



Australian Government

PPMEPG401 Troubleshoot and rectify power generation system

Release: 1

PPMEPG401 Troubleshoot and rectify power generation system

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 identify, diagnose and rectify and report on processes and equipment faults in the power generation system of a manufacturing facility.

This unit applies to senior operators and production specialists who troubleshoot and rectify complex system faults that occur in continuous power generation operations.

Licensing requirements apply to this unit 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 current 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. Identify and diagnose causes of system faults	<p>1.1 Prepare for rectification of power generation system according to operational requirements and workplace health and safety and environmental procedures</p> <p>1.2 Identify safety hazards and determine risk control measures with relevant personnel</p> <p>1.3 Interpret abnormal plant conditions and system alarms to determine type and location of fault</p>

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	<p>1.4 Identify faults through physical inspections of plant, equipment and processes</p> <p>1.5 Identify and locate the cause and source of fault and take appropriate actions</p> <p>1.6 Access and refer to relevant historical data to confirm fault diagnosis</p> <p>1.7 Communicate diagnosis to relevant personnel according to workplace procedures</p>
2. Rectify faults	<p>2.1 Notify power authorities of planned shutdown according to regulatory requirements</p> <p>2.2 Shut down and isolate equipment according to operating procedures and regulatory requirements</p> <p>2.3 Repair or replace faulty equipment according to equipment specifications</p> <p>2.4 Adjust process and equipment to restore normal operations</p> <p>2.5 Verify and communicate restoration to normal operations to relevant personnel</p>
3. Record and report troubleshooting and rectification activities	<p>3.1 Document variations from required production output and systems operation faults according to workplace requirements</p> <p>3.2 Record and report troubleshooting process and corrective action to relevant personnel</p>

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	<ul style="list-style-type: none"> Interpret information from a range of documentation and test results
Writing	<ul style="list-style-type: none"> Complete accurate detailed records and reports for system and product faults, diagnostic and corrective action processes using the required format

Skill	Description
Oral Communication	<ul style="list-style-type: none"> Provide comprehensive information about problems with equipment and products using clear language and industry terminology Provide clear, unambiguous information about return to normal operations to system operators and other personnel
Numeracy	<ul style="list-style-type: none"> Interpret numerical settings on instruments, gauges and data recording equipment Interpret system and product data Record detailed numerical data for system and product test results Use measuring equipment to measure and inform calculations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
PPMEPG401 Troubleshoot and rectify power generation system	PPMEPG440 Troubleshoot and rectify power generation system	Changes to 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>