



Australian Government

UEPOPS524 Evaluate scheduling of generation plant

Release: 1

UEPOPS524 Evaluate scheduling of generation plant

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 undertake the evaluation of a power generation plant schedule to meet forecast demand.

Scheduling is the process of arranging and optimising the use of generating plant and personnel in a power generation facility. Scheduling can have a major impact on the productivity and costs of a power generation facility.

Competency in this unit requires the ability to analyse load profile, evaluate power generation unit availability and capability, evaluate power generation unit schedule and complete documentation. Individuals will, in general, work as an operator with responsibility for scheduling 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

UEPOPS422 Schedule generation

Competency Field

Operations

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Analyse load profile

- 1.1 Information on variables which have the potential to affect power generation demand and load are analysed, in accordance with workplace procedures
- 1.2 Power generation forecasts are produced, in accordance with workplace procedures
- 1.3 Power generation forecasts are evaluated against real time trends, and adjustments are made, in accordance with workplace procedures

2 Evaluate unit availability and capability

- 2.1 Power generation unit status is analysed, in accordance with workplace procedures, to maintain the integrity of scheduling plans
- 2.2 Information on power generation unit status is processed and recorded, in accordance with workplace procedures, to enable the identification of problems
- 2.3 Relationships are maintained with remote or independent power generators, in accordance with workplace procedures

3 Evaluate generation unit schedules

- 3.1 Base load generation schedules are analysed, in accordance with workplace procedures, and in line with contractual obligations
- 3.2 Peak load generation schedules are analysed to meet power generation system demand, in accordance with workplace procedures, to maintain adequate spinning reserve capability
- 3.3 Schedule is evaluated to confirm power generation units are operating, in accordance with workplace procedures and fuel strategies framework
- 3.4 Megawatts and megavar spinning reserve criteria are continuously evaluated, in accordance with workplace procedures
- 3.5 Power generation system security criteria are analysed continuously, in accordance with workplace procedures

- 3.6 Quality of supply is analysed continuously, in accordance with workplace procedures and legislative requirements
 - 3.7 Power generation plant maintenance commitments are analysed, in accordance with workplace procedures, when setting priorities for committing power generation units
 - 3.8 Schedule is produced with sufficient lead time to allow power generation plant movements to occur, in accordance with workplace procedures
 - 3.9 Power generation plant problems are assessed for impact on unit commitment and scheduling requirements, in accordance with workplace procedures
 - 3.10 Power generation plant testing is incorporated into priorities for committing power generation units, in accordance with workplace procedures
- 4 Complete documentation**
- 4.1 Scheduling information is recorded, in accordance with workplace procedures
 - 4.2 Key stakeholders are informed of scheduling evaluation outcomes, 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 UEPOPS524A Evaluate the scheduling of generation.

Links

Companion Volume implementation guides are found in VETNet -

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