



Australian Government

UETDRSO020 Operate SCADA equipment

Release: 1

UETDRSO020 Operate SCADA equipment

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.

Application

This unit includes the skills and knowledge required to operate supervisory control and data acquisition (SCADA) equipment in the electricity supply industry (ESI).

It includes setting limits, operational parameters, alarms and events, control schemes, and communication with relevant personnel.

It also includes switching programs, feedback, extracting network data, testing and commissioning, failover, and dealing with unplanned events.

The application of the skills and knowledge described in this unit may require a licence/registration to practice in the workplace.

Other conditions may also apply under state and territory legislative and regulatory licensing requirements which must be confirmed prior to commencing this unit.

Pre-requisite Unit

Not applicable.

Competency Field

System Operations

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to operate

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Legislation, regulations, standards, codes of practice and organisational workplace requirements for the

SCADA equipment	work to be done are reviewed and determined
1.2	System monitoring and control procedures are discussed with relevant personnel in accordance with workplace procedures
1.3	Operational parameters are determined in accordance with workplace requirements
1.4	Work roles and tasks are determined according to requirements and individual competencies
1.5	Work is prioritised and sequenced for completion in accordance with workplace requirements
1.6	Liaison and communication issues with others/authorised personnel, authorities and clients are resolved and activities coordinated to carry out work
1.7	Hazards are identified, risks assessed, and control measures identified and applied
2 Operate SCADA equipment	2.1 Legislation, regulations, standards, codes of practice and organisational workplace requirements for the work to be performed are applied and monitored
2.2	SCADA equipment is operated in accordance with workplace requirements
2.3	SCADA information accuracy is evaluated in accordance with workplace requirements
2.4	The effectiveness of operations is analysed for best outcomes in accordance with workplace requirements
2.5	Incidents or unplanned events are responded to in accordance with workplace requirements
3 Complete work and documentation	3.1 Completed work is checked for compliance against workplace requirements
3.2	Work records, reports and documentation are completed, and appropriate personnel notified in accordance with workplace requirements

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UET Transmission, Distribution and Rail Sector Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is not equivalent to UETTDRSO45 Operate and monitor system SCADA equipment.

Links

Companion Volume Implementation Guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>

Assessment Requirements for UETDRSO020 Operate SCADA equipment

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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
- dealing with an unplanned event on at least one (1) occasion
- completing relevant work records, reports and documentation
- performing on at least three (3) occasions all of the following:
 - determine operational parameters
 - interpret alarms, events and indicators
 - evaluate information accuracy
 - respond using available technology
 - communicate with relevant personnel
 - enable/disable control schemes
 - execute switching programs
 - analyse supervisory control and data acquisition (SCADA) feedback
- performing on at least two (2) occasions all of the following:
 - test and commission new SCADA interface
 - deal with an unplanned event
- demonstrating all of the following:
 - manage SCADA configuration
 - extract network data for analysis of network loading trends.

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:

- applying 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
- events constituting an unplanned event or incident
- procedures for responding to an unplanned event or incident
- workplace records, reports and documentation
- SCADA systems, including:
 - configuration and failover
 - features and applications
 - display functions and capabilities
 - SCADA point configuration
 - setting limits
 - alarm and event logging
 - control scheme parameters
 - trending data.

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 tools and SCADA equipment currently used in industry
- applicable documentation, including workplace requirements, relevant industry standards, equipment specifications, regulations, codes of practice and operation manuals.

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