



Australian Government

UEEEL0055 Overhaul and repair major switchgear and control gear

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to overhaul and repair switchgear and control gear rated in excess of 20 kiloamps (kA).

It includes planning and documenting the scope of service work required, arranging for the overhaul and repair to be carried out, verifying compliance of overhauled/repaired switchgear/control gear and completing the necessary service documentation.

The skills and knowledge described in this unit require a licence or permit to practice in the workplace where work is carried out on electrical installations which are designed to operate at voltages greater than 50 volt (V) alternating current (a.c.) or 120 V direct current (d.c.).

Competency development activities in this unit are subject to regulations directly related to licensing. Where a licence or permit to practice is not held, a relevant contract of training, such as an Australian Apprenticeship, may be required.

Additional and/or other conditions may apply in some jurisdictions subject to regulations related to electrical work. Practice in the workplace and during training is also subject to work health and safety (WHS)/occupational health and safety (OHS) regulations.

Pre-requisite Unit

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

UEECD0019 Fabricate, assemble and dismantle utilities industry components

UEECD0020 Fix and secure electrotechnology equipment

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

UEECD0043 Solve problems in direct current circuits

or

UEECD0044 Solve problems in multiple path circuits

UEECD0046 Solve problems in single path circuits

Competency Field

Electrical

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for overhaul/repair of switchgear/control gear

PERFORMANCE CRITERIA

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

- 1.1** WHS/OHS processes and workplace procedures for a given work area are identified and applied
- 1.2** Existing WHS/OHS risk control measures and workplace procedures in preparation for work are followed
- 1.3** Safety hazards that have not previously been identified are noted on job safety assessments, risks assessed and risk control measures implemented
- 1.4** Workplace instructions on the scope of overhaul and/or repair work are received and expected outcomes of work discussed with appropriate person/s
- 1.5** Appropriate person/s is consulted to ensure the work is coordinated effectively with others involved on the worksite
- 1.6** Switchgear/control gear service and repair documentation is read and applied
- 1.7** Sources of materials required for work are determined in accordance with workplace procedures
- 1.8** Tools, equipment and testing devices needed for work are obtained in accordance with workplace procedures and checked for correct operation and safety
- 2 Overhaul switchgear/control gear**
 - 2.1** WHS/OHS risk control measures and workplace procedures for carrying out repair work are followed

- 2.2 Need to inspect, test or measure live electrical work is determined in accordance with WHS/OHS requirements and workplace procedures
 - 2.3 Circuits/machines/plant are checked and isolated in accordance with WHS/OHS requirements and workplace procedures
 - 2.4 Switchgear and control gear are dismantled, parts tagged and stored to prevent loss or damage
 - 2.5 Serviceability of switchgear/control gear components is determined by measurement tests and inspections and results recorded in accordance with workplace procedures
 - 2.6 Materials/replacement parts required to complete repair work are sourced and obtained in accordance with workplace procedures
 - 2.7 Repairs are inspected and tested in accordance with workplace procedures
 - 2.8 Overhaul/repair specifications and work instructions are documented in accordance with workplace procedures
- 3 Document overhaul/repair work**
- 3.1 WHS/OHS work completion risk control measures and workplace procedures are followed
 - 3.2 Reusable, faulty or worn components are tagged and despatched for repair in accordance with workplace procedures
 - 3.3 Repair work is documented in accordance with workplace requirements, stating whether the switchgear/control gear complies with the overhaul specifications and relevant industry standards

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 UEE Electrotechnology Training Package Companion Volume Implementation Guide.

overhauling and repair majoring switchgear and control gear must include at least two types of the following switchgear and control gear:

- low voltage (LV) switchgear and control gear rated above 20 kA
- any high voltage (HV) switchgear and control gear

Unit Mapping Information

This unit replaces and is equivalent to UEENEEG129A Overhaul and repair major switchgear and controlgear.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>