



**Australian Government**

**Assessment Requirements for PPMEPG210  
Monitor and control power generation  
system**

**Release: 2**

# Assessment Requirements for PPMEPG210 Monitor and control power generation system

## Modification History

Release	Comments
Release 2	This version released with PPM Pulp and Paper Manufacturing Training Package Version 2.0.
Release 1	This version released with PPM Pulp and Paper Manufacturing Training Package Version 1.0.

## Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria of this unit. There must be evidence that the individual has:

- operated a power generation system at least twice in line with required enterprise intervals
- followed safe working practices when operating power generation system
- used electronic and other control systems to control equipment during operations
- communicated effectively, through written and verbal means, with others, in the work area when operating power generation system
- completed the following records for each of the above operational periods:
  - operating log
  - record of steam generation processes and maintenance requirements.

## Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- organisational procedures relevant to workplace health and safety with particular emphasis on:
  - use of personal protective equipment (PPE)
  - equipment lock out and isolation procedures
  - handling chemicals and hazardous substances, including spill and disposal guidelines
  - plant clearance requirements
  - emergency procedures and responses
  - job safety analysis documentation and processes
  - plant permit systems and processes
  - high risk load shifting licensing requirements where relevant

- major hazard facility requirements where relevant
- characteristics and dangers of heat and energy generated by power generation systems
- power generation plant layout
- purpose, features and operation of power generation and distribution systems, operating parameters and allowable variations
- operation and application of electronic and other control systems
- electrical isolation procedures
- principles of operation of transformers and circuit protection systems
- AC/DC generation principles
- electrical output control and regulation principles
- power factor characteristics and effects
- effect of steam quality on turbine operation
- data used to evaluate power generation system performance including:
  - heat levels
  - pressure levels
  - energy generation levels
  - heat build-up
  - system overload information
  - test outcomes for fuel
  - past performance records
- organisational procedures:
  - standard operating procedures (SOP) specific to power generation operations
  - communication reporting lines
  - recording and reporting power generation processes and maintenance requirements.

## **Assessment Conditions**

Assessment of skills must take place under the following conditions:

- physical conditions:
  - a workplace or a productive environment that accurately reflects performance in a workplace
- resources, equipment and materials:
  - access to the full range of equipment involved in integrated continuous manufacturing of power generation systems in a pulp or paper manufacturing facility, including chemical products
  - high and low voltage transformers
  - steam or gas turbine driven alternators
  - switchboards
  - water systems and auxiliary plant
  - circuit breaker
  - AC/DC generation and distribution systems

- analogue and digital instrumentation
- PPE suitable for operating a power generation system
- specifications:
  - template operating log and documents for recording power generation processes and maintenance requirements
  - organisational workplace health and safety and SOP

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## **Links**

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=12998f8d-d0ac-40bc-a69e-72a600d4fd93>