



Australian Government

PPMEPG440 Troubleshoot and rectify power generation system

Release: 2

PPMEPG440 Troubleshoot and rectify 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.

Application

This unit of competency describes the skills and knowledge required to identify, diagnose and rectify power quality and distribution faults and report operational data relevant to power generation systems in the pulp or paper industry.

This unit applies to senior operators and production specialists who troubleshoot and rectify power generation systems, in a pulp and paper manufacturing facility. This typically involves working in a facility with complex integrated equipment and continuous operations.

No licensing, legislative or certification requirements apply to this unit at the time of publication. Where the turbine equipment falls under the category for which a High Risk Work Licence is required, this unit should not be used and the appropriate unit should be sought.

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	1.1 Identify faults according to workplace health and safety and environmental procedures, safe working requirements, productivity

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<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
causes of faults	<p>requirements, standard operating procedures (SOP), risks and hazard identification and housekeeping requirements</p> <p>1.2 Interpret abnormal plant conditions and system alarms to determine type and location of fault</p> <p>1.3 Identify faults through physical inspections of plant, equipment and processes</p> <p>1.4 Identify and locate the cause and source of fault and take appropriate actions</p> <p>1.5 Access and refer to relevant historical data to confirm fault diagnosis</p> <p>1.6 Communicate diagnosis to relevant personnel according to organisational procedures/SOP</p> <p>1.7 Select, fit, use and maintain personal protective equipment according to job requirements and task to be undertaken</p>
2. Rectify faults	<p>2.1. Rectify faults according to workplace health and safety and environmental procedures, safe working requirements, and SOP</p> <p>2.2. Implement shutdown and isolation procedures, according to SOPs or manufacturer's specifications/operating procedures</p> <p>2.3. Repair or replace faulty equipment</p> <p>2.4. Adjust process and equipment to restore normal operations</p> <p>2.5. Verify restoration to normal operations and communicate to relevant personnel</p>
3. Record and report operational data	<p>3.1. Document variations from required production output and systems operation faults</p> <p>3.2. Record troubleshooting process and corrective action</p> <p>3.3. Communicate relevant information to appropriate personnel in accordance with operational requirements</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 documentation, procedure manuals and test results
Writing	<ul style="list-style-type: none"> Record and report test results and rectifications accurately and legibly using correct technical vocabulary
Numeracy	<ul style="list-style-type: none"> Estimate and calculate using measuring equipment relevant to power generation systems and to aid troubleshooting Interpret instruments, gauges and data recording equipment
Navigate the world of work	<ul style="list-style-type: none"> Use electronic and other control systems to control equipment and processes for power generation systems Access, navigate and enter computer based information
Get the work done	<ul style="list-style-type: none"> Maintain situational awareness in the work area Analyse and use sensory information to adjust process and to maintain and coordinate safety, quality and productivity

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
PPMEPG440 Troubleshoot and rectify power generation system Release 2	PPMEPG440 Troubleshoot and rectify power generation system Release 1	Performance criteria added, minor changes to knowledge evidence, minor change to licensing statement	Equivalent unit

Links

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