



Australian Government

Assessment Requirements for PMAOPS331 Operate and troubleshoot gas turbine system

Release: 1

Assessment Requirements for PMAOPS331 Operate and troubleshoot gas turbine system

Modification History

Release 1. Unit code changed and title changed. Application and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMAOPS324 Operate a gas turbine.

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit:

- at least 2 times, each in a separate work context.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- all items on a schematic of the gas turbine system, including:
 - turbine operating principles including fuel injection, lubrication, cooling, ignition, induction and exhaust power supply
 - interactions between plant items and processes
 - operating parameters and integrity limits, and product specifications and tolerances including temperature, pressure and flow
 - procedures for starting, stopping, operating, controlling and isolating system
 - emergency shutdown procedures
 - functions of major components and troubleshooting techniques
- physics and chemistry to the level of being able to provide an overview of the science of the gas turbine process and product
- basic science of upstream and downstream processes
- gas turbine system abnormal situations and required actions, including but not limited to:
 - variation in power or fuel supply
 - vibration
 - overheating
 - fouling of turbine/engine/exchangers
 - lubrication quality
 - ancillary equipment failures
- hierarchy of control
- gas turbine hazards:
 - possible causes
 - potential consequences

- appropriate risk controls
- reporting and escalation procedures.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - gas turbine system
 - operating procedures
- abnormal situations must be relevant to gas turbine systems.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=9fc2cf53-e570-4e9f-ad6a-b228ffdb6875>