



Australian Government

PPMEPG301 Perform power generation operations

Release: 1

PPMEPG301 Perform power generation operations

Modification History

Release	Comments
Release 1	This version released with PPM Pulp and Paper Manufacturing Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to prepare for, start up, monitor and shut down power generation systems that are steam generated and produce power output of less than 500kW or use gas fired turbines that produce power greater than 500kW.

The unit applies to production operators and technicians who perform power generation operations and **respond to contingencies** that occur working with complex integrated equipment and continuous operations.

No licensing, legislative or certification requirements apply to this unit at the time of publication. This unit should not be used where the turbine equipment falls under the category for which a high risk work licence is required. Users are advised to check with the relevant regulatory authority for appropriate unit and licensing requirements.

Pre-requisite Unit

Nil

Unit Sector

Electrical Power Generation (EPG)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for power generation operations	1.1 Identify power generation requirements and specifications to plan operations and processes in conjunction with power authorities 1.2 Identify workplace health and safety hazards, assess risks and determine control measures 1.3 Identify process control points according to operational

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	specifications 1.4 Select, fit, use and maintain personal protective equipment according to job requirements and task to be undertaken 1.5 Communicate power generations requirements and specifications, workplace health and safety and environmental requirements and operating procedures to relevant personnel
2. Inspect, start up and monitor power generation system	2.1 Conduct system inspections and pre-start-up safety checks according to regulatory requirements, workplace health and safety and operating procedures 2.2 Confirm plant status by observation and inspection 2.3 Complete routine maintenance to ensure optimum system performance 2.4 Coordinate and start up generation system distribution and ancillary systems and bring on-line 2.5 Monitor system or plant condition during start-up to detect abnormal conditions 2.6 Detect deviations from operational specifications and rectify common faults or refer complex faults to specialist technician
3. Shut down, inspect and maintain system	3.1 Coordinate shutdown of power generation system according to maintenance schedule 3.2 Notify power authorities of planned shutdown according to regulatory requirements 3.3 Shut down process supplies according to workplace health and safety and operating procedures 3.4 Isolate and shut down power generation system according to workplace and regulatory requirements 3.5 Inspect system and record or report further maintenance requirements
4. Respond to unplanned shutdowns	4.1 Respond to unplanned faults and stoppages according to operating, emergency and workplace health and safety procedures 4.2 Rectify, isolate and/or contain faulty plant for continued production according to manufacturer specifications and operating procedures 4.3 Shut down process supplies where fault cannot be rectified

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.4 Assess effects of unplanned shutdown to determine impact on operations 4.5 Notify relevant personnel to rectify and make plant ready for restart
5. Record and report production information	5.1 Record production and power generation operation information according to workplace requirements 5.2 Report problems or variations with production and plant to relevant personnel

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret information from workplace procedures and documentation
Writing	Complete records accurately and legibly using clear language and industry terminology
Oral communication	Provide information about start-up and shutdown operations, problems or variations with production, quality and system using clear language and industry terminology
Numeracy	- Interpret numerical settings on instruments, gauges and data recording equipment - Record numerical data for power generation system and operational performance

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
PPMEPG301 Perform power generation	PPMEPG320 Manage a power generation	Merges two units Changes to unit title,	Not equivalent

Code and title current version	Code and title previous version	Comments	Equivalence status
operations	system startup	elements, performance criteria, foundation skills, performance evidence and knowledge evidence Assessment conditions updated	
PPMEPG301 Perform power generation operations	PPMEPG330 Coordinate power generation system shutdown	Merges two units Changes to unit title, elements, performance criteria, foundation skills, performance evidence and knowledge evidence Assessment conditions updated	Not equivalent

Links

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