



Australian Government

UEPOPS359 Monitor climatic conditions for renewable energy production

Release: 1

UEPOPS359 Monitor climatic conditions for renewable energy production

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 renewable energy production. It also includes taking suitable preventative actions to ensure the safety of personnel, power generation plant and equipment in adverse weather conditions.

Renewable energy can be generated from natural resources such as sun light, wind, rain, tides and geothermal heat which are naturally replenished.

Competency in this unit requires the ability to interpret weather and climate information, carry out preventative actions, monitor weather and climate during adverse conditions, return to normal operations and complete all documentation. Individuals will, in general, work as an operator, in a power generation facility.

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

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Interpret weather and climate information

- 1.1** Weather and climate information, including warnings, are monitored, in accordance with workplace procedures to determine likely conditions
- 1.2** Potential variations in weather and climate conditions are anticipated and assessed, in accordance with workplace procedures, warnings, weather patterns and historical experience
- 1.3** Possible impact of weather and climate on renewable energy plant, equipment and civil assets are identified, in accordance with workplace procedures
- 1.4** Stakeholders and key personnel are informed of anticipated impact of weather and climate on renewable energy plant, equipment and civil assets, in accordance with workplace procedures

2 Carry out preventative actions

- 2.1** Preventative actions are identified, in accordance with workplace procedures and manufacturers' recommendations
- 2.2** Stakeholders and key personnel are consulted in the development of preventative actions, in accordance with workplace procedures
- 2.3** Preventative actions are reviewed, in accordance with workplace procedures, to ensure availability of resources, safety of personnel, renewable energy plant and equipment
- 2.4** Actions to minimise loss and damage of renewable energy plant, equipment and civil assets are implemented, in accordance with workplace procedures and manufacturers' recommendations
- 2.5** Actions to ensure safety of personnel are implemented, in accordance with workplace procedures

3 Monitor weather and climate during adverse conditions

- 3.1** Weather and climate information, including warnings, are continually monitored, in accordance with workplace procedures, to determine ongoing suitability

		of preventative actions
	3.2	Preventative actions are adjusted and revised in relation to weather and climatic changes, in accordance with workplace procedures
4 Return to normal operations	4.1	Weather and climate information, including warnings, are monitored, in accordance with workplace procedures, to determine when normal and safe weather conditions have returned
	4.2	Renewable energy plant, equipment and civil assets are inspected for damage, in accordance with workplace procedures and manufacturers' recommendations
	4.3	Renewable energy plant, equipment and civil assets are placed back into service, in accordance with workplace procedures and manufacturers' recommendations
	4.4	Preventative actions are reviewed and recommendations are developed to improve processes, in accordance with workplace procedures
5 Complete documentation	5.1	Documentation is updated, in accordance with workplace procedures
	5.2	Completed documentation is forwarded to authorised 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 UEPOPS359A Monitor Climatic Conditions for Renewable Energy Production.

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 UEPOPS359 Monitor climatic conditions for renewable energy production

Modification History

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

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
- carrying out preventative actions
- communicating with stakeholders and key personnel
- completing documentation using recording procedures
- identifying renewable energy plant status
- implementing legislation, industry standards, codes of practice and regulations
- interpreting weather and climate conditions and possible impact on renewable energy plant, equipment and civil assets using data analysis techniques and tools
- monitoring weather and climate during adverse conditions
- organising resources
- preparing renewable energy plant and/or equipment for operation
- 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:

- climate and weather patterns in area
- legislation, industry standards, codes of practice and regulations
- manufacturers' specifications and manuals
- renewable energy plant and equipment, its location and operating parameters
- renewable energy plant status
- typical arrangements of renewable energy power production plant

- weather and climate conditions and its possible impact on renewable energy plant, equipment and civil assets
- 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.

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

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

Companion Volume implementation guides are found in VETNet -

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