



Australian Government

UETDRRC008 Solve problems in low voltage electrical network circuits in a very remote community

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 involves the skills and knowledge required to solve problems in low voltage (LV) electrical network circuits in a very remote community in the electricity supply industry (ESI).

It includes establishing correct operation of single and multi-phase LV electrical network circuits and solving circuit problems as they apply to servicing, fault-finding and installation work function.

It also includes safe working practices, issues related to fault protection, power factor and multiple earthed neutral (MEN) systems and the use of voltage, current and resistance measuring devices to provide solutions to LV electrical network circuit problems derived from calculated and measured parameters.

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

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

UEECD0046 Solve problems in single path circuits

UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications

UETDREL001 Apply environmental requirements

UETDREL004 Operate plant and equipment in the vicinity of live electrical apparatus

UETDREL005 Work safely in the vicinity of live electrical apparatus

UETDRRC006 Perform low voltage electricity network switching in a very remote community

UETDRRC007 Solve problems in electrical network apparatus in a very remote community

Competency Field

Remote Community

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Prepare to solve problems in LV electrical network circuits

- 1.1** Legislation, regulations, standards, codes of practice and organisational workplace requirements for the work to be performed are referred to and confirmed
- 1.2** Work plan is obtained and confirmed in accordance with workplace requirements
- 1.3** Materials required for work are determined and obtained in accordance with work plan and workplace requirements
- 1.4** Plant, tools, equipment, and personal protective equipment (PPE) required for work are determined, obtained and confirmed in working order
- 1.5** Hazards are identified, risks assessed and control measures identified and applied
- 1.6** Work is prioritised and sequenced for completion in accordance with work plan and workplace requirements
- 1.7** Work permits are received and signed in accordance with workplace requirements
- 1.8** Worksite is prepared in accordance with the work plan and workplace requirements
- 1.9** Traffic management plan is confirmed as being in place in accordance with workplace requirements

2 Solve problems in LV electrical network circuits

- 2.1** Legislation, regulations, standards, codes of practice and organisational workplace requirements for the work to be performed are applied and monitored
- 2.2** Lifting, climbing, working at heights and the use of plant, tools, equipment and PPE are carried out in accordance with workplace requirements

- 2.3 Hazard control measures are monitored in accordance with workplace requirements
 - 2.4 Live testing or measuring requirements are determined in accordance with workplace requirements
 - 2.5 Electrical network circuits are confirmed as isolated and proved earthed/short circuited in accordance with workplace requirements
 - 2.6 Operating parameters of the network electrical circuits are verified in accordance with workplace requirements
 - 2.7 Established methodical processes are used to identify electrical network circuit problems from measured and calculated values in accordance with workplace requirements
 - 2.8 Electrical network circuit problems are solved without damage to apparatus or circuits to comply with workplace requirements
 - 2.9 Earthing/short circuiting equipment is removed, permit signed off and electrical network circuits re-energised in accordance with workplace requirements
 - 2.10 Electrical network circuits are tested to determine correct operation in accordance with workplace requirements
 - 2.11 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 the work plan and workplace requirements
 - 3.2 Worksite is rehabilitated, cleaned and made safe in accordance with workplace procedures
 - 3.3 Plant, tools and equipment are cleaned, checked and returned to storage in accordance with workplace requirements
 - 3.4 Surplus materials are returned to storage or disposed of in accordance with workplace requirements
 - 3.5 Incidents or unplanned events are reported in accordance with workplace requirements
 - 3.6 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 equivalent to UETTDRI33 Solve electrical problems in remote community network systems.

Links

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