# ISSC Guide 39 Training of personnel working on or near electricity networks

June 2025

## Contributions

In the development of this guide, discussions were held with the following parties:

#### **David Britten**

In memory of David Britten, a passionate advocate for training in the electricity supply industry for many years. David generously gave his time to improve safety for network personnel through better training practices and contributed to the creation of this Guide.

#### Network operators

Ausgrid

**Endeavour Energy** 

Essential Energy

**Sydney Trains** 

Metro Trains

**Transgrid** 

NSW Utilities & Electrotechnology Industry Training Advisory Body (ITAB)

#### Regulator

NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW)

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The guide assumes that the user will have a certain minimum level of technical qualifications or experience. The guide is not intended for use by untrained or unqualified people and anyone in that category using the guide does so at their own risk.

This guide has not been designed, and is not sufficient, to ensure compliance with all the relevant statutes and regulations such as occupational health and safety laws. Users must satisfy themselves as to the requirements of all relevant laws.

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## Purpose

This publication specifies personnel training requirements to be included in network operator Electrical Network Safety Management Systems (ENSMS) for persons working on, near or in the vicinity of electricity networks in NSW.

The guide identifies the competency requirements and the ISSC approved training required to secure safe work practices for personnel who work on or near electricity networks. It provides a model and a basis for NSW Network Operators to specify training requirements for inclusion in ENSMS.

## Revision

It updates information in previous NSW Electricity Association 1999 publication EA18 Guide to the Training of Personnel Working on or near Electricity Works and identifies competency standards approved by the NSW ISSC for the purposes of the relevant standards and codes.

## Regulatory basis

NSW Electricity Network Operators are required to have a safety management system in place in accordance with AS5577 - Electricity network safety management systems.

Energy Networks Australia (ENA) document ENA Doc 001 - National Electricity Network Safety Code and ENA Doc 003 – National Guidelines for Safe Access to Electrical and Mechanical Apparatus provide specific information and guidance to network operators to meet the requirements of AS5577 for the safety of persons working on or near electricity networks.

This document also lists additional guidance documents and standards for network operators regarding specific components of their worker safety system (e.g. access, PPE).

The NSW WHS Act 2011 and WHS Regulation 2017 require a Person Conducting a Business or Undertaking (PCBU) to provide 'any information, training, instruction or supervision that is necessary to protect all persons from risks to their health and safety ...' as part of their primary duty of care.

# **Principles**

Consistent with ENA/AS5577 guidance, the principles identified below are based on the relevant components of the National Training Package for the Electricity Supply Industry – Transmission, Distribution, & Rail Sector (UET).

The following guiding principles apply to all the information in this document:

- Superseded or superseding qualifications and units of competency to the those listed in this document are accepted.
- Network operator safety rules, work instructions and safety procedures relevant to the task must also be complied with.
- Network operators may choose alternative training to the national training package requirements listed in this guide. The training shall be consistent with the responsibilities described in ENA Doc 001.
- This Guide does not apply retrospectively to workers currently authorised in the Electricity Supply Industry whose training may predate current national training package requirements.
- Training requirements shall be identified in the network operator's AS5577 Electricity network safety management systems compliant training matrix.
- Authorisations must be relevant to the work undertaken, and accepted authorisation pathways include, but are not limited to:
  - Certificate of Proficiency
  - Craft Certificates
  - Trade licenses
  - Enterprise training and/or enterprise-specific authorisations demonstrating current competency (within the last 24 months).
- General Construction Induction Training Card (NSW issue or equivalent) is a mandatory requirement (e.g. CPCWHS1001 - Prepare to work safely in the construction industry).
- Any mandatory licenses specified by SafeWork NSW relevant to the nature of the work must be complied with.
- Accreditation and registration requirements in relation to the NSW Accredited Service Provider (ASP) scheme are not captured in this document.
- Network operators' authorisation requirements in relation to the ASP scheme are addressed in individual network standards.

## **Definitions**

Accredited Service Provider (ASP): a person who provides contestable network services in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014.

**ASQA:** Australian Skills Quality Authority

Authorised person: A person with technical knowledge or sufficient experience who has been approved or has the delegated authority to act on behalf of the Network Operator to perform the duty concerned.

Certificate of proficiency: A Certificate that shows a person is adequately trained to work in a trade.

Close Approach Vegetation Control (CAVC): Close Approach Vegetation Control is the term used to describe vegetation control works undertaken on vegetation that is within the vegetation clearance distances specified.

Competency: As specified in ASQA's Glossary of terms asqa.gov.au/glossary.

Distribution Network Service Provider (DNSP): Entities that build, maintain and operate the distribution networks.

Electrical Network Safety Management Systems (ENSMS): a safety management system as defined in the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW).

Energy Networks Association (ENA): The national industry body representing Australia's electricity transmission and distribution and gas distribution networks.

In the vicinity of: A situation where it is likely that a person will, either directly, or through any conducting medium, come within the relevant safe approach distance for an ordinary person, but unlikely to come within the relevant safe approach distance for an authorised person.

**Network operator:** The entity that is responsible for the safe and reliable operation of an electricity distribution supply network in NSW, or its authorised representative. The network operator may or may not be the owner of the electricity assets but will have legal responsibility for their safe operation in accordance with the Electricity Supply (Safety and Network Management) Regulation 2014 (NSW) and other relevant legislation. Refer to ISSC3 2016. In other words, the owner, controller or operator of an electricity network.

On or 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 for authorised persons.

**Statement of attainment:** As specified in ASQA's Glossary of terms.

Unit of competency (UoC): As specified in ASQA's Glossary of terms.

Unrestricted electrician's licence: A licence which authorises a person to perform electrical work as defined by the Electrical Regulatory Authorities Council (ERAC).

## **Network Construction and Maintenance**

#### **Substation Construction and Maintenance**

#### Pathway 1:

UET40522 - Certificate IV ESI Substations

#### Pathway 2:

- Certificate of proficiency in Electrotechnology Electrician
- Enterprise training and assessment on substation construction and maintenance that is equivalent to the Pathway 1 qualification.

#### Pathway 3:

- Unrestricted Electrician's Licence or equivalent issued in an Australian state or territory
- Enterprise training and assessment on substation construction and maintenance that is equivalent to the Pathway 1 qualification.

- HLTAID009 Provide cardiopulmonary resuscitation
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRMP007 Perform rescue from a live LV panel
- UETDRMP008 Perform rescue from switchyard structures
- UETDRMP010 Provide first aid in an ESI environment.
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus

#### Protection and/or Control Technician

#### Pathway 1:

• UET60222 – Advanced Diploma of ESI – Power Systems with Protection or Protection and Metering specialisation

#### Pathway 2:

 Professional Engineer with the Institution of Engineers Australia, National Engineering Registration (NER) in the Electrical area of practice.

#### Pathway 3:

 Engineering Technologist or Associate with the Institute of Engineers Australia in the Electrical area of practice.

#### Pathway 4:

- Certificate of proficiency in Electrotechnology Electrician
- Enterprise training and assessment on protection systems that is equivalent to the Pathway 1 qualification.

#### Pathway 5:

- Unrestricted Electrician's Licence or equivalent issued in an Australian state or territory
- Enterprise training and assessment on protection systems that is equivalent to the Pathway 1 qualification.

- HLTAID009 Provide cardiopulmonary resuscitation
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP007 Perform rescue from a live LV panel
- UETDRMP008 Perform rescue from switchyard structures
- UETDRMP010 Provide first aid in an ESI environment.

## **Electrical Operating Work – Field Operator**

#### Pathway 1:

UET30621 – ESI Distribution Overhead

#### Pathway 2:

UET30821 – ESI Distribution Underground

#### Pathway 3:

UET30521 – ESI – Transmission Overhead

#### Pathway 4:

• UET30721 - ESI - Rail Traction

#### Pathway 5:

Certificate of proficiency in Electrotechnology Electrician

#### Pathway 6:

Unrestricted Electrician's Licence or equivalent issued in an Australian state or territory.

- HLTAID009 Provide cardiopulmonary resuscitation
- UETDRIS017 Perform high voltage field switching operation to a given schedule
- UETDRIS018 Perform low voltage field switching operation to a given schedule
- UETDRIS022 Coordinate permit procedures
- UETDRIS023 Develop and validate high voltage distribution switching programs
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP007 Perform rescue from a live LV panel
- UETDRMP010 Provide first aid in an ESI environment
- UETDRRT013 Perform rail traction switching operations to a given schedule
- UETDRSB001 Perform substation switching operations to a given schedule
- UETDRSO016 Develop and validate low voltage switching programs

## **Electrical Operating Work - Control Room**

#### Pathway 1:

• UET60222 - Advanced Diploma of ESI - Power Systems with specialisation in System **Operations Distribution** 

#### Pathway 2:

• UET60222 – Advanced Diploma of ESI – Power Systems with specialisation in System **Operations Transmission** 

#### Pathway 3:

- Certificate of proficiency in Electrotechnology Electrician
- Enterprise training and assessment on system operations that is equivalent to Pathway 1 or 2 qualifications.

#### Pathway 4:

- Unrestricted Electrician's Licence or equivalent issued in an Australian state or territory
- Enterprise training and assessment on system operations that is equivalent to Pathway 1 or 2 qualifications.

#### Additional competencies that may be required by network operators relevant to the work:

• UETDRMP002 - ESI safety rules for work on, near or in the vicinity of electrical apparatus

# **Network Construction and Maintenance** (Overhead)

## **Public Lighting Work**

#### Pathway 1:

- UET30621 ESI Distribution Overhead
- UETDRMP011 Testing of connections to low voltage electricity networks

#### Pathway 2:

- UET30821 ESI Distribution Underground
- UETDRMP011 Testing of connections to low voltage electricity networks

#### Pathway 3:

- UET30921 Certificate III in ESI Very Remote Community Utilities
- UETDRMP011 Testing of connections to low voltage electricity networks

#### Pathway 4:

- Certificate of proficiency in Electrotechnology Electrician
- UETDRMP011 Testing of connections to low voltage electricity networks

#### Pathway 5:

- Unrestricted Electrician's Licence or equivalent issued in an Australian state or territory
- UETDRMP011 Testing of connections to low voltage electricity networks

- HLTAID009 Provide cardiopulmonary resuscitation
- RIIWHS204E Work safely at heights
- TLILIC0005 Licence to operate a boom-type elevating work platform (boom length 11 metres or more)
- UETDRDU007 Install and maintain underground public lighting
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRIS013 Install and maintain public lighting systems
- UETDRMP001 Apply access authority procedures to work on or near electrical
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP004 Perform elevated work platform-controlled descent escape
- UETDRMP005 Perform elevated work platform rescue
- UETDRMP006 Perform pole top rescue
- UETDRMP007 Perform rescue from a live LV panel
- UETDRMP010 Provide first aid in an ESI environment

#### LV Overhead Services

#### Pathway 1:

- UET30621 Certificate III in ESI Distribution Overhead
- UETDRMP011 Testing of connections to low voltage electricity networks

#### Pathway 2:

A former authorised lineworker with an Australian electricity network operator and can satisfy the network operator that they meet all the following requirements:

- They hold a linework certification (e.g. craft certificate).
- They were authorised by an Australian electricity distributor to perform linework duties in a period no more than 24 months prior to the date of application (this must be supported by evidence of authorisation by the electricity distributor).
- They have demonstrated lineworker experience on an overhead electricity distribution system relevant to network requirements.
- UETDRMP011 Testing of connections to low voltage electricity networks

#### Pathway 3:

- Certificate of proficiency in Electrotechnology Electrician
- UETDRIS010 Install and maintain low voltage overhead service
- UETDRMP011 Testing of connections to low voltage electricity networks

#### Pathway 4:

- Unrestricted electrician's licence or equivalent issued in an Australian state or territory
- UETDRIS010 Install and maintain low voltage overhead services
- UETDRMP011 Testing of connections to low voltage electricity networks

- HLTAID009 Provide cardiopulmonary resuscitation
- RIIHAN301E Operate elevating work platform
- RIIWHS204E Work safely at heights
- TLILIC0005 Licence to operate a boom-type elevating work platform (boom length 11 metres or more)
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP004 Perform elevated work platform-controlled descent escape
- UETDRMP005 Perform elevated work platform rescue
- UETDRMP006 Perform pole top rescue
- UETDRMP007 Perform rescue from a live LV panel
- UETDRMP010 Provide first aid in an ESI environment

#### **Overhead Distribution Linework**

#### Pathway 1:

- UET30621 Certificate III in ESI Distribution Overhead
- UETDRMP011 Testing of connections to low voltage electricity networks

#### Pathway 2:

A former authorised lineworker with an Australian electricity network operator and can satisfy the network operator that they meet all the following requirements:

- They have obtained a lineworker certification (e.g. craft certificate).
- They were authorised by an Australian electricity distributor to perform linework duties in a period no more than 24 months prior to the date of application (this must be supported by evidence of authorisation by the electricity distributor).
- They have demonstrated lineworker experience on an overhead electricity distribution system relevant to network requirements.
- UETDRMP011 Testing of connections to low voltage electricity networks

- HLTAID009 Provide cardiopulmonary resuscitation
- RIIWHS204E Work safely at heights
- TLILIC0005 Licence to operate a boom-type elevating work platform (boom length 11 metres or more)
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP004 Perform elevated work platform-controlled descent escape
- UETDRMP005 Perform elevated work platform rescue
- UETDRMP006 Perform pole top rescue
- UETDRMP007 Perform rescue from a live LV panel
- UETDRMP010 Provide first aid in an ESI environment
- UETDRMP012 Working on energised low voltage overhead electrical apparatus

#### Overhead Distribution Linework – Live HV

#### Pathway 1:

- UET40422 Certificate IV in ESI Network Systems (Distribution High Voltage Live Line)
- UETDRD0003 Maintain energised high voltage distribution overhead electrical apparatus (glove and barrier)
- UETDRD0004 Maintain energised high voltage distribution overhead electrical apparatus (stick)
- UETDRIS020 Contribute to Coordinated High Voltage Live Work

(Subject to annual verification of competency and network authorisation)

#### Pathway 2:

- UET30621 Certificate III in ESI Distribution Overhead
- UETDRD0003 Maintain energised high voltage distribution overhead electrical apparatus (glove and barrier)
- UETDRD0004 Maintain energised high voltage distribution overhead electrical apparatus (stick)
- UETDRIS020 Contribute to Coordinated High Voltage Live Work

(Subject to annual verification of competency and network authorisation)

#### Pathway 3:

A person that meets all the following requirements:

- They have obtained a lineworker certification (e.g. craft certificate).
- They were authorised by an Australian electricity distributor to perform linework duties in a period no more than 24 months prior to the date of application (this must be supported by evidence of authorisation by the electricity distributor).
- They have demonstrated lineworker experience on an overhead electricity distribution system relevant to network requirements.
- UETDRD0003 Maintain energised high voltage distribution overhead electrical apparatus (glove and barrier)
- UETDRD0004 Maintain energised high voltage distribution overhead electrical apparatus (stick)
- UETDRIS020 Contribute to Coordinated High Voltage Live Work

(Subject to annual verification of competency and network authorisation)

- HLTAID009 Provide cardiopulmonary resuscitation
- RIIWHS204E Work safely at heights
- TLILIC0005 Licence to operate a boom-type elevating work platform (boom length 11 metres or more)
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus

- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP004 Perform elevated work platform-controlled descent escape
- UETDRMP005 Perform elevated work platform rescue
- UETDRMP006 Perform pole top rescue
- UETDRMP010 Provide first aid in an ESI environment

#### **Overhead Transmission Linework**

#### Pathway 1:

• UET30521 - Certificate III in ESI - Transmission Overhead

#### Pathway 2:

A person that meets all of the following requirements:

- They have obtained a lineworker certification (e.g. craft certificate).
- They were authorised by an Australian electricity distributor to perform linework duties in a period no more than 24 months prior to the date of application (this must be supported by evidence of authorisation by the electricity distributor).
- They have demonstrated lineworker experience on an overhead electricity transmission system relevant to network requirements.

- HLTAID009 Provide cardiopulmonary resuscitation
- RIIWHS204E Work safely at heights
- TLILIC0005 Licence to operate a boom-type elevating work platform (boom length 11 metres or more)
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP004 Perform elevated work platform-controlled descent escape
- UETDRMP005 Perform elevated work platform rescue
- UETDRMP006 Perform pole top rescue
- UETDRMP009 Perform tower rescue
- UETDRMP010 Provide first aid in an ESI environment

#### Overhead Transmission Linework – Live HV

#### Pathway 1:

- UET40422 Certificate IV in ESI Network Systems (Transmission Live Line)
- UETDRT0011 Maintain energised transmission lines using live work barehand techniques
- UETDRT0012 Maintain energised transmission lines using live work stick techniques
- UETDRIS020 Contribute to coordinated high voltage live work

(Subject to annual verification of competency and network authorisation)

#### Pathway 2:

- UET30521 Certificate III in ESI Transmission Overhead
- UETDRT0011 Maintain energised transmission lines using live work barehand techniques
- UETDRT0012 Maintain energised transmission lines using live work stick techniques
- UETDRIS020 Contribute to coordinated high voltage live work

(Subject to annual verification of competency and network authorisation)

#### Pathway 3:

A person that meets all the following requirements:

- They have obtained a lineworker certification (e.g. craft certificate).
- They were authorised by an Australian electricity distributor to perform linework duties in a period no more than 24 months prior to the date of application (this must be supported by evidence of authorisation by the electricity distributor).
- They have demonstrated lineworker experience on an overhead electricity transmission system relevant to network requirements.
- UETDRT0011 Maintain energised transmission lines using live work barehand techniques
- UETDRT0012 Maintain energised transmission lines using live work stick techniques
- UETDRIS020 Contribute to coordinated high voltage live work

(Subject to annual verification of competency and network authorisation)

- HLTAID009 Provide cardiopulmonary resuscitation
- RIIWHS204E Work safely at heights
- TLILIC0005 Licence to operate a boom-type elevating work platform (boom length 11 metres or more)
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRT0010 Maintain energised transmission lines using barehand techniques from a helicopter
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus

- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP004 Perform elevated work platform-controlled descent escape
- UETDRMP005 Perform elevated work platform rescue
- UETDRMP006 Perform pole top rescue
- UETDRMP009 Perform tower rescue
- UETDRMP010 Provide first aid in an ESI environment

## **Rail Traction Linework**

#### Pathway:

• UET30721 - Certificate III in ESI - Rail Traction

- HLTAID009 Provide cardiopulmonary resuscitation
- RIIWHS204E Work safely at heights
- TLILIC0005 Licence to operate a boom-type elevating work platform (boom length 11 metres or more)
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP004 Perform elevated work platform-controlled descent escape
- UETDRMP005 Perform elevated work platform rescue
- UETDRMP006 Perform pole top rescue
- UETDRMP010 Provide first aid in an ESI environment

### **Rail Traction Live Linework**

#### Pathwav:

- UET30721 Certificate III in ESI Rail Traction
- UETDRRT015 Maintain energised rail traction networks (Subject to annual verification of competency and network authorisation)

- HLTAID009 Provide cardiopulmonary resuscitation
- RIIWHS204E Work safely at heights
- TLILIC0005 Licence to operate a boom-type elevating work platform (boom length 11 metres or more)
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP004 Perform elevated work platform-controlled descent escape
- UETDRMP005 Perform elevated work platform rescue
- UETDRMP006 Perform pole top rescue
- UETDRMP010 Provide first aid in an ESI environment

# **Network Construction and Maintenance** (Underground)

## **LV Underground Service**

#### Pathway 1:

- UET30821 Certificate III in ESI Distribution Underground
- UETDRMP011 Testing of connections to low voltage electricity networks

#### Pathway 2:

A former authorised cable jointer with an Australian electricity network operator and can satisfy the network operator that they meet all of the following requirements:

- They hold a cable jointer certification (e.g. craft certificate).
- They were authorised by an Australian electricity distributor to perform cable jointer duties in a period no more than 24 months prior to the date of application (this must be supported by evidence of authorisation by the electricity distributor).
- They have demonstrated cable jointer experience on an underground electricity distribution system relevant to network requirements.
- UETDRMP011 Testing of connections to low voltage electricity networks

#### Pathway 3:

- Certificate of proficiency in Electrotechnology Electrician
- UETDRIS011 Install and maintain low voltage underground services
- UETDRMP011 Testing of connections to low voltage electricity networks

#### Pathway 4:

- Unrestricted Electrician's Licence or equivalent issued in an Australian state or territory
- UETDRIS011 Install and maintain low voltage underground services
- UETDRMP011 Testing of connections to low voltage electricity networks

- HLTAID009 Provide cardiopulmonary resuscitation
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP007 Perform rescue from a live LV panel
- UETDRMP010 Provide first aid in an ESI environment

## **Distribution Cable Jointing**

#### Pathway 1:

UET30821 – Certificate III in ESI – Distribution Underground

#### Pathway 2:

A former authorised cable jointer with an Australian electricity network operator and can satisfy the network operator that they meet all of the following requirements:

- They hold a cable jointer certification (e.g. craft certificate).
- They were authorised by an Australian electricity distributor to perform cable jointer duties in a period no more than 24 months prior to the date of application (this must be supported by evidence of authorisation by the electricity distributor).
- They have demonstrated cable jointer experience on an underground electricity distribution system relevant to network requirements.

#### Pathway 3:

Certificate of proficiency in Electrotechnology Electrician

#### Pathway 4:

Unrestricted Electrician's Licence or equivalent issued in an Australian state or territory

- HLTAID009 Provide cardiopulmonary resuscitation
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRDU010 Joint, terminate and maintain energised low voltage underground paper insulated cable
- UETDRDU011 Joint, terminate and maintain energised low voltage underground polymeric cable
- UETDRDU012 Joint, terminate and maintain high voltage underground paper insulated cable
- UETDRDU013 Joint, terminate and maintain high voltage underground polymeric cable
- UETDRDU014 Joint, terminate and maintain low voltage underground paper insulated cable
- UETDRDU015 Joint, terminate and maintain low voltage underground polymeric cable
- UETDRDU019 Transition joint high voltage paper insulated cable to high voltage polymeric cable
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP003 Perform cable pit/trench/excavation rescue
- UETDRMP007 Perform rescue from a live LV panel
- UETDRMP010 Provide first aid in an ESI environment

### **Transmission Cable Jointing**

#### Pathwav:

UET30821 – Certificate III in ESI – Distribution Underground

#### Additional competencies that may be required by network operators relevant to the work:

- HLTAID009 Provide cardiopulmonary resuscitation
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRDU010 Joint, terminate and maintain energised low voltage underground paper insulated cable
- UETDRDU011 Joint, terminate and maintain energised low voltage underground polymeric cable
- UETDRDU012 Joint, terminate and maintain high voltage underground paper insulated
- UETDRDU013 Joint, terminate and maintain high voltage underground polymeric cable
- UETDRDU014 Joint, terminate and maintain low voltage underground paper insulated cable
- UETDRDU015 Joint, terminate and maintain low voltage underground polymeric cable
- UETDRDU019 Transition joint high voltage paper insulated cable to high voltage polymeric cable
- UETDRDU021 Joint, terminate and maintain underground polymeric cable 33kV and
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP003 Perform cable pit/trench/excavation rescue
- UETDRMP007 Perform rescue from a live LV panel
- UETDRMP010 Provide first aid in an ESI environment

Note: In addition to the above requirements, jointing suppliers/manufacturers may require specific product training (non-accredited) to comply with warranty terms and conditions.

# **Network Construction and Maintenance** (Non-Electrically Qualified)

## **Cable Laying - Underground Civil Works**

#### Pathway:

• UETDRDU016 - Lay power cables

#### Additional competencies that may be required by network operators relevant to the work:

- HLTAID009 Provide cardiopulmonary resuscitation
- RIICCM202E Identify, locate and protect underground services
- UETDREL005 Work safely in the vicinity of live electrical apparatus
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP003 Perform cable pit/trench/excavation rescue
- UETDRMP007 Perform rescue from a live LV panel
- UETDRMP010 Provide first aid in an ESI environment

## Overhead Powerline Vegetation Control - Groundline

#### Pathwav:

- UET20321 Certificate II in ESI Powerline Vegetation Control
- UETDRVC005 Control vegetation in the vicinity of live electrical apparatus from ground level
- UETDRVC007 Control vegetation using pruning techniques

- Enterprise specific Close Approach Vegetation Control (CAVC) training
- AHCCHM201 Apply chemicals under supervision
- AHCCHM304 Transport and store chemicals
- AHCCHM307 Prepare and apply chemicals to control pest, weeds and diseases
- HLTAID009 Provide cardiopulmonary resuscitation
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP010 Provide first aid in an ESI environment
- UETDRMP012 Working on energised low voltage overhead electrical apparatus
- UETDRVC002 Assess vegetation in an electricity supply industry environment
- UETDRVC011 Use specialised plant to cut vegetation above ground in the vicinity of live electrical apparatus

## **Overhead Powerline Vegetation Control – EWP**

#### Pathwav:

- UET20321 Certificate II in ESI Powerline Vegetation Control
- TLILIC0005 Licence to operate a boom-type elevating work platform (boom length 11 metres or more)
- UETDRMP004 Perform elevated work platform-controlled descent escape
- UETDRMP005 Perform elevated work platform rescue
- UETDRVC004 Control vegetation in the vicinity of live electrical apparatus from an elevated work platform
- UETDRVC007 Control vegetation using pruning techniques

- Enterprise specific, Close approach Vegetation Control (CAVC) training
- HLTAID009 Provide cardiopulmonary resuscitation
- RIIWHS204E Work safely at heights
- UETDRMP001 Apply access authority procedures to work on or near electrical
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP010 Provide first aid in an ESI environment
- UETDRMP012 Working on energised low voltage overhead electrical apparatus
- UETDRVC002 Assess vegetation in an electricity supply industry environment

## **Overhead Powerline Vegetation Control – Climber**

#### Pathwav:

- UET20321 Certificate II in ESI Powerline Vegetation Control
- AHCARB322 Access trees for inspection
- UETDRVC006 Control vegetation in the vicinity of live electrical apparatus from within the tree
- UETDRVC007 Control vegetation using pruning techniques
- UETDRVC010 Perform rescue from within a tree in the vicinity of live electrical apparatus

#### Additional competencies that may be required by network operators relevant to the work:

- Enterprise-specific Close approach Vegetation Control (CAVC) training
- HLTAID009 Provide cardiopulmonary resuscitation
- RIIWHS204E Work safely at heights
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP004 Perform elevated work platform-controlled descent escape
- UETDRMP005 Perform elevated work platform rescue
- UETDRMP010 Provide first aid in an ESI environment
- UETDRMP012 Working on energised low voltage overhead electrical apparatus
- UETDRVC002 Assess vegetation in an electricity supply industry environment

## **Vegetation Inspection**

#### Pathway:

- UET20321 Certificate II in ESI Powerline Vegetation Control
- UETDRVC002 Assess vegetation in an electricity supply industry environment
- AHC30824 Certificate III in Arboriculture
- AHCARB408 Perform ground-based tree defect evaluation

- HLTAID009 Provide cardiopulmonary resuscitation
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP010 Provide first aid in an ESI environment

## **Pole and Line Inspection**

#### Pathwav:

UET20621 – Certificate II in ESI – Asset Inspection and Testing

#### Additional competencies that may be required by network operators relevant to the work:

- AVIW0006 Perform infrastructure inspections using remote operated systems
- HLTAID009 Provide cardiopulmonary resuscitation
- UETDRAI004 Treat poles
- UETDRAI003 Perform minor maintenance on electricity network assets
- UETDRDU002 Inspect underground electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP007 Perform rescue from a live low voltage panel
- UETDRMP010 Provide first aid in an ESI environment

## **Work on Overhead Telecommunication Equipment**

Pathway: No formal pathway

- HLTAID009 Provide cardiopulmonary resuscitation
- RIIWHS204E Work safely at heights
- TLILIC0005 Licence to operate a boom-type elevating work platform (boom length 11 metres or more)
- UETDREL006 Work safely in the vicinity of live electrical apparatus as a non-electrical
- UETDRMP001 Apply access authority procedures to work on or near electrical apparatus
- UETDRMP002 ESI safety rules for work on, near or in the vicinity of electrical apparatus
- UETDRMP004 Perform elevated work platform-controlled descent escape
- UETDRMP005 Perform elevated work platform rescue
- UETDRMP006 Perform pole top rescue
- UETDRMP007 Perform rescue from a live low voltage panel
- UETDRMP010 Provide first aid in an ESI environment

# References

- AS5577 Electricity network safety management systems.
- ENA Doc 001 National Electricity Network Safety Code
- ENA Doc 003 National Guidelines for Safe Access to Electrical and Mechanical **Apparatus**
- Australian Skills Quality Authority (ASQA) Glossary of terms asqa.gov.au/glossary
- NSW WHS Act 2011 and WHS Regulation 2017 as published by training.gov.au
- Electricity Supply (Safety and Network Management) Regulation 2014
- Metro Trains Sydney Electrical authorisations for instructed and authorised person
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- Essential Energy CEOF7811 Network skills and training matrix
- Essential Energy CEOP8049 Network authorisation requirements
- Endeavour Energy Authorisations manual March 2025
- Ausgrid Ausgrid training matrix
- Transgrid Transgrid training matrix