



Australian Government

Assessment Requirements for UETDRSB006 Inspect substations

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the UET Transmission, Distribution and Rail Sector Training Package Release 4.0.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least two (2) separate occasions and include:

- applying relevant legislation, regulations, standards, codes of practice and organisational workplace requirements including:
 - work health and safety (WHS)/occupational health and safety (OHS) requirements
- identifying hazards, assessing risks, and identifying, applying and monitoring control measures
- obtaining, inspecting and using relevant personal protective equipment (PPE)
- dealing with an unplanned event on at least one (1) occasion
- obtaining and signing relevant work permits in accordance with workplace requirements
- completing relevant work records, reports and documentation
- assessing defects for level of safety or system impact and rectifying where appropriate
- reporting of defects in accordance with workplace requirements
- performing inspections on at least one (1) of the following substations:
 - transmission
 - distribution
 - traction
 - zone
 - terminal switching station
- performing substation inspections on the following:
 - plant and equipment
 - environmental systems
 - security systems
- performing substation inspection on at least ten (10) of the following:
 - circuit breaker
 - transformer
 - control system
 - operating mechanism cabinet
 - voltage transformer
 - current transformer

- surge arrestor
- capacitor bank
- static var compensator (SVC)
- synchronous condenser
- harmonic filter
- rectifier transformer
- rectifier
- inverter
- negative reactor (traction)
- energy dissipation resistor
- earthing resistor
- disconnect/isolator
- earth switch
- fault throwing switch
- a.c. and d.c. supply system
- control room environment
- testing equipment
- fire systems equipment
- oil spill equipment
- high voltage operating equipment
- portable earth.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- relevant legislation, regulations, standards, codes of practice and organisational workplace requirements including WHS/OHS requirements
- hazard, risk assessment and risk control requirements, including potential hazards
- types and application of PPE
- safe use of plant, tools and equipment
- application, purpose and types of permits
- events constituting an unplanned event or incident
- procedures for responding to an unplanned event or incident
- workplace records, reports and documentation
- operational manuals, system diagrams/plans and drawings
- assessment of defects for level of safety or system impact
- defect reports
- substations, including:
 - types

- layouts
- bus bar configurations
- types of electrical apparatus
- function and operating characteristics of various switchgear
- earthing systems
- voltage regulation
- types, characteristics and possible defects of:
 - plant and equipment
 - environmental systems
 - security systems
 - testing equipment
 - fire systems equipment
 - portable earths
 - high voltage operating equipment.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so.

Where this is not appropriate, assessment must occur in simulated conditions involving realistic and authentic activities that replicate operational workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- relevant and appropriate materials, tools, equipment and PPE currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>