



**Australian Government**

# **Assessment Requirements for UEPOPL004 Licence to operate a steam turbine**

**Release: 1**

# Assessment Requirements for UEPOPL004 Licence to operate a steam turbine

## Modification History

Release 1. This is the first release of this unit of competency in the UEP Electricity Supply Industry - Generation Sector Training Package Release 2.0.

## Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions on at least one occasion and include:

- applying work health and safety (WHS)/occupational health and safety (OHS) regulations, including:
  - emergency procedures
  - risk control measures
  - safe working practices
- communicating effectively and working safely with others in the work area
- completing verification of problems and steam turbine equipment faults and demonstrating relevant response procedures
- complying with Commonwealth, state or territory regulations for the acquisition of a high-risk work (HRW) licence for steam turbine operation
- complying with organisational and site policies and procedures, including quality requirements and state or territory legislation applicable to workplace operations
- complying with WHS/OHS regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- controlling and monitoring any ancillary equipment connected or interfaced to the steam turbine recording accurately and maintaining information related to operation of a steam turbine
- establishing safe practices and procedures for starting, operating, shutting down and maintaining a steam turbine
- identifying hazards associated with the operation of the steam turbine and putting in place effective hazard controls for those hazards identified
- performing efficiently and safely when starting, operating, shutting down and maintaining a steam turbine
- starting up, monitoring and shutting down a steam turbine effectively which meets the definition of this licence class
- undertaking diagnostic and testing techniques as applied to steam turbines
- using relevant communication techniques with colleagues and others
- utilising relevant tools and equipment.

## Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- communication channels and protocols in the workplace
- confined space awareness and the limits for entry into a confined space
- environmental protection requirements relating to the disposal of waste material and storage of environmentally hazardous materials
- organisational and workplace standards, requirements, policies and procedures for starting, operating, shutting down and maintaining a steam turbine
- principles of heat transfer and thermodynamics
- procedures for the recording, reporting and maintenance of workplace records and information
- regulations, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements relevant to the full range of techniques for operating steam turbines
- routine problems encountered in the process and equipment and adjustments required for correction
- safety data sheets (SDS) and material handling methods
- steam turbine capabilities and components
- steam turbine fault-finding and problem-solving techniques
- steam turbine operations and operating techniques
- steam turbine safety devices and testing techniques
- steam turbine speed control equipment
- system components and interaction with other plant and equipment
- understanding of the hierarchy of hazard identification and control
- WHS/OHS requirements, including:
  - emergency procedures
  - risk control measures
  - safe working practices.

## Assessment Conditions

Assessments must be conducted by an assessor accredited for this HRW licence class in the Commonwealth, state or territory where the licence will be obtained (i.e. an assessor authorised by a Commonwealth, state or territory WHS/OHS regulator).

Assessment must occur in suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated suitable workplace operational situations that replicate workplace conditions.

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.

Assessment of performance must be undertaken in the workplace and/or under realistic

workplace conditions which reflect:

- performing tasks and activities within timelines that would be expected in a workplace
- standard and authorised work practices, safety requirements and environmental constraints
- using full scale equipment.

The use of simulators in the assessment of this unit of competency is acceptable.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools and equipment used in industry, including:
  - personal protective equipment (PPE) for performance assessment
  - appropriate safety equipment in safe condition
  - appropriate steam turbine and associated equipment in safe condition
  - communication equipment, as required
- applicable documentation, including workplace procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

## Links

Companion Volume implementation guides are found in VETNet -

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