



Australian Government

UETDRDS014 Prepare and manage detailed construction plans for electrical power system infrastructure

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 2.0.

Application

This unit covers the preparation of detailed plans to be used during the design phase and preparation of as-built drawings during the construction phase and utilised by network owners as technical reference materials to detail system infrastructure. It includes the use of computer-aided drafting (CAD) or other relevant drafting methods.

The application of the skills and knowledge described in this unit may require a licence/registration to practice in the workplace subject to regulations for undertaking of electrical work.

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

Pre-requisite Unit

UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace

UEENEEE104A Solve problems in d.c. circuits

UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications

UEENEEG101A Solve problems in electromagnetic devices and related circuits

UEENEEG102A Solve problems in low voltage a.c. circuits

UETDREL001 Apply environmental requirements

UETDREL005 Work safely in the vicinity of live electrical apparatus

UETDRIS005 Implement & monitor power system environmental & sustainable energy management policies & procedures

UETDRIS006 Implement and monitor the power system organisational WHS/OHS policies, procedures and programs

Competency Field

Design

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Plan for and coordinate the preparation and management of detailed construction plans for electrical system infrastructure

PERFORMANCE CRITERIA

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

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) practices/procedures, which may influence the preparation and management of detailed construction plans for electrical system infrastructure, are reviewed and determined
- 1.2** Purpose of the construction plans is established and expected outcomes of the work are confirmed with appropriate personnel
- 1.3** Established organisational procedures, policies and specifications for the construction plans are obtained or established with appropriate personnel
- 1.4** Work is prioritised and sequenced for the most efficient and effective outcome following consultation with others for completion within acceptable timeframes, to a quality standard and in accordance with established procedures
- 1.5** Risk control measures are identified, prioritised and evaluated against the work schedule
- 1.6** Relevant work permits are secured to coordinate the performance of work according to requirements and/or established procedures
- 1.7** Resources, including personnel, equipment, tools and personal protective equipment (PPE), required for the job are identified, scheduled and coordinated and confirmed safe and in technical working order
- 1.8** Liaison and communication issues with others/authorised personnel, authorities, clients and landowners are resolved and activities coordinated to carry out work

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| | 1.9 | Site is prepared according to the work schedule and to minimise risk and damage to property, commerce and individuals in accordance with established procedures |
| 2 Carry out and coordinate the preparation and management of detailed construction plans for electrical system infrastructure | 2.1 | WHS/OHS and sustainable energy principles, functionality and practices to reduce the incidence of accidents and minimise waste are incorporated into the project in accordance with requirements and/or established procedures |
| | 2.2 | System design decisions are made on the basis of safety and effective outcomes according to requirements and/or established procedures |
| | 2.3 | Mathematical models of the system are used to analyse the effectiveness of the finished project in accordance with requirements and established procedures |
| | 2.4 | Technical advice is given to potential hazards, safety risks and control measures so that monitoring and preventative action can be undertaken and/or appropriate authorities consulted, where necessary, in accordance with requirements and established procedures |
| | 2.5 | Essential knowledge and associated skills are applied to analyse specific data and compare it with compliance specifications to ensure completion of the project within an agreed timeframe according to requirements |
| | 2.6 | Solutions to non-routine problems are identified and actioned using acquired essential knowledge and associated skills according to requirements |
| | 2.7 | Quality of work is monitored against personal performance agreement and/or established organisational and professional standards |
| 3 Complete and coordinate the preparation and management of detailed construction plans for electrical system infrastructure | 3.1 | Final inspections of the construction plans are undertaken to ensure they comply with all requirements and include all specifications and documentations needed to complete the design brief |
| | 3.2 | Appropriate personnel are notified of completion and reports and/or completion documents are finalised |
| | 3.3 | Reports and/or completion documents are submitted to |

relevant personnel/organisations for approval and, where applicable, statutory or regulatory approval

- 3.4** Approved copies of construction plan documents are issued and records are updated in accordance with established procedures

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 equivalent to UETDRDS39 Prepare and manage detailed construction plans for electrical power system infrastructure.

Links

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