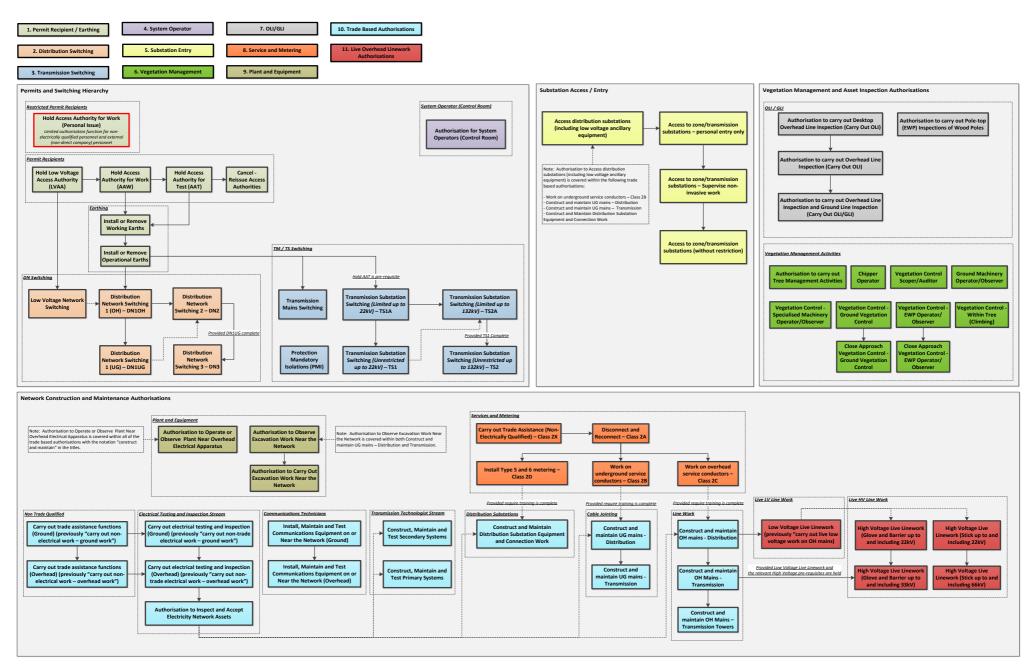




- Low Voltage Live Linework (previously "carry out live low voltage work on OH mains)
- High Voltage Live Linework (Glove and Barrier up to and including 22kV)
- High Voltage Live Linework (Stick up to and including 22kV)
- High Voltage Live Linework (Glove and Barrier up to and including 33kV)
- High Voltage Live Linework (Stick up to and including 66kV)



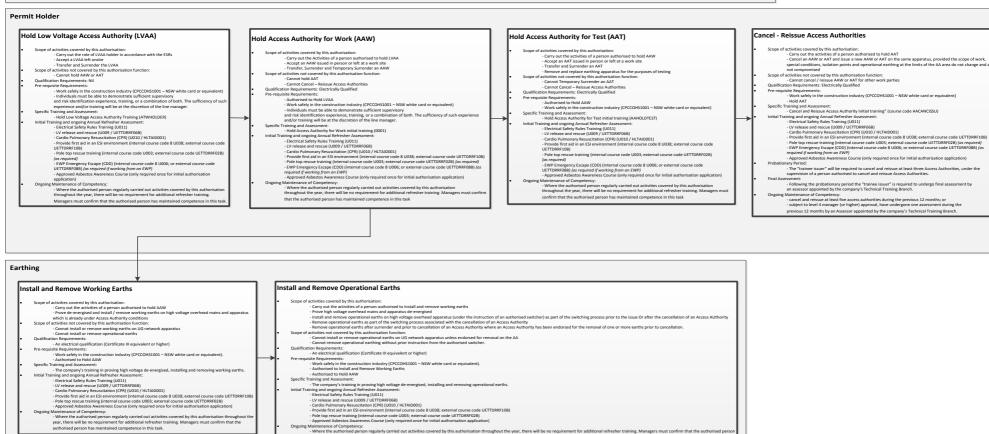
6.3 Authorisation hierarchy overview



6.4 Authorisation Schedule 1

Permit Recipient and Earthing Authorisation Hierarchy





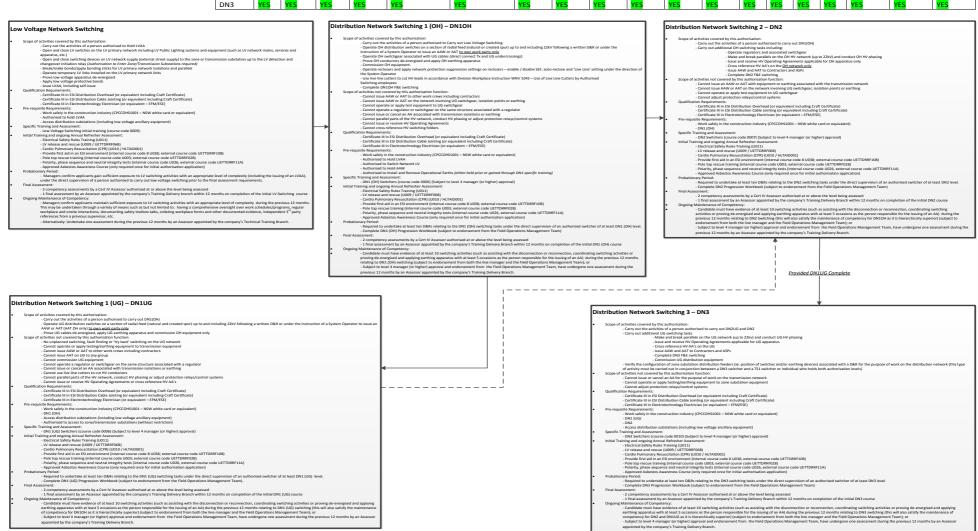


6.5 Authorisation Schedule 2

Distribution Switching Authorisation Hierarchy

	ing Non-Network Systems is not applicable and does quire authorisation (GSY0093)
Non-netw	ork systems include:
	- LV supply to Substation Voltage Transformers
	 auxiliary 230/400 Volt station systems (fans, pumps, motor supplies, etc)
	- 230/400 Volt station supply (lights, power, etc)
	 Audio Frequency Injection Cell (AFIC) 230/400 Volt supply systems
	- LV service and metering work beyond the connection point
	- non-electrical sources of energy







6.6 Authorisation Schedule 3

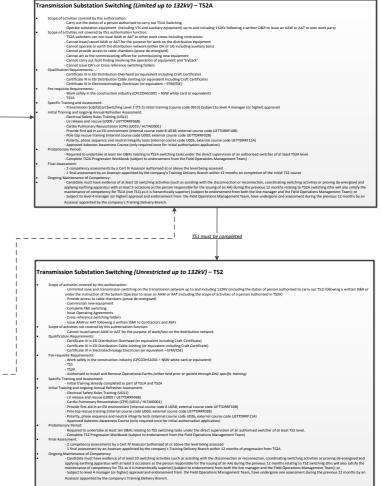
Transmission Switching Authorisation Hierarchy

	Carry	Issue	Issue AAW	Switch	Issue AAW	Issue AAW	Switch	Issue AAW	Issue AAW	Issue AAW	Field	Switch and	Issue	Issue AA's for	Commission	Commission	Fault Finding	Fault	Distribution	Cross	Issue OA on	Issue OA on
	out	AAW	to other	Substation	and AAT on	on OH	inside	and AAT	and ATT on	and AAT on	Reclosers	Issue AAW	Substation	access to cable	Transmission	Transmission	and Try Back	Finding	HV	Reference	Transmission	Transmission
	PMI	to	crews or	&	OH	Distribution	Substation	on	33/66/132KV	Distribution	Protection	and AAT on	CB	chambers/prove	OH mains	Substation	on OH	and Try	switching	AA's and	OH mains	Substation
		Work	contractors	Switching	Transmission	Mains	&	11/22kv	Substation &	Mains	Control	Distribution	maintenance	de-energised		equipment	Transmission	Back on	and parallel	folders		Equipment
		Party	contractors	Station	Mains	associated	Switching	Substation	Switching	(other than	change	Regulators	AAW and	ac chergisca		equipment	mains	Substation	of	ioideis		Equipment
		· urcy		Line	Wilding	with	Station	&	Station	Reclosers	criarige	& Reclosers	AAT					&	OH & UG			
				isolator		transmission	(other	Switching	Equipment	and								Switching				
				and		mains work	than Line	Station		Regulators								Station				
				associated			isolator	Equipment		and								Equipment				
				VT only			and	-4		Distributions								-4				
							associated			Mains												
							VT only)			associated												
										with												
										Transmission												
										work)												
TM	NO	YES	NO	YES	YES	YES	NO	NO	NO	NO	YES	NO	NO	NO	YES	NO	YES	NO	NO	YES	YES	YES
TS1A	YES	YES	NO	YES	NO	NO	YES	YES	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO
TS2A	YES	YES	NO	YES	NO	NO	YES	YES	YES	NO	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO
TS1	YES	YES	YES	YES	NO	NO	YES	YES	NO	NO	YES	Yes	YES	YES	NO	YES	NO	YES	YES	YES	NO	YES
TS2	YES	YES	YES	YES	NO	NO	YES	YES	YES	NO	YES	Yes	YES	YES	NO	YES	NO	YES	YES	YES	NO	YES

Transmission Mains Switching Scope of activities covered by this authorization. The control of a control of the control of t









6.7 Authorisation Schedule 4

System Operator Authorisation

Authorisation for System Operators (Control Room) Scope of activities covered by this authorisation: Operate an Area Control Desk within the Control Room; Use Supervisory Control and Data Acquisition (SCADA) and associated computerised equipment systems. Qualification Requirements: - An electrical qualification (Certificate III equivalent or higher) - Work safely in the construction industry (CPCCOHS1001 - NSW white card or equivalent); and Specific Training and Assessment: - Training in the requirements Of System Control Branch Procedure NCB – Control Room Training procedures Initial Training and Assessment: - Electrical Safety Rules Training (U011) Probationary Period: - The Control Room Manager must confirm the training program and 'on the job' experience has enabled adequate time and complexity of tasks for individuals applying to carry out the duties of a System Operator to have developed sufficient skills and knowledge to carry out those duties competent and safely. Ongoing Refresher Training and Assessment: - Electrical Safety Rules Refresher Training (U011) Ongoing Maintenance of Competency: -The Control Room Manager is required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/or skills in order to adequately identify, assess and control electrical safety hazards. This may be undertaken through a variety of means such as but not limited to: having a comprehensive oversight over work schedules/programs, regula workplace and onsite interactions, documenting safety toolbox talks, collating workplace forms and other documented evidence, independent 3rd party references from a previous employer/supervisor, etc.



6.8 Authorisation Schedule 5

Distribution Substation Access

Access distribution substations (including low voltage ancillary equipment)

- Scope of activities covered by this authorisation
 - Access the company's Low Voltage (LV) ancillary equipment, padmount, ground mount and indoor distribution substations, and distribution switching stations in accordance with the Electrical Safety Rules
 - Supervise others accessing <u>distribution substations and low voltage ancillary equipment only</u>
- Scope of activities not covered by this authorisation function:
- Cannot enter a zone/transmission substation without supervision Qualification Requirements: Nil
- Pre-requisite Requirements:
- Work safely in the construction industry (CPCCOHS1001 NSW white card or equivalent)
- Specific Training and Assessment:
 - An applicant must provide evidence of successful completion of the company's Distribution Substation Entricourse (course code DSUBE)
- Initial Training and ongoing Annual Refresher Assessment:
 - Electrical Safety Rules Training (U011)
 - LV release and rescue (U009 / UETTDRRF06B)
 - Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
 - Cardio Pulmonary Resuscitation (CPR) (UOLO / HETAIDUOL)
 Provide first aid in an ESI environment (internal course code 8 UO38; external course code UETTDRRF10B)
 - Approved Asbestos Awareness Course (only required once for initial authorisation application)

Zone/Transmission Substation Entry

Access to zone/transmission substations – personal entry only

- Scope of activities covered by this authorisation:
 - Carry out the duties of a person authorised to Access distribution substations (including low voltage ancillary equipment); in addition to
 - Access zone or transmission substations and transmission switching stations in accordance with the Electrical Safety Rules
 - Scope of activities not covered by this authorisation function:
 - Cannot supervise others in a zone or transmission substation or switching station
 - Qualification Requirements:
 - Internal Employee: NII / External Employee: Hold a trade level qualification (Certificate III or equivalent) in the manufacturing industry, building and construction industry, energy industry, communications industry or equivalent.
- Pre-requisite Requirements
 - Work safely in the construction industry (CPCCOHS1001 NSW white card or equivalent).
- Specific Training and Assessment:
- An applicant must provide evidence of successful completion of the company's Substation Entry course (course code: SUBE-PE)
 - Initial Training and ongoing Annual Refresher Assessment
 - Electrical Safety Rules Training (U011)
 - LV release and rescue (U009 / UETTDRRF06B)
 - Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
 - Provide first aid in an ESI environment (internal course code 8 U038; external course code UETTDRRF10B)
 - Approved Asbestos Awareness Course (only required once for initial authorisation application)

Access to zone/transmission substations – Supervise non-invasive work

- Scope of activities covered by this authorisation
 - Carry out the duties of a person authorised to Access distribution substations (including low voltage ancillary equipment); in addition to
 - Access zone or transmission substations and transmission switching stations in accordance with the Electrical Safety Rules
 - Supervise non-invasive work in a zone or transmission substation or switching station limited to the following:
 - Visual inspection of station equipment
 - Work on disconnected apparatus within an electrical station
 - Civil maintenance/construction activities such as fire systems, non-network electrical systems (lights/power) waste services, property maintenance, building services/repairs, etc.
- Note: Any worksite demarcated from primary and/or secondary systems with physical barriers or exclusion zones may be deemed as non-invasive.

 Scope of activities not covered by this authorisation function:
- Cannot supervise any work within an electrical station involving the construction, maintenance and testing of primary and/or secondary systems
- Qualification/Experience Requirements:

 Internal Employee: Nil / External Employee: Hold a trade level qualification (Certificate III or equivalent) in the manufacturing industry, building and
- Internal Employee: Nil / External Employee: Hold a trade level qualification (Certificate III or equivalent) in the manufacturing construction industry, energy industry, communications industry or equivalent.
- Pre-requisite Requirements:
 - Work safely in the construction industry (CPCCOHS1001 NSW white card or equivalent); and
 - Be employed in a role that requires the ability to supervise non-invasive Work; and
 - Individuals must be able to demonstrate sufficient supervisory and risk identification experience, training, or a combination of both. The sufficiency of such
 experience and/or training will be at the discretion of the line manager.
 - Specific Training and Assessment:
- An applicant must provide evidence of successful completion of the company's Substation Entry course (course code: SUBE)
- Initial Training and ongoing Annual Refresher Assessment:
 - Electrical Safety Rules Training (U011)
 - LV release and rescue (U009 / UETTDRRF06B)
 - Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
 Provide first aid in an ESI environment (internal course code 8 U038; external course code UETTDRRF10B)
 - Provide first aid in an ESI environment (internal course code 8 UU38; external course code UE11DKRF1U
 - Approved Asbestos Awareness Course (only required once for initial authorisation application)

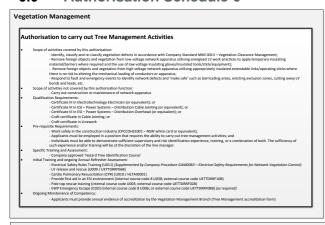
Access to zone/transmission substations (without restriction)

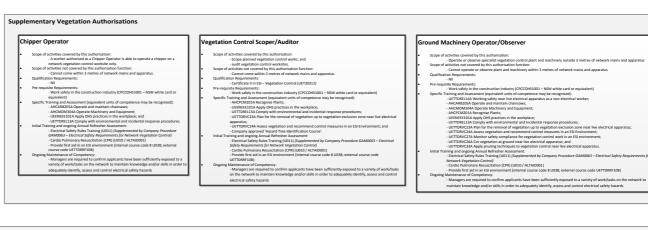
- Scope of activities covered by this authorisation
 - Carry out the duties of a person authorised to Access distribution substations (including low voltage ancillary equipment): in addition to
- Access and supervise any work activity in zone or transmission substations and transmission switching stations in accordance with the Electrical Safety Rule
 - Qualification/Experience Requirements:
 - An Electrical qualification (Certificate III or higher)
- Pre-requisite Requirements:
 - Work safely in the construction industry (CPCCOHS1001 NSW white card or equivalent); and
- Individuals must be able to demonstrate sufficient supervisory and risk identification experience, training, or a combination of both. The sufficiency of such
 experience and/or training will be at the discretion of the line manager.
- Specific Training and Assessment:
- An applicant must provide evidence of successful completion of the company's Substation Entry course (course code: SUBE)
- Initial Training and ongoing Annual Refresher Assessment: - Electrical Safety Rules Training (U011)
 - Electrical Safety Rules Training (U011)
 LV release and rescue (U009 / UETTDRRF06B)
 - Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
 - Cardio Pulmonary Resuscitation (CPR) (U010 / HETAIDUO1)

 Provide first aid in an ESI environment (internal course code 8 U038; external course code UETTDRRF10B)
 - Approved Asbestos Awareness Course (only required once for initial authorisation application)



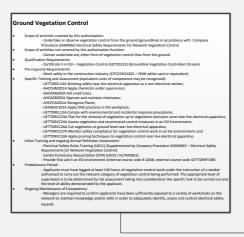
6.9 Authorisation Schedule 6





Specialised Machinery Operator/Observer Sope of activities covered by this authorisation. - Operator or doubres specialis segrations control dant and machinery in accordance with the distances specified within Coperator or doubres are observed by the authorisation facility. Stope of activities not covered by the authorisation facility of the second of the secon

maintain knowledge and/or skills in order to adequately identify, assess and control electrical safety hazards



Close Approach Vegetation Control (CAVC)

Close Approach Vegetation Control - Ground Vegetation Control

٧	VP Operator/Observer
	Scope of activities covered by this authorisation:
	 Undertake or observe vegetation control from an EWP in accordance with Company Procedure GAM0063 Electrical Safety Requirements for Network. Vegetation Control
	Scope of activities not covered by this authorisation function:
	Cannot undertake any other form of vegetation control than from an EWP
	Qualification Requirements: - Certificate II in ESI – Vegetation Control (UET20312) (Elevated Work Platform Vegetation Controllers Stream)
	Pre-requisite Requirements:
	 Work safely in the construction industry (CPCCOHS1001 – NSW white card or equivalent)
	 TLILIC2005A Licence to operate a boom-type elevating work platform (boom length 11 metres or more) or equivalent Specific Training and Assessment (equivalent units of competence may be recognised):
	- UETTOREL14A Working safely near live electrical apparatus as a non-electrical worker:
	AHCCHM201A Apply chemicals under supervision (as required):
	- AHCAR8202A Fell small trees:
	AHCAR8205A Operate and maintain chainsaws:
	- AHCPCM201A Recognise Plants;
	- UEENEEE101A Apply OHS practices in the workplace;
	 UETTDREL13A Comply with environmental and incidental response procedures;
	 UETTDRVC23A Plan for the removal of vegetation up to vegetation exclusion zone near live electrical apparatus;
	 UETTDRVC24A Assess vegetation and recommend control measures in an ESI Environment;
	 UETTDRVC2SA Use EWP to cut above ground vegetation near live electrical apparatus;
	 UETTDRVC26A Cut vegetation at ground level near live electrical apparatus;
	- UETTDRVC27A Monitor safety compliance for vegetation control work in an ESI environment; and
	UETTDRVC33A Apply pruning techniques to vegetation control near live electrical apparatus. Initial Training and ongoing Annual Refresher Assessment:
	Electrical Safety Rules Training (U011) /Supplemented by Company Procedure GAM0063 – Electrical Safety
	Requirements for Network Vegetation Control
	- Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
	 Provide first aid in an ESI environment (internal course code 8 U038; external course code UETTDRRF10B)
	- UETTDRRF03B Perform EWP Rescue
	- UETTDRRF08B Perform EWP controlled descent escape
	Probationary Period:
	 Applicants must have logged at least 140 hours of vegetation control work under the instruction of a worker
	authorised to carry out the relevant category of vegetation control being performed. The appropriate level of
	supervision is to be determined by risk assessment taking into consideration the specific task to be carried out and the level of ability demonstrated by the applicant.
	Ongoing Maintenance of Competency:

Scope of activities covered by this authorisation:
 Undertake or observe vesetation control from within a tree in accordance with Company Procedure GAM0063 Electrical
Safety Requirements for Network Vegetation Control
Scope of activities not covered by this authorisation function:
- Cannot undertake any other form of vegetation control than from within a tree
Qualification Requirements:
Certificate II in ESI - Vegetation Control (UET20312) (Within Tree (climbing) Vegetation Controllers Stream)
Pre-requisite Requirements:
 Work safely in the construction industry (CPCCOHS1001 – NSW white card or equivalent)
Specific Training and Assessment (equivalent units of competence may be recognised):
 UETTDREL14A Working safely near live electrical apparatus as a non-electrical worker;
 AHCCHM201A Apply chemicals under supervision (as required);
- AHCARB202A Fell small trees;
 AHCARB204A Undertake standard climbing techniques;
 AHCARB205A Operate and maintain chainsaws;
- AHCPCM201A Recognise Plants;
 UEENEEE101A Apply OHS practices in the workplace;
 UETTDREL13A Comply with environmental and incidental response procedures;
 UETTDRVC21A Use climbing techniques to cut vegetation near live electrical apparatus;
 UETTDRVC23A Plan for the removal of vegetation up to vegetation exclusion zone near live electrical apparatus;
 UETTDRVC24A Assess vegetation and recommend control measures in an ESI Environment;
UETTDRVC26A Cut vegetation at ground level near live electrical apparatus; UETTDRVC27A Monitor safety compliance for vegetation control work in an ESI environment:
UETTDRVC3AA Apply pruning techniques to vegetation control work in an ESI environment; UETTDRVC3AA Apply pruning techniques to vegetation control near live electrical apparatus; and
UETTORVCSSA Apply pruning techniques to vegetation control near live electrical apparatus, and UETTORVCS4A Undertake release and rescue from a tree near live electrical Apparatus.
- UE I IUKVC.54A Undertake release and rescue from a tree near live electrical Apparatus. Initial Training and ongoing Annual Refresher Assessment:
initial Training and Ongoing Annual Kerresner Assessment: Electrical Safety Rules Training (U011) (Supplemented by Company Procedure GAM0063 – Electrical Safety Requirements
for Network Vegetation Control
- Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
Provide first aid in an ESI environment (internal course code 8 U038: external course code UETTDRRF10B)
- UETTDRVC34A Undertake release and rescue from a tree near live electrical apparatus (evidence of successful completion
Probationary Period:
- Applicants must have logged at least 140 hours of vegetation control work under the instruction of a worker authorised to
carry out the relevant category of vegetation control being performed. The appropriate level of supervision is to be
determined by risk assessment taking into consideration the specific task to be carried out and the level of ability
demonstrated by the applicant.
Ongoing Maintenance of Competency:
- Managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to
maintain knowledge and/or skills in order to adequately identify, assess and control electrical safety hazards

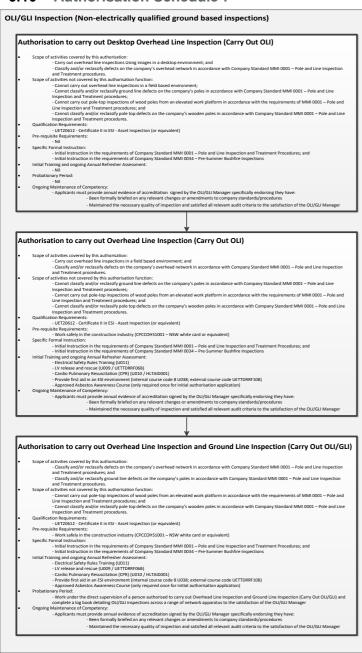
	Certificate II ESI – Powerline Vegetation Control Pathways	Unit of competence	Ground line vegetation controllers	EWP vegetation controllers	Within tree (climbing) vegetation controllers
ESI – tation Units	Apply Occupational Health Safety regulations, codes and practices in the workplace	UEENEEE101A	✓	✓	✓
in ESI getatic	Comply with sustainability, environmental and incidental response policies and procedures	UETTDREL13A	✓	✓	✓
= 2 3	Working safely near live electrical apparatus as a non-electrical worker	UETTDREL14A	✓	✓	✓
Certificate Powerline \	Operate and maintain chainsaws	AHCARB205A	✓	✓	✓
Certifica	Plan the removal of vegetation up to vegetation exclusion zone near live electrical apparatus	UETTDRVC23A	✓	✓	✓
<u> </u>	Monitor safety compliance of vegetation control work in an ESI environment	UETTDRVC27A	✓	✓	✓
ine /e	Licence to operate a boom-type elevating work platform (boom length 11 metres or more)	TLILIC2005A		✓	
owerline	Fell Small Trees	AHCARB202A	✓		
S H	Apply chemicals under supervision	AHCCHM201A	✓		
1 0 s	Undertake standard climbing techniques	AHCARB204A			✓
in ESI - Control Units	Use climbing techniques to cut vegetation above ground near live electrical apparatus	UETTDRVC21A			✓
= =	Use elevated platform to cut vegetation above ground level near live electrical apparatus	UETTDRVC25A		√	
Certificate II Vegetation	Cut vegetation at ground level near live electrical apparatus	UETTDRVC26A	✓		
ege	Apply pruning techniques to vegetation control near live electrical apparatus	UETTDRVC33A	✓	√	✓
8 >	Undertake release and rescue from a tree near live electrical apparatus	UETTDRVC34A			✓

•	Scope of activities covered by this authorisation:
	 Undertake or observe close approach vegetation control from the ground (groundline) in accordance with Company Procedure GAM0063 Electrical
	Safety Requirements for Network Vegetation Control
•	Scope of activities not covered by this authorisation function:
	 Cannot undertake any other form of close approach vegetation control than from the ground
•	Qualification Requirements:
	 Certificate II in ESI – Vegetation Control (UET20312) (Groundline Vegetation Controllers Stream)
•	Pre-requisite Requirements:
	 Work safely in the construction industry (CPCCOHS1001 – NSW white card or equivalent); and
	 Hold a current authorisation for Vegetation Control - Ground Vegetation Control
•	Specific Training and Assessment (equivalent units of competence may be recognised):
	- Company approved Close Approach Vegetation Control (CAVC) Course
•	Initial Training and ongoing Annual Refresher Assessment:
	 Electrical Safety Rules Training (U011) (Supplemented by Company Procedure GAM0063 – Electrical Safety Requirements for Network Vegetation Control
	- Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
	 Provide first aid in an ESI environment (internal course code 8 U038; external course code UETTDRRF10B)
•	Probationary Period:
	 Applicants must have logged at least 140 hours of close approach vegetation control work under the instruction of a worker authorised to carry out the
	relevant category of vegetation control being performed. The appropriate level of supervision is to be determined by risk assessment taking into
	consideration the specific task to be carried out and the level of ability demonstrated by the applicant.
•	Ongoing Maintenance of Competency:
	 Managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/or
	skills in order to adequately identify, assess and control electrical safety hazards; and
	- Company approved CAVC refresher

For Network Negations Coursel Scope of Sachiests not covered by this authorisation function: Cannot understake any other from of doise approach vegetation control than from an EWP Cannot understake any other from of doise approach vegetation control than from an EWP Cannot understake any other from of doise approach vegetation control than 1912. Per requisit Requirements. Per requisit Requirements. 1. Cannot understake in Inst 31-Vegetation Control (LEVE) 2015. 1. THE CORD Actions to construction industry (CECCHOS) 2015. 1604 which can de equivalent). 1. THE CORD Actions to special be bounney per leveling only patients howen legel 11 meters or mone) or Equivalent; and 1. Hold acurrent authorisation for Vegetation control - EWP Operator/Diseaver Special: Training and exessumes (equivalent under of comprehensive per leveling). 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/Diseaver 1. Extra Called National Reference in Control - EWP Operator/	LIO	se Approach Vegetation Control - EWP Operator/Observer
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Qualification Regularements Certification in LSB - Vegetation Control (ULT20112) [Revarde Work Platform Vegetation Controllers Stream) Pre-requisité Requierments Certification controllers de l'acceptance de l'accep	•	
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- Electrica Salety Males Training (URL1) (Expolemented by Composity Procedur CAMODES - Electrical Safety Requirements for Network Vegetations Cs - Cardio Pulmonary Resocrations (CRIS) (2015) (ATLANDOS) - Provide Brita ain in a total environment (internal course code USE), external course code UETTORP108) - UETTORPROSE Perform EVE controlled descent escape - Probabicary Period: - Applicant much have logged at least 18 hours of close approach vegetation control work under the instruction of a worker authorised to carry out relevant category of vegetation control level of supervision in to be determined by risk assessment staling into Composition of the control level of supervision in to be determined by risk assessment staling into Composition of the special control level of single demonstrate by the applicant. Objective Control of the special cast of the carried out and the level of shift plemonstrate by the applicant. - Managers are required to confirm applicants have been difficiently exposed to a variety of work/Lasks on the network to maintain incovindige and, skills in order to adequate the pulsas season and confirmal seasons.		
- Cardio Fulmonary Resourction (CPS) (0.010 / N.T.00001) - Provide first ask in a 1th or removement (internal counce code UDSE, external counce code UDTTORRF108) - UNITORRF108 Profilm EVP controlled descent escape - UNITORRF108 Profilm EVP controlled descent escape - Probletionary Profilm Council and the State of t		Initial Training and ongoing Annual Refresher Assessment:
- URTIDERFOIR Perform EVP Rescue - URTIDERFOIR Perform EVP rescue - URTIDERFOIR Perform EVP controlled descent escape - Probabilisms Person. - Application sturb two logged at least 140 hours of done approach vegetation control work under the instruction of a worker authorised to carry out relevant category of vegetation control long performed. The appropriate level of supervision is to be determined by risk assessment taking into - Ongoing Marketines or Competency. - Ungoing Marketines or Competency. - Hunagers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and, stills in order to adequately develop, assess and controlled and the controlled person. - Managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and, stills in order to adequately develop, assess and controlled excitors allegely assess.		 Electrical Safety Rules Training (U011) (Supplemented by Company Procedure GAM0063 – Electrical Safety Requirements for Network Vegetation Control, Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
Probabicomary Period: Applicants must have logged at least 140 hours of close approach vegetation control work under the instruction of a worker authorised to carry out relevant category of vegetation control level of supervision in to be determined by risk assessment stating into control level of supervision in to be determined by risk assessment stating into control level of supervision in the specific task to be carried out and the level of daily demonstrated by the applicant. Ongoin which is the specific task to be carried out and the level of daily demonstrated by the applicant. Managers are required to confirm applicants have been difficiently exposed to a variety of world/tasks on the network to maintain knowledge and/silk in north or adequately devertify, assess and control sectional series/susage.		
 Probationary Period: Application must have logged at least 140 hours of dose approach vegetation control work under the instruction of a worker authorised to carry out relevant category of vegetation control level of the appropriate level of supervision in to be determined by risk assessment stating into Companies of the application of the application in the specific task to be carried or and the fivel of daily demonstrated by the application. Organization demonstrates a propriet of confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/silk in norther to adequately demonstrate, assess and confort excitoral safely hazards. 		- LIFTTIRREDRR Perform FWP controlled descent escape
 Applicants must have logged at least 140 hours of cose approach vegetation control work under the instruction of a worker authorised to carry out relevant category of vegetation control being performed. The appropriate level to place privation is to be determined by risk assessment taking into consideration the specific task to be carried out and the level of ability demonstrated by the applicant. Origing Mantenance of Competency. Managers are required to confilm applicants have been sufficiently opposed to a variety of work/basks on the network to maintain knowledge and/sills in order to adequately identify, assess and control electrical safety hazards; and 		Probationary Period
consideration the specific task to be carried out and the level of ability demonstrated by the applicant. Ongoing Maintenance of Competency: Namagers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/ skills in order to adequately identify, assess and control electrical safety hazards; and		 Applicants must have logged at least 140 hours of close approach vegetation control work under the instruction of a worker authorised to carry out the
 Managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/skills in order to adequately identify, assess and control electrical safety hazards; and 		
skills in order to adequately identify, assess and control electrical safety hazards; and		Ongoing Maintenance of Competency:
		 Managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/or skills in order to adequately identify, assess and control electrical safety hazards; and
		- Company approved CAVC refresher



6.10 Authorisation Schedule 7



Pole Top Inspection (Electrically qualified specialist inspections carried out aloft) Authorisation to carry out Pole-top (EWP) Inspections of Wood Poles activities covered by this authorisation: - Carry out pole-top inspections of wood poles from an elevated work platform in accordance with the requirements of MMI 0001 – Pole and Line Inspection and Treatment - Classify and/or reclassify pole top defects on the company's wooden poles in accordance with Company Standard MMI 0001 – Pole and Line Inspection and Treatment procedures Scope of activities not covered by this authorisation function - Carry out overhead line inspections in a field based environment - Classify and/or reclassify defects on the company's overhead network in accordance with Company Standard MMI 0001 – Pole and Line Inspection and Treatment procedures; - Cannot classify and/or reclassify ground line defects on the company's poles in accordance with Company Standard MMI 0001 – Pole and Line Inspection and Treatment procedur An electrical qualification (Certificate III equivalent or higher) Pre-requisite Requirements - Work safely in the construction industry (CPCCOHS1001 - NSW white card or equivalent): - High Risk Work Liennes) for various terms of plant (as required), and - An applicant must hold current authorisation to Operate or observe plant near overhead power lines under Company Procedure GAM 0032 – Authorisation To Operate Or Observe Plant Near Overhead Electrical Operator - Training in the requirements of pole top inspection of wooden poles from an EWP (Internal course code POLETOPINS) Initial Training and ongoing Annual Refresher Assessment: - Electrical Safety Rules Training (1021) - Telectrical satery trues 't ratining (UU-11) - L'I vrielease and rescue (U009 / UETTORRF06B) - Cardio Pulmonany Resuscitation (CPR) (U010 / HLTAID001) - Provide first al din an ESF environment (internal course code 8 U038; external course code UETTDRRF10B) - EWP Emergency Escape (CDD) (internal course code 8 U036; or external course code UETTDRRF08B) Approved Asbestos Awareness Course (only required once for initial authorisation application) Ongoing Maintenance of Competency: - Managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/or skills in order to adequately identify, assess and control electrical safety hazards; and Applicants must have carried out pole-top (EWP) inspections of wood poles on at least 3 occasions during the previous 12 months in accordance with MMI 0001 – Pole and Line Inspection and Treatment procedures



6.11 Authorisation Schedule 8

Disconnect and Reconnect - Class 2A

expires, the authorisation of all employees must be suspended.

Scope of activities covered by this authorisation: - Perform electrical trade related works performed by electrical trades apprentices covered by a training contract that may be required to work on or near the network
under direct and constant supervision of an appropriately authorised person;
 - Carry out work performed by persons engaged by a telecommunications network operator on telecommunications assets attached to electricity network operator assets; at - Perform trades assistant work such as safety observer, rescue assistant and plant operator.
Note: This class allows non-electrically qualified personnel to be registered with the ASP Scheme in accordance with the Scheme Rules.
Scope of activities not covered by this authorisation function:
- Cannot carry out 2A,2B, 2C or 2D work
Qualification Requirements: Nil
Pre-requisite Requirements: - Work safely in the construction industry (CPCCOHS1001 – NSW white card or equivalent);
Specific Training and Assessment:
- UETTORELIAA - Working safely near live electrical apparatus as a non-electrical worker (or equivalent)
Initial Training and ongoing Annual Refresher Assessment:
- Electrical Safety Rules Training (U011)
- LV release and rescue (U009 / UETTORRF06B)
- Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
 Provide first aid in an ESI environment (internal course code 8 U038; external course code UETTDRRF10B)
 Pole top rescue training (internal course code U003; external course code UETTDRRF02B)
 Approved Asbestos Awareness Course (only required once for initial authorisation application)
Ongoing Maintenance of Competency:
 Managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/or skills in order to
adequately identify, assess and control electrical safety hazards.
This may be undertaken through a variety of means such as but not limited to: having a comprehensive oversight over work schedules/programs, regular workplace and onsi
interactions, documenting safety toolbox talks, collating workplace forms and other documented evidence, independent 3 rd party references from a previous employer/ supervisor, etc.
Note: Authorisation for employees of an ASP company must only be maintained while the accreditation of the ASP company remains current. If the ASP company accreditation
expires, the authorisation of all employees must be suspended.

Qualification Requirements	Disconnect and Reconnect – Class 2A	Work on underground service conductors – Class 2B	Work on overhead service conductors – Class 2C	Install Type 5 and 6 metering – Class 2D	Non-electrically qualified – 2X	
Certificate III in Electrotechnology Electrician (or equivalent)	√ #	√ #	√ #	1	N/A	
Certificate III in ESI – Power Systems – Distribution Cable Jointing (or equivalent)	√ #	√ #			N/A	
Certificate III in ESI – Power Systems – Distribution Overhead (or equivalent)	√ #		√ #		N/A	
Notes:						

✓# – applicants must hold at least one of the qualification options for this authorisation

Initial Training Requirement	Disconnect and Reconnect – Class 2A	Work on underground service conductors – Class 2B	Work on overhead service conductors – Class 2C	Install Type 5 and 6 metering – Class 2D	Non-electrically qualified – 2X
Endeavour Energy Electrical Safety Rules training	1	1	1	1	1
UETTDRRF06B Low voltage release and rescue (internal course code 8U009)	1	1	1	1	1
HLTAID001 Perform CPR (internal course code 8U010)	1	1	1	1	1
UETTDRRF11A Successfully complete test and completion of polarity, phase sequence and neutral integrity tests (internal course code 8U026)	1	1	1	1	
UETTDRRF02B pole top rescue training including pre-climbing safety inspections of poles, both timber and steel (internal course code 8U003)			1		As Required
UETTDRRF08B EWP Emergency Escape (CDD) (internal course code 8 U006);					
UETTDRRF10B First Aid in an ESI Environment	1	1	1	1	1
UETTDREL16A Working safely near live electrical apparatus	1			1	
UETTDREL14A Working safely near live electrical apparatus as a non-electrical worker					1
Approved asbestos awareness training	1	1	1	1	1

Refresher Training Requirement	Disconnect and Reconnect – Class 2A	Work on underground service conductors – Class 2B	Work on overhead service conductors – Class 2C	Install Type 5 and 6 metering – Class 2D	Non-electrically qualified - 2 X
Endeavour Energy Electrical Safety Rules training	1	1	1	1	1
UETTDRRF06B Low voltage release and rescue (internal course code U009)	1	1	1	1	1
HLTAID001 Perform CPR (internal course code U010)	1	1	1	1	1
UETTDRRF11A Successfully complete test and completion of polarity, phase sequence and neutral integrity tests (internal course code U026)	1	1	1	1	
UETTDRRF02B pole top rescue training including pre-climbing safety inspections of poles, both timber and steel (internal course code U003)			1		As Required
UETTDRRF10B First Aid in an ESI Environment	1	1	1	1	1

(seep of activities covered by this authorisation: - Carry out the fault of a person submissed to carry out Trade Assistance (Non-Electrically Qualified) — Class 2X; and - Carry out the fault of a person submissed for carry out Trade Assistance (Non-Electrically Qualified) — Class 2X; and - Concentration of economic review less as the connection point—but only work at the connection point that does not involve accessing network operator assets and no concentration of a connection point that does not involve accessing network operator assets and no connection of a connection operator assets and no connection of a connection operator assets and no connection of a con
Decorated and reconnect service lines at the connection point – but only work at the connection point that does not involve accessing network operator assets and no mechanical charges to network assets are recipited. Decorated to the connection of the connection of the connection point that does not involve accessing network operator assets and no mechanical charges. Primary qualification must include at least one of the following: Primary qualification must include at least one of the following: Certificate Bill In Extraore Systems—Distribution Caleb accessing for equivalently, or certificate Bill In Extraore Systems—Distribution Caleb accessing for equivalently, or certificate Bill In Extraore Systems—Distribution Chemical Companies (or equivalently) Pre-requisite Requirement and cale Bill In Extraore Systems—Distribution Chemical Companies (or equivalent) Pre-requisite Requirement charges Systems—Distribution Chemical Companies (or equivalent) Pre-requisite Requirement Companies (CECCONISCIO)—NOW white card or equivalent) Prof. Training and Asset Recursing Systems (see Excitical Apparatus (or equivalent) Distribution (CECCONISCIO)—Systems (CECCONISCIO)—Syst
cope of activation on covered by the authorisation function: - Cannot carry out 28, 72, 20 - Centificate ill in Sir-Overed System - Distribution (security of the Cannot Carry out 28, 72, 20 - Centificate ill in Sir-Overed System - Distribution Chief bottom (security of the Cannot Carry o
Description of the Community of the Comm
- Primary qualification must sclude at least one of the following: - Primary qualification must sclude at least one of the following: - Certificate Bill in Exceptional Code in Code
Certificate Illin Electrotechnology Rectrician for equivalent; or certificate Illin Electrotechnology Rectrician for equivalent; or certificate Illin Electromy Systems—Distribution calle electrinis (per equivalent) /*re-requisite Requirements: White seley in the construction industry (VCCOHSIDDI - NSW white card or equivalent) **LITTRIBLAS Workings selety were their electricial Apparatus (or equivalent) initial Training and ongoing Annual Referaber Assessment: - Electrical Seley Moster Taming (COLI) **LITTRIBLAS Wester Taming (C
- Certificate III in ISI - Power Systems — Distribution Calle lociting for equivalent], or - Certificate III in ISI - Power Systems — Distribution Overhead for equivalent] *Per exequisite Requirements: - Work safety in the construction industry (CYCCOMSIOD) - NeW white card or equivalent) specific Training and Assument: - UETTOBELS (Working safety near live electrical Apparatus for equivalent) initial Training and ongoing Annual Refereber Assessment: - Electrical Selfey Works Training (IDI) (IDI)
Certificate Illin ISI - Power Systems — Unitribution Overheads (or equivalent) **The requisite Requirements: - Vervi salely in the construction industry (CCCCGISIO) - NSW white card or equivalent) specific Training and Averaging and selection of the electrical Apparatus (or equivalent) related Training and oraping Average Meritarine Average (and the electrical Apparatus (or equivalent) related Training and oraping Average Meritarine Average (and the electrical Apparatus (or equivalent) - Electrical Selectrical Selectrical Meritarine (and the electrical Apparatus (or equivalent) - Electrical Selectrical Selectrical Selectrical Meritarine (and the electrical Apparatus (or equivalent) - Electrical Selectrical Sel
The requisite Requirements: - Work safely the construction industry (CCCCMS1001 - NSW white card or equivalent) gettlif: Training and Assessment: - LETTORELIS Working safely near live electrical Apparatus (or equivalent) initial Training and ongoing Annual Refereber Assessment: - Electrical Self-Web Self-Training (1001) - Electrical Self-Web Self-Training (1001)
What safely in the construction industry (CPCC061301—1NDW white cast of equivalent) specific Training and Assertions and September (CPCC06130101—1NDW white cast of equivalent) TUTTORILLEA Workings afterly where five electrical Apparatus (or equivalent) TOTORILLEA Workings after a CPC (CPCC06100101) TOTORICAL SECURITIES AND Workings after a CPCC06101011 TOTORICAL SECURITIES AND WORK Training (CDC) TOTORICAL SECURITIES AND WORK T
specific Training and Assessment: - URTDRELLSW Movining softly more five electrical Apparatus (or equivalent) initial Training and ongoing Annual Referebre Assessment: - Electrical Safety-Rober Training (1011) - Electrical Safety-Rober Training (1011)
UETTORELIGA Working safely near live electrical Apparatus (or equivalent) milital Training and congoing Annual Refereber Assessment: Descritos Stepk Rules Training (10011)
nitial Training and ongoing Annual Refresher Assessment: - Electrical Safety Rules Training (U011)
- Electrical Safety Rules Training (U011)
- Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
 Provide first aid in an ESI environment (internal course code 8 U038; external course code UETTDRRF10B)
 Polarity, phase sequence and neutral integrity tests (internal course code U026, external course code UETTDRRF11A)
 Approved Asbestos Awareness Course (only required once for initial authorisation application)
Ongoing Maintenance of Competency:
 Managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/or skills in order to
adequately identify, assess and control electrical safety hazards.
This may be undertaken through a variety of means such as but not limited to: having a comprehensive oversight over work schedules/programs, regular workplace and onsit
interactions, documenting safety toolbox talks, collating workplace forms and other documented evidence, independent 3 rd party references from a previous employer/
supervisor, etc.
Note: Authorisation for employees of an ASP company must only be maintained while the accreditation of the ASP company remains current. If the ASP company accreditation
expires, the authorisation of all employees must be suspended.
Or

on underground service conductors – Class	2B
ope of activities covered by this authorisation:	
 Remove and replace an Endeavour Energy security seal; 	
Install and connect underground service lines up to the point of	supply; to 3m above ground level (note: a person authorised to Work on overhead service conductors – Class 2C is
required to connect the service conductor to the overhead netwo	
Disconnect and reconnect service lines/consumers mains to the	
- Replace service fuse(s), service active(s) and neutral links; and	
- Access Distribution Substations (including low voltage ancillary e	quipment) for the purpose of underground service work.
ope of activities not covered by this authorisation function:	
- Cannot carry out 2C or 2D	
ualification Requirements:	
 Primary qualification must include at least one of the following: 	
 Certificate III in Electrotechnology Electrician (Certificate III in ESI – Power Systems – Distribu 	
- Certificate III In ESI – Power Systems – Distribute-requisite Requirements:	tion Cable Jointing (or equivalent)
Work safely in the construction industry (CPCCOHS1001 – NSW :	white card or equivalent)
pecific Training and Assessment:	
 - UETTDRISSSA – Install and maintain low voltage underground se 	rvices (or equivalent)
itial Training and ongoing Annual Refresher Assessment:	
- Electrical Safety Rules Training (U011)	
- LV release and rescue (U009 / UETTDRRF06B)	
Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001) Provide first aid in an ESI environment (internal course code 8 U	
	use; external course code (LETTORREDUB) urse code UETTORRED2B) (as required for applicants working aloft)
 Pole top rescue training (internal course code usus; external co Polarity, phase sequence and neutral integrity tests (internal co 	
Approved Asbestos Awareness Course (only required once for in	
ngoing Maintenance of Competency:	
	itly exposed to a variety of work/tasks on the network to maintain knowledge and/or skills in order to
adequately identify, assess and control electrical safety hazards.	
	ot limited to: having a comprehensive oversight over work schedules/programs, regular workplace and onsite
interactions, documenting safety toolbox talks, collating workplan supervisor, etc.	e forms and other documented evidence, independent 3 rd party references from a previous employer/

•	k on overhead service conductors – Class 2C
	Scope of activities covered by this authorisation:
	- Remove and replace an Endeavour Energy security seal;
	 Install and connect overhead service lines to the point of common coupling;
	- Connect underground service conductors to the overhead distribution network and install underground service conductors on a distributor pole from 3m above ground I
	(note: a person authorised to Work on underground service conductors - Class 2B is required to install the service conductor from ground level up to 3m from ground level
	- Relocate/upgrade an existing overhead service line and restore supply on completion;
	- Disconnect and reconnect service lines at the point of supply and point of common coupling; and
	Replace service fuse(s), service actives and neutral links. Scope of activities not covered by this authorisation function:
	cope or activates not covered by intia authorisation function: - Cannot carry out 28 or 2D
	- cannot carry out 28 or 20 Dualification Requirements:
	- Frimary quantication mass include at teast one of the information of the control of the contro
	Certificate III in ESI – Power Systems – Distribution Overhead (or equivalent)
	Pre-requisite Requirements:
	- Work safely in the construction industry (CPCCOHS1001 – NSW white card or equivalent)
	Specific Training and Assessment:
	- UETTORISSSA - Install and maintain low voltage overhead services (or equivalent)
	Initial Training and ongoing Annual Refresher Assessment:
	- Electrical Safety Rules Training (U011)
	- LV release and rescue (U009 / UETTDRRF06B)
	- Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
	- Provide first aid in an ESI environment (internal course code 8 U038; external course code UETTDRRF10B)
	- Pole top rescue training (internal course code U003; external course code UETTDRRF02B)
	- EWP Emergency Escape (CDD) (internal course code 8 U006; or external course code UETTDRRF08B) (as required for applicants working aloft from an EWP)
	 Polarity, phase sequence and neutral integrity tests (internal course code U026, external course code UETTDRRF11A)
	 Approved Asbestos Awareness Course (only required once for initial authorisation application)
	Ongoing Maintenance of Competency:
	- Managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/or skills in order to
	adequately identify, assess and control electrical safety hazards.
	This may be undertaken through a variety of means such as but not limited to: having a comprehensive oversight over work schedules/programs, regular workplace and of
	interactions, documenting safety toolbox talks, collating workplace forms and other documented evidence, independent 3 rd party references from a previous employer/
	supervisor, etc.

Install Type 5 and 6 metering – Class 2D Scope of activities covered by this authorisation:

- Remove and replace as Indexous Energy security seal;
- Install and remove metering explament for meter types 5 and 6 and other Endeavour Energy service equipment;
- Disconnect and reconnect of the installation at the connection point (including at an overhead point of attachment); and
- Energie ere wischallations.

- Service have wischallations.

- Service are middletions.
- Service are middletio - Certificate III in Electrotechnology Electrician (or equivalent); and
- Additionally, to be eligible for authorisation to Install Type 5 and 6 Metering an applicant must hold Qualified Supervisor Certificate – Electrical or an Electrical Contractor Licence endorsed with 6 and 10 - Certificate III in Electrotechnology Electrician (or equivalent);
- Certificate III in ESI – Power Systems – Distribution Cable Jointing (or equivalent); or
- Certificate III in ESI – Power Systems – Distribution Overhead (or equivalent) Pre-requisite Requirements:
- Work safely in the construction industry (CPCCOHS1001 – NSW white card or equivalent) . Training and Assessment.
- External Application.
- External Application.
- URTIDREISEA: Working safely near live electrical apparatus (or equivalent);
- URTIDREISEA: Apply environmentally and sostainable energy procedures in the energy Sector (or equivalent); and
- Either:
- URTIDRESSEA: Install and replace gover system meters and associated Equipment (or equivalent); or
- UREINEGST1A install, setup and commission interval metering (or equivalent). Internal Applicants:
 UETTDRIS60A – Install and replace power system meters and associated Equipment (or equivalent) - LV release and rescue (U009 / UETTDRRF06B) - O' reteix sin frecise (UMO) / Let (UMO) (Asset)
- O' reteix sin frecise (UMO) / Let (UMO) / N.T.A00010
- Provide first sin sin sin St. environment (John Carlon burnary Resolution) (CR) (UMO) / N.T.A00010
- Provide first sin sin St. environment (John Carlon Ca Ongoing Maintenance of Competency: Managers, are required to confirm applicants have been difficiently exposed to a variety of work/basks on the network to maintain knowledge and/or skills in order to adequately identify, sees and control electrical safety hazards.

This may be understaten through a variety of means such as but not limited to: having a comprehensive conveight over work schedule/programs, regular workplace and or interactions, documenting alleft problost last, outsiding workplace from any other documented evidence, independent 3 party references from parevious employers.

Note: Authorisation for employees of an ASP company must only be maintained while the accreditation of the ASP company remains current. If the ASP company accreditation

expires, the authorisation of all employees must be suspended.



Note: Authorisation for employees of an ASP company must only be maintained while the accreditation of the ASP company remains current. If the ASP company accreditation

6.12 Authorisation Schedule 9

Overhead Plant

Authorisation to Operate or Observe Plant Near Overhead Electrical Apparatus

- Scope of activities covered by this authorisation
 - Operate plant up to the safe approach distances provided in Table A Safe Approach Distances for Authorised Persons and Instructed Persons, in the Electrical Safety Rules Handbook, whilst an authorised safety observer is in place; and
 - Observe plant that is operated by an authorised operator up to the safe approach distances provided in Table A Safe Approach Distances for Authorised Persons and Instructed Persons, in the Electrical Safety Rules Handbook.
- Scope of activities not covered by this authorisation function:
 - Cannot carry out or observe powered excavation work near the network
- Qualification Requirements: Nil
- Pre-requisite Requirements:
 - Work safely in the construction industry (CPCCOHS1001 NSW white card or equivalent)
- Specific Training and Assessment:
 - Work near overhead electrical apparatus training course in accordance with Company Procedure (Health & Safety)
 GSY 0031 Operating or Observing Plant Near Overhead Electrical Apparatus (internal course code 8 U022); or
 - UETTDREL14A Working safely near live electrical apparatus as a non-electrical worker (or equivalent)
- Initial Training and ongoing Annual Refresher Assessment:
 - Electrical Safety Rules Training (U011)
 - LV release and rescue (U009 / UETTDRRF06B)
 - Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
 - Provide first aid in an ESI environment (internal course code 8 U038: external course code UETTDRRE108)
- Ongoing Maintenance of Competency:
 - Managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/or skills in order to adequately identify, assess and control electrical safety hazards. This may be undertaken through a variety of means such as but not limited to: having a comprehensive oversight over work schedules/programs, regular workplace and onsite interactions, documenting safety toolbox talks, collating workplace forms and other documented evidence, independent 3rd party references from a previous employer/supervisor, etc.

Excavation

Authorisation to Observe Excavation Work Near the Network

- Scope of activities covered by this authorisation:
 - Observe powered excavation activities carried out by an authorised operator In accordance with the Electrical Safety Rules Handbook
- Scope of activities not covered by this authorisation function:
 - Cannot <u>carry out</u> powered excavation work near the network
 Cannot operate or observe plant near overhead electrical apparatus
- Cannot operate of observe plant hear overhead electric
- Qualification Requirements. N
 - Pre-requisite Requirements:
 - Work safely in the construction industry (CPCCOHS1001 NSW white card or equivalent)
- Specific Training and Assessment:
 - RIICCM202D Identify, Locate and Protect Underground Services (or equivalent)
- Initial Training and ongoing Annual Refresher Assessment
 - Electrical Safety Rules Training (U011)
 - LV release and rescue (U009 / UETTDRRF06B)
 - Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
 - Provide first aid in an ESI environment (internal course code 8 U038; external course code UETTDRRF10B)
- Ongoing Maintenance of Competency:

- Managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/or skills in order to adequately identify, assess and control electrical safety hazards.

This may be undertaken through a variety of means such as but not limited to: having a comprehensive oversight over work schedules/programs, regular workplace and onsite interactions, documenting safety toolbox talks, collating workplace forms and other

documented evidence, independent 3rd party references from a previous employer/supervisor, etc.

Authorisation to Carry Out Excavation Work Near the Network

- Scope of activities covered by this authorisation:
 - Observe and carry out powered excavation activities carried out by an authorised operator In accordance with the Electrical Safety Rules Handbook.
- Scope of activities not covered by this authorisation function:
 - Cannot operate or observe plant near overhead electrical apparatus
- Qualification Requirements: Nil
- Pre-requisite Requirements:
 - Work safely in the construction industry (CPCCOHS1001 NSW white card or equivalent)
- Specific Training and Assessment:
 - RIICCM202D Identify, Locate and Protect Underground Services (or equivalent); and
 - Additionally, in order to gain authorisation to carry out excavation near the network, a person must complete a practical Verification
 of Competence (VOC) by an RTO accredited in accordance with Branch Procedure PES 0002 RTO Accreditation. The VOC must be
 carried out in accordance with Endeavour Energy Electrical Safety Rules.
- Initial Training and ongoing Annual Refresher Assessment:
 - Electrical Safety Rules Training (U011)
 - LV release and rescue (U009 / UETTDRRF06B)
 - Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
 - Provide first aid in an ESI environment (internal course code 8 U038; external course code UETTDRRF10B)
- Ongoing Maintenance of Competency:

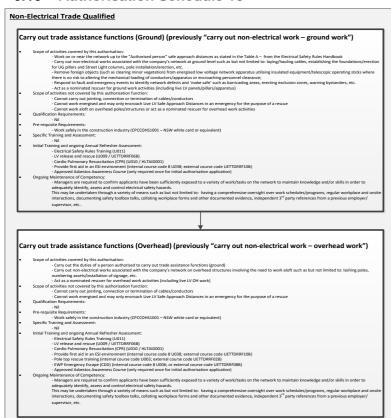
- Managers are required to confirm applicants have been sufficiently exposed to a variety of work/tasks on the network to maintain knowledge and/or skills in order to adequately identify, assess and control electrical safety hazards.

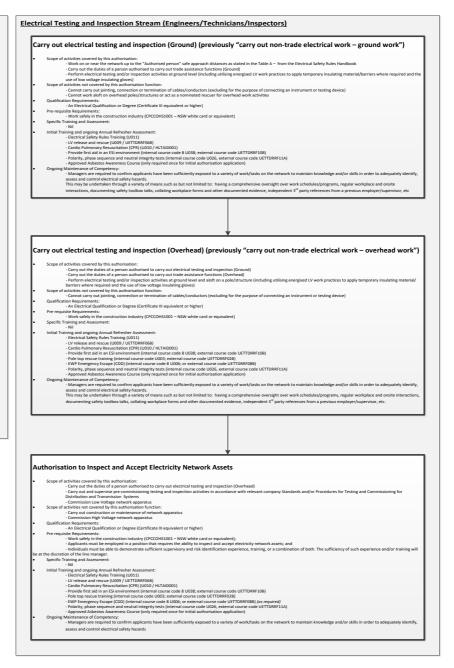
This may be undertaken through a variety of means such as but not limited to: having a comprehensive oversight over work schedules/ programs, regular workplace and onsite interactions, documenting safety toolbox talks, collating workplace forms and other

documented evidence, independent 3rd party references from a previous employer/supervisor, etc.



6.13 Authorisation Schedule 10







Construct and Maintain Distribution Substation Equipment and Connection Work Soap of activities covered by the authorization: Note of the control of the c

Construct and maintain UG mains - Distribution - Soape of arthrites covered by this authorization: - Verific on a ran art or entered, up to the "Anthorized person" aris approach distances as stated in the "Table A — from the Electrical Safery Rules Nandbook in the "Anthorized person" and statement of the "Anthorized person" and "Anthorized person"

Construct and maintain UG mains - Transmission Sop of attributes covered by the authorisation: Carry out deaths plant parameters and the construct and maintain UG Mains - Distribution - Carry out called pointing and termination was the overhead transmission structures carrying voltages up to and including 1120V Sopp of attributes covered by the submination functions: Carry out called pointing and termination was the overhead transmission structures carrying voltages up to and including 1120V Sopp of attributes covered by the submination for mains Carry of the control of mains and the mains Called Control of the control o

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Construct and maintain OH mains - Distribution

• Scope of stabilities covered by this authorisation:

- Work on or near the retain to a your stabilities of the stab
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Co	nstruct and maintain OH Mains - Transmission
ŀ	Scope of activities covered by this authorisation: - Carry out the duties of a person authorised to Construct and maintain OH Mains - Distribution
ŀ	 Construct and maintain OH Transmission mains and apparatus on overhead transmission structures carrying voltages up to and including 132kV Scope of activities not covered by this authorisation function: Canada consideration and maintain IER mains
	- Cannot carry out end worked all linework practices (Low Voltage Live Linework) - Cannot carry out work on steel lattice transmission towers - Cannot carry out work on steel lattice transmission towers
ŀ	Qualification Requirements:
	 Certificate III in ES – Power Systems – Distribution Overhead (or equivalent); or Certificate III in ES – Power Systems – Distribution Cable Jointing (or equivalent) (with relevant competencies required to be eligible for a statement of attainment in Distribution overhead); or Craft rectificate in Linework
	Pre-requisite Requirements:
	 Work safely in the construction industry (CPCCOHS1001 – NSW white card or equivalent)
•	Specific Training and Assessment: NII
	Initial Training and ongoing Annual Refresher Assessment:
	- Electrical Safety Rules Training (U011)
	- LV release and rescue (U009 / UETTDRRF068)
	- Cardio Pulmonary Resuscitation (CPR) (U010 / HLTAID001)
1	 Provide first aid in an ESI environment (internal course code 8 U038; external course code UETTDRRF10B)
	 Pole top rescue training (internal course code U003; external course code UETTDRRF02B)
	EWP Emergency Escape (CDD) (internal course code 8 U006; or external course code UETTDRRF08B)
	 Polarity, phase sequence and neutral integrity tests (internal course code U026, external course code UETDRRF11A)
	- Approved Askestos Awareness Course Probationary Period:
•	Proparionary Person: - Managers confirm applicants gain sufficient exposure to transmission overhead activities ranging in type and complexity under the direct supervision of a person authorised as a Lineworker
	 managers commit against span sometime exposure to transmission overness accordes ranging in type and competing other three concerts on a person and control sectors as a cineworker (Transmission) in order to develop the necessary technical knowledge / skill for adequately identify, assess and control electrical safety hazards. (Progression from the probationary period to
	(Traininstant) in order to develop the increasing vicinitian information of properties of the increasing vicinitian information in the increasing vicinitian vicinitian in the increasing vicinitian vicin
	Onsoins Maintenance of Competency:

This may be undertaken through a variety of means such as but not limited to: having a comprehensive oversight over work schedules/programs, regular workplace and onsite in

enting safety toolbox talks, collating workplace forms and other documented evidence, independent 3rd party references from a previous em

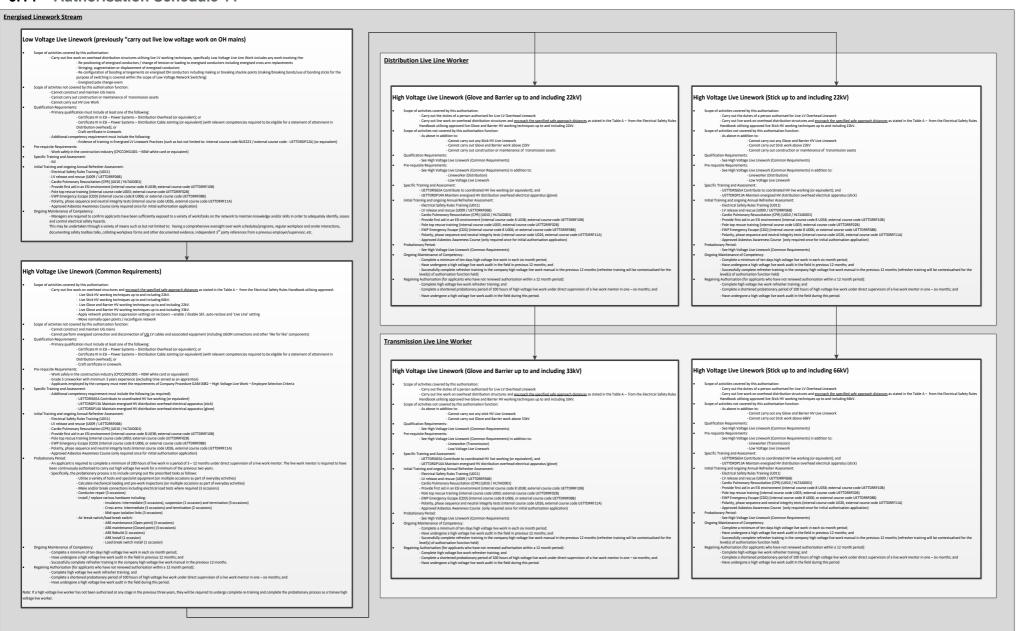
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Construct and maintain OH Mains — Transmission Towers

Sopp of atthities covered by this adhorisation:

- Carry out the direct of a person substanced is Construct and maintain OH Mains - Transmission
- Carry out the direct of a person substanced is Construct and maintain OH Mains - Transmission
- Carridor the very and advanced communication interest and the state towers carrying wohapes up to and including 132xV.
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6.14 Authorisation Schedule 11





7.0 FREQUENTLY ASKED QUESTIONS

Do I need to be authorised to work on the Endeavour Energy network?

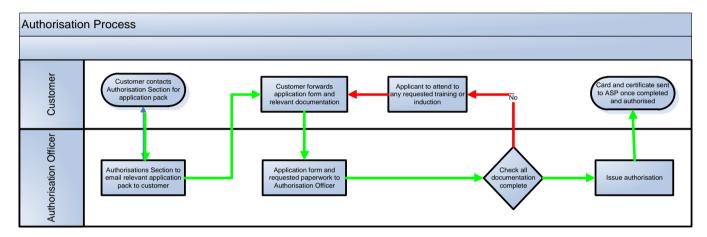
Yes, unless you are under supervision. All people wishing to work on or near the Endeavour Energy electricity network without authorised supervision will be appropriately authorised, once they have met the competency requirements that are requested for each individual function.

Can anyone be authorised to work on the Endeavour Energy network?

You must be either working for an Accredited Service Provider, Contract Service Provider, or employee of Endeavour Energy to be authorised. People will only be authorised if they are employed by a company that has a legitimate need to employ authorised persons and the necessary safety management systems for the work activities to be carried out.

How do I get authorised?

Authorisations are processed in accordance with Endeavour Energy's *Company Procedure GAM 0018 Authorisations Process Management*. For further details on how to become authorised contact authorisations@endeavourenergy.com.au



What is an Authorised Person (AUP)?

A person with technical knowledge or sufficient experience who has been approved, or who has the delegated authority to act on behalf of Endeavour Energy, to perform the duty concerned.

What is an Accredited Service Provider (ASP)?

A company or individual accredited by the NSW Department of Planning & Environment to undertake contestable service work as defined by the Scheme for Accreditation of Service Providers.

What is a Contract Service Provider (CSP)?

A corporation, company or individual who is engaged to do work for Endeavour Energy.

Do I need to renew my accreditation that is given to me by the NSW Department of Planning & Environment?

Your accreditation must be renewed annually. If your accreditation has expired and is not renewed, any authorisations that have been issued under the accreditation will be suspended.

Do you accept other safety rules for an initial authorisation?

No. Electrical Safety Rules for other companies, although similar, are not the same as Endeavour Energy's. All people required to work on or near the network must demonstrate an understanding of the Endeavour Energy's Electrical Safety Rules.

What is a Registered Training Organisation?

Training organisations that have been registered in accordance with the Australian Recognition Framework to provide Vocation Education & Training (VET) Services.

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What is NAAS?

NAAS is short for Network Access Authorisation System. This is the corporate database used to store records of people's authorisation to work on the network.

What is contestable works?

Under the *Electricity Supply Act 1995*, customers are required to fund certain works which are required to enable new or increased capacity connection to the electricity network. These works are contestable and the customer chooses a service provider to carry out these works. Contestability may also be extended to other capital works requested by and funded by individuals or organisations to suit the site developments or required as a result of damage caused by others. Further info:

http://www.resourcesandenergy.nsw.gov.au/energy-supply-industry/pipelines-electricity-gas-networks/network-connections/contestable-works

What is the authorisations renewal period?

The period of time from one month prior to an authorisation anniversary date to one month after an authorisation anniversary date. If you complete your training outside this window, your anniversary date will be moved to your training date.

What does it mean if my authorisation has been suspended?

If you receive a suspension letter, you are not permitted to work on the Endeavour Energy network until the suspension has been lifted.

What if I'm on leave when my renewal is due/What if I am injured and can't complete training? If you can't complete the required training and/or can't submit your paperwork before your expiry date (1 month after your anniversary date) your Authorisation will be temporarily suspended. If you are on leave, or you are on light duties due to injury, then you don't require access to the network, and therefore don't need to be authorised. As soon as you return to normal duties, attend the required training and submit your paperwork your Authorisation will be reinstated (note: your authorisation anniversary date may change).

What if I regularly do a certain type of work but my card does not display the relevant authorisation(s)?

This means you are not authorised and must stop performing that particular activity. Your manager/employer will need to apply for the necessary authorisation function to be added to your authorisations card and provide evidence of competency.

What if I don't have the necessary training/qualification requirements within the authorisation function but do the work?

As above, this means you are not authorised and must stop performing that particular activity. You will need to complete the necessary training requirements in order to become authorised. You cannot continue performing the task without direct supervision until you are authorised to do so.

If I am learning how to carry out a task covered by an authorisation function do I need to be authorised?

No. You will need to be under the appropriate level of supervision of a person authorised to carry out that task.

What if I have been carrying out a specific function for many years but have never had any formal training and/or don't hold the necessary qualification?

This means you are not authorised and must stop performing that particular activity. For Endeavour Energy employees, the Technical Training Delivery Branch may perform a range of workplace and/or theoretical assessments in order to determine any recognition or prior learning or current competency (RPL/RCC). This is a comprehensive process that takes a significant administrative resource to complete and may take weeks/months. For externals, RTOs may be able to facilitate a similar RPL or RCC process or alternatively provide the required training.

What if I believe I am competent to carry out a task though my manager does not and won't attest to my competence?

This means you are not authorised and must stop performing that particular activity. Line management ultimately hold the duty and associated responsibilities to ensure workers are competent to carry out specific tasks.

What if I have the necessary qualifications/skills to hold an authorisation though my manager does not want me to hold it?

This means you are not authorised and must stop performing that particular activity. Line management ultimately hold the duty and associated responsibilities to ensure workers are competent to carry out specific tasks. It is at the discretion of a manager to recognise the existing competence of workers to hold a particular authorisation function.

If I lose my authorisation does that mean I lose my qualification?

No. Qualifications and training, where a statement of attainment has been issued, do not expire. The reasoning behind losing an authorisation is related to familiarity with the work activities. The basic philosophy is that if you don't continually use a skill you lose it. Authorisation protects against this happening, particularly with high risk activities.

What happens if I hold an authorisation but have doubts about my own ability?

The first step is to raise this with your supervisor. There are a few options such as additional training, pairing with a mentor to improve particular skills or alternatively, failing this, your authorisation function will be taken away.

Are there authorisation fees for Accredited Service Providers?

There is an Australian Energy Regulator (AER) approved authorisation fee which will be invoiced to the Accredited Service Provider upon authorisation approval. Please note there is a fee for all new applications, and renewal applications. All fees include GST. Please contact the Authorisation Section for the amount, as fees are increased on the 1st July each year in accordance with the AER determination. Contact: authorisations@endeavourenergy.com.au

How do I obtain sealing pliers?

Endeavour Energy will be moving away from individual identification sealing pliers for new authorised personnel from 2 October 2017 and as a result, will no longer be issuing sealing pliers.

Existing authorised personnel can continue to seal switchboard equipment using their existing sealing pliers and seals in a transition period of an undefined timeframe until existing stock are exhausted.

New authorised personnel are required to obtain Endeavour Energy "Green" Roto Seals. The seals have an EE prefix and a wire rotate to secure to the equipment.

ASPs are required to purchase the seals directly from Harcor. As part of the order please request stock code SS30208 and provide the ASP Accreditation number provided by the Department of Planning & Environment. Please take note that they come in packs of 250.

Notes:

- Sealing of service and metering equipment is required in accordance with the Service and Installation Rules of NSW.
- For authorised personnel working on multiple NSW Network Operator networks, there may still be a requirement from other Network Operators to carry on with the practice of using sealing pliers.

Again, for existing authorised personnel with sealing pliers already issued, this practice may continue.



Harcor Australia

Unit 3/1 Skyline Place Frenchs Forest, NSW 2086 Australia Tel: + 61 (0)2 9454 4200

E-mail: sales@harcor.com.au

What is 'Power of Choice' metering?

On 26 November 2015, the AEMC made a final rule that will open up competition in metering services and will give consumers more opportunities to access a wider range of services.

The new arrangements, which will commence on 1 December 2017, have required changes to the National Electricity Rules (NER) and the National Electricity Retail Rules (NERR). The final rule changes who has overall responsibility for the provision of metering services by providing for the role and responsibilities of the Responsible Person to be performed by a new type of Registered Participant - a Metering Coordinator. Any person can become a Metering Coordinator subject to satisfying certain registration requirements.

Retailers are required to appoint the Metering Coordinator for their retail customers, except where a party has appointed its own Metering Coordinator.

More information: http://www.aemc.gov.au/Major-Pages/Power-of-choice

What happens with the current process?

From 1 December 2017 ASPs are not permitted to install basic meters (Type 5 & 6).

Bulk Limit on Meter Issue:

- As per the current process, all metering/relay equipment issued to ASPs should be installed within 30 days of issue.
- ASPs are reminded to deplete their stock before 30 November to avoid unnecessary cost.
 - o Endeavour Energy will accept and credit returned meters and relays up to 30 Sep 2017.
 - Equipment that remains in ASP's stock following 30 September will be the responsibility
 of the ASP and will not be accepted back or be credited by Endeavour Energy.
 - ASPs will be unable to use any meters or relays held by them after 30 November and should dispose of this equipment as they will be redundant.

Important Changes to Issuing of Load Control Devices:

 Endeavour Energy will NOT issue any Load Control Devices (relays and time switches) for green field or new Load Control requests at an existing site post 1 December 2017 (Load Control can be achieved via the smart meter).

Any eNOSW submitted after 30 November 2017 for a meter installed after this date will be investigated as they are illegal connections.

How will this change affect authorisation to 'Install Type 5 and 6 Metering'?

Endeavour Energy does not have a requirement for a metering provider to be authorised to remove basic metering (Type 5 & 6) when replacing with advanced metering (Type 1-4) as any safety issues are managed through the Office of Fair Trading & and Retailer.

When a type 5 or 6 meter is removed as part of a service upgrade the final reading must be submitted on the eNOSW.

8.0 CONTACT INFORMATION

Enquiries:

- For authorisation enquires regarding applications, processing, etc., please contact: authorisations@endeavourenergy.com.au
- For Endeavour Energy Electrical Safety Rules or general electrical safety advice, please contact: Electrical.Safety@endeavourenergy.com.au
- For Training Delivery enquiries, please contact: technical.training@endeavourenergy.com.au
- For technical enquiries, please contact: inspection@endeavourenergy.com.au
- For NOSW app enquiries, please contact: noswapp@endeavourenergy.com.au

Other useful links:

- Endeavour Energy Accredited Service Provider Homepage
- **Endeavour Energy Safety Resource Library**
- Accredited Service Provider (ASP) Scheme and contestable works
- Service and Installation Rules of New South Wales
- **Electricity Industry Safety Steering Committee Guidelines**
- **Australian Government Asbestos Information**
- Safe Work NSW Work Near Overhead Powerlines Code of Practice 2006
- Safe Work NSW Work Near Underground Assets Guide 2007



