



Australian Government

UEPOPS437 Manage system restart

Release: 1

UEPOPS437 Manage system restart

Modification History

Release 1. This is the first release of this unit of competency in the UEP Generation Training Package.

Application

This unit involves the skills and knowledge required to manage a power generation system restart after the islanding or shut down of the system and/or network.

A restart is the process of restoring an electric power generating facility to operation without relying on an external transmission network. Power generation system restarts allow parts of the power system to be re-energised through black start equipped generation capacity following a black out.

Competency in this unit requires the ability to identify cause for power generating system restart, restore power generating system and document work. Individuals will, in general, work as an operator with responsibility for managing system restarts in a power generation facility.

Power generation plant operators are typically trained and authorised to isolate, prepare plant and issue permits to work.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Note: Workplace practice

The application of the skills and knowledge described in this unit may require a licence or training permit to practice in the workplace where work is carried out on gas and electrical installations. Additional conditions may apply under state and territory legislative and regulatory licensing requirements.

Pre-requisite Unit

There are no prerequisite units.

Competency Field

Operations

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Identify cause for system/network restart

- 1.1 Probable implications of power generation system restart are identified and assessed, in accordance with Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations and workplace procedures
- 1.2 Secondary threats to power generation system restart are identified and monitored, in accordance with workplace procedures
- 1.3 Power generation system configuration or generation capability is evaluated, in accordance with workplace procedures
- 1.4 External information is collated and assessed, in accordance with workplace procedures
- 1.5 Probable cause of power generation system shutdown is identified from available information and resources, in accordance with workplace procedures
- 1.6 Communication with key stakeholders is established, in accordance with workplace procedures
- 1.7 Roles and work tasks are identified, in accordance with workplace procedures and in consultation with appropriate personnel

2 Restore system/network generation

- 2.1 Power generation system restart response is managed, in accordance with workplace procedures and site requirements
- 2.2 Power generation system restart responses are prioritised, in accordance with workplace procedures
- 2.3 Contingency management plan including power generation system restart is actioned, in accordance with workplace policies and procedures
- 2.4 Additional resources are coordinated and directed, as required, in accordance with workplace procedures
- 2.5 Restart plans are monitored, evaluated and adjusted, as

required, in accordance with workplace procedures

3 Document work

- 3.1** Equipment failure or system restart problems are recorded and processed, in accordance with workplace procedures
- 3.2** Feedback from key stakeholders is recorded, in accordance with workplace procedures
- 3.3** Reports are generated and distributed to appropriate personnel, in accordance with workplace procedures
- 3.4** Alternative restart plans or recommendations are communicated to appropriate personnel, in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS437B Manage system restart.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1715b9fa-e7bd-441c-bb8d-cf22c9c825a8>

Assessment Requirements for UEPOPS437 Manage system restart

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and includes:

- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements including
 - emergency procedures
 - risk control measures
 - safe working practices
- communicating with key stakeholders
- communicating with personnel and key stakeholders
- determining corrective actions using diagnostic techniques
- documenting completed work using recording procedures
- identifying power generation system restart cause
- implementing legislation, industry standards, codes of practice and regulations
- interpreting manufacturers' specifications and manuals
- locating power generating plant and equipment
- maintaining power generator unit integrity
- recognising abnormal power generating plant operating conditions
- recognising power generating plant status including interpreting remote indications of status using data analysis techniques and tools
- restarting and operating power generating plant within design parameters
- restoring power generation system and/or network generation
- using contingency and restarting plans

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions and includes knowledge of:

- abnormal power generating plant operating conditions
- communication with key stakeholders
- contingency and restart plans

- corrective actions using diagnostic techniques
- equipment and generation system restart prerequisites
- legislation, industry standards, codes of practice and regulations
- manufacturers' specifications and manuals
- power generation plant and equipment, its location and operating parameters
- power generation plant status
- typical arrangements of power production plant including auxiliary plant and plant operation
- WHS/OHS legislated requirements including
 - emergency procedures
 - risk control measures
 - safe working practices
- workplace documentation
- workplace policies and procedures

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

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