



Australian Government

UEPMNT421 Conduct technical inspection of process plant and equipment

Release: 2

UEPMNT421 Conduct technical inspection of process plant and equipment

Modification History

Release 2. Minor release to update superseded pre-requisite units.

Release 1. This is the first release of this unit of competency in the UEP Generation Training Package.

Application

This unit involves the skills and knowledge required to conduct a technical inspection of process generation plant, equipment and associated infrastructure.

An inspection is an organised examination or formal evaluation of power generation plant and equipment, it includes verifying compliance with technical specifications, taking measurements and performing tests.

Competency in this unit requires the ability to prepare for an inspection of power generation plant, inspection of power generation plant, analysing inspection results and updating documentation. Individuals will, in general, work as a maintenance operative in a power generation facility.

Power generation maintenance personnel are typically trained and authorised to receive permits to work.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Note: Workplace practice

The application of the skills and knowledge described in this unit of competency may require a licence or training permit to practice in the workplace, where work is carried out on gas and electrical installations. Additional and/or other conditions may apply under state and territory legislative and regulatory licensing requirements.

Pre-requisite Unit

UEECD0019 Fabricate, assemble and dismantle utilities industry components

UEECD0020 Fix and secure electrotechnology equipment

UEECD0043 Solve problems in direct current circuits

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

UEEEL0003 Arrange circuits, control and protection for general electrical installations

UEEEL0011 Evaluate performance of low voltage electrical apparatus

UEEEL0014 Isolate, test and troubleshoot low voltage electrical circuits

UEEEL0020 Solve problems in low voltage A.C. circuits

UEEEL0021 Solve problems in magnetic and electromagnetic devices

UEEEL0023 Terminate cables, cords and accessories for low voltage circuits

UEEEL0024 Test and connect alternating current (a.c.) rotating machines

UEEEL0025 Test and connect transformers

UEPMNT351 Test and commission electrical equipment

Competency Field

Maintenance

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for inspection process plant

PERFORMANCE CRITERIA

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

- 1.1** Short term maintenance and operating history is identified and obtained from authorised personnel
- 1.2** Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations, legislative requirements, industry standards, codes of practice, manufacturers' specifications and workplace procedures are reviewed in preparation for work
- 1.3** Deviations from normal operational parameters of process plant, equipment and associated infrastructure are identified
- 1.4** Potential options for cause of deviations are established, in accordance with workplace procedures
- 1.5** Needs and outcomes of process plant inspections or testing are defined, in accordance with workplace procedures
- 1.6** Method sheets, check sheets and isolation instructions are obtained, in accordance with workplace procedures

- | | | |
|---------------------------------------|------------|--|
| | 1.7 | Technical procedures are reviewed and adapted, as required, in accordance with workplace procedures |
| 2 Inspect process plant | 2.1 | Process plant is correctly identified, in accordance with workplace procedures |
| | 2.2 | Process plant's operational status is identified, in accordance with workplace procedures |
| | 2.3 | Inspection work is carried out, in accordance with workplace procedures, legislative requirements and industry standards |
| | 2.4 | Inspection methods are followed, in accordance with workplace procedures |
| | 2.5 | Relevant documentation is completed, in accordance with workplace procedures |
| | 2.6 | Additional tests or inspections are identified, in accordance with workplace procedures |
| | 2.7 | Process plant and/or equipment is left in a safe condition, in accordance with workplace procedures |
| | 2.8 | Process plant and/or equipment availability is declared, in accordance with workplace procedures |
| | 2.9 | Specialist assistance is sought, in accordance with workplace procedures, during a technical inspection |
| 3 Analyse inspection results | 3.1 | Testing and inspection results are analysed |
| | 3.2 | Causes for deviations from normal operation are identified |
| 4 Prepare remedial action plan | 4.1 | Action plan is prepared for any required remedial action on process plant, equipment and associated infrastructure |
| | 4.2 | Remedial action is checked for implementation effectiveness, in accordance with workplace procedures |
| 5 Update documentation | 5.1 | Records and documentation is updated, in accordance with legislative requirements, industry standards and workplace procedures |
| | 5.2 | Testing and inspection results, including reports are forwarded to designated personnel |

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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPMNT421B Conduct technical inspection of process plant and equipment.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1715b9fa-e7bd-441c-bb8d-cf22c9c825a8>