

# Assessment Requirements for MEM10022 Commission and decommission high and low voltage equipment or installations

Release: 2

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## **Modification History**

Release 2. Minor adjustments to reflect ERAC requirements for electrician licensing and revision of Essential Performance Capabilities

Release 1. New unit

#### **Performance Evidence**

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting circuits, drawings, specifications, commissioning, decommissioning switching schedules and instructions relevant to the work to be undertaken
- preparing and following work plans associated with commissioning and decommissioning electrical equipment or installation in accordance with legislative and regulatory requirements, hazard and safety requirements
- complying with the Australian/New Zealand Wiring Rules and regulatory requirements for high voltage and low voltage electrical equipment and installations
- selecting the appropriate measuring and testing devices
- conducting briefing sessions to all personnel participating in or affected by the work
- preparing the site, including signage, barriers and warning devices
- commissioning electrical equipment or installation using a systems approach
- verifying the performance of the installed equipment/system to meet the design requirements through a series of tests/measurements
- making adjustments, where necessary, to ensure conformance with the specified design intent
- capturing and recording performance data of the whole installation as the baseline for future operation and maintenance
- decommissioning electrical equipment or installation
- shutting down and isolating electrical equipment sequentially in preparation for maintenance or repair using lock out and tag procedures and safe working practices
- seeking assistance from authorised personnel for site specific commissioning and decommissioning of electrical equipment and installations including the need for high voltage switching
- documenting completion of commissioning/decommissioning process in accordance with SOPs.

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### **Knowledge Evidence**

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- Australian/New Zealand Wiring Rules and regulatory requirements for high voltage and low voltage electrical installations
- industry personnel to be consulted for advice on commissioning or decommissioning procedures
- test and commissioning, including:
  - procedures required for a particular electrical equipment or installation
  - objectives to be achieved, including:
    - to verify proper functioning of the equipment/system after installation
    - to verify that the performance of the installed equipment/systems meet with the specified design intent through a series of tests and adjustments
    - to capture and record performance data of the whole installation as a baseline for future operation and maintenance
  - using a systems approach, including:
    - performance tests appropriate to equipment/installation to be commissioned
    - · measurements required to ensure conformance to specifications
    - adjustments to be made to meet specified design and operational requirements
    - the use of appropriate test equipment
- decommissioning of electrical equipment or installation, including:
  - procedures required for a particular electrical equipment or installation
  - a working knowledge of the electrical equipment or installation in order to sequentially shut down and isolate for the purposes of repair and maintenance including using lock out and tag procedures to enable safe removal of equipment/conductors
  - types of operational forms, access authorities, permits and requirements associated with high voltage switching
- reporting requirements relevant to the electrical equipment or installation being commissioned.

#### Assessment Conditions

- Assessors must:
  - have vocational competency in commissioning and decommissioning high and low voltage equipment or installations at least to the level being assessed with relevant industry knowledge and experience
  - satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* and comply with the *National Vocational Education and Training Regulator Act 2011* or equivalent legislation covering VET regulation in a non-referring State as the case requires.

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- Where possible assessment must occur in operational workplace situations. Where this is
  not possible or where personal safety or environmental damage are limiting factors,
  assessment must occur in a sufficiently rigorous simulated environment that reflects
  realistic operational workplace conditions. This must cover all aspects of workplace
  performance, including environment, task skills, task management skills, contingency
  management skills and job role environment skills.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications.
- 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.

#### Links

Companion Volume implementation guides are found in VETNet - <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2</a>

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