



Australian Government

UEPMNT369 Monitor climatic conditions for renewable electricity generation

Release: 1

UEPMNT369 Monitor climatic conditions for renewable electricity generation

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 monitor weather and climate conditions for the purposes of planning electricity generation from renewable sources and ensuring the safety of power generation plant and personnel.

Weather is measured through the assessment of patterns in temperature, humidity, atmospheric pressure, wind, precipitation and other meteorological variables. Climate is the measurement of weather over longer periods of time in specific regions.

Competency in this unit requires the ability to interpret weather and climate information, plan for adverse or extreme weather conditions, take action in response to adverse or extreme weather conditions and complete all documentation. Individuals will, in general, work as a maintenance operative in a power generation facility.

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

Note: Workplace practices

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

Pre-requisite Unit

There are no prerequisite units.

Competency Field

Maintenance

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Interpret weather and climate information

2 Plan for adverse weather conditions

3 Act in response to adverse weather conditions

PERFORMANCE CRITERIA

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

1.1 Weather, climate information and warnings are regularly monitored to determine likely conditions

1.2 Potential variations in weather and climate conditions are assessed, in accordance with warnings, weather patterns and historical experience

1.3 Possible impact of weather and climate on power generation plant, equipment, grid demand and civil assets are identified

2.1 Workplace operational guidelines for adverse weather conditions are accessed and implemented, in accordance with workplace procedures

2.2 Possible power generation outages and actions to be taken are communicated to key stakeholders

3.1 Work schedules are adjusted, in accordance with workplace procedures, to account for extreme weather events

3.2 Workplace procedures to be followed during, and after, extreme weather events are analysed and discussed with personnel or team members

3.3 External assets in the perimeter area of wind turbine generators are prepared, in accordance with workplace procedures, for extreme weather events

3.4 Emergency and evacuation procedures are implemented, in accordance with workplace procedures for adverse weather conditions

3.5 Stakeholders and key personnel are informed of anticipated impact of weather and climate on power generation plant, equipment, grid demand and civil assets

3.6 Meteorological incidents are monitored and preventative actions are taken

- 3.7 Normal operations are recommenced, in accordance with workplace procedures, after confirmation of return to normal weather conditions and completion of inspection
- 4 **Complete documentation**
 - 4.1 Workplace documentation is updated, in accordance with workplace procedures
 - 4.2 Reports are prepared and presented to key 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 UEPMT369A Monitor climatic conditions for renewable electricity generation

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 UEPMNT369 Monitor climatic conditions for renewable electricity generation

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:

- accessing weather data from monitoring systems
- acting in response to adverse or extreme weather conditions
- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements including:
 - emergency procedures
 - hazard identification
 - risk control measures
 - safe working practices
- assessing wind speed, wind direction, atmospheric pressure and lightning strike geographical data
- communicating with personnel
- completing documentation
- implementing legislation, industry standards, codes of practice and regulations
- interpreting weather and climate information
- planning for adverse or extreme weather conditions
- preparing documentation
- undertaking post weather event damage inspections
- using manufacturers' specifications and manuals

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:

- documentation and reporting requirements
- legislation, industry standards, codes of practice and regulations
- manufacturers' specifications and manuals
- meteorology

- post weather event damage inspections
- risk mitigation processes
- weather data monitoring systems
- weather safety alert systems
- WHS/OHS legislated requirements including:
 - emergency procedures
 - hazard identification
 - 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.

Links

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