



Australian Government

UEP50112 Diploma of ESI Generation - Systems Operations

Release 3

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Modification History

Release	Action	Core/Elective	Details	Points
2	Update	Group A	BSBWHS501A Ensure a safe workplace	60

3	Edit	Group B	Correct weighting points of UEPOPS342B – Interpret and analyse single operation protection devices	60
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Description

Scope: Those gaining this qualification will be able to complete work function such as remote operation of network systems. Isolation of plant systems for work. Development of operational procedures and systems, manage the start up and shut down of boilers and turbines, hydro plant, gas turbines. Implementation of safe working practices and environmental procedures. Management and supervision of others and coordination of work activities of individuals and/or teams.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

Not applicable.

Packaging Rules

Completion requirements:

The requirements for granting this qualification will be met when competency is demonstrated and achieved for:

- All the Core competency standard units, defined in the Core Competency Standard Units table below and
- A combination of Elective competency standard units to achieve a total weighting of 960 points in accordance with the Elective Competency Standard Units table below.

Core Competency Standard Units		Weighting Points
All core competency standard units to be achieved		
UEENEEE117A	Implement and monitor energy sector OHS policies and procedures	20
UEENEEE101A	Apply Occupational Health and Safety regulations, codes and practices in the workplace	20
UEPOPS202B	Apply Quality Systems to Work	20
UEPOPS337B	Maintain Quality Systems within the Team	20
UEPOPS369A	Respond to a critical incident	40
UEPOPS370A	Facilitate the use of contingency plans	60
UEPOPS417B	Monitor and Implement Environmental Plans and Procedures	20
UEPOPS420B	Coordinate the Network System	40
UEPOPS426B	Interpret and Analyse Multi-Operation Protection Devices	40
UEPOPS428B	Develop H.V Switching Programs	20
UEPOPS440B	Coordinate Team Activities	30
UEPOPS441B	Operate and Monitor System Equipment	30
UEPOPS454A	Coordinate response to critical incidents	30
UEPOPS456A	Perform switching to a switching program	30
UEPOPS501B	Manage Occupational Health and Safety Policy and	40

	Procedures	
UEPOPS512B	Manage the Network/Systems	80
UEPOPS513B	Manage Operational Crisis to Maintain/Restore Power System Integrity	60
UEPOPS515B	Coordinate Power Generation	40
Total points in core		640

Elective Competency Standard Units

Complete Elective units to achieve a total of weighting of 960 points from the following groups:

Group		Minimum points	Maximum points
A	Imported and Common Elective Units Imported units from other training packages and/or state accredited courses can be added to this group, but they must be selected from qualifications where the unit is first packaged at AQF level 5. If units have not been assigned a weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting will be 10 points.	0	270
B	Qualification Elective Units You may select units from this group for qualification completion.	0	660
C	Qualification Elective Units You may select units from this group for qualification completion.	0	100
D	Qualification Elective Units You may select units from this group for qualification completion.	200	920

Group A - Imported and Common Elective Units.

Complete units to a maximum weighting of 270 points

Weighting Points

BSBCUS501C	Manage quality customer service	40
BSBINM501A	Manage an information or knowledge management system	50
BSBINN502A	Build and sustain an innovative work environment	50
BSBLED501A	Develop a workplace learning environment	60
BSBMGT502B	Manage people performance	70
BSBMGT515A	Manage operational plan	60
BSBMGT516C	Facilitate continuous improvement	60
BSBWHS501A	Ensure a Safe Workplace	60
BSBWOR501B	Manage personal work priorities and professional development	60
BSBWOR502B	Ensure team effectiveness	60
	<p>Imported units from other training packages and/or state accredited courses can be added to this group, but they must be selected from qualifications where the unit is first packaged at AQF level 5. If units have not being assigned a weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting will be 10 points.</p> <p>Note: For further information see Application of the NQC Flexibility Formula, Page 10, UEP12 ESI Generation Sector Training Package, Part1.1.00</p>	Up to 270 points

Group B Qualification Electives.		Weighting Points
Complete units to a maximum weighting of 660 points		
UEPOPS301B	Conduct Single Energy Source Isolation Procedures for Permit to Work	40
UEPOPS304B	Make and Spread a Stockpile	40
UEPOPS305B	Operate & Monitor Briquette Coal Cooling Plant	40
UEPOPS306B	Operate & Monitor Briquette Coal Drying Plant	40
UEPOPS307B	Operate & Monitor Briquette Coal Press Plant	40
UEPOPS308B	Perform Briquette Laboratory Tests	40
UEPOPS309B	Operate and Monitor Air Conditioning Equipment and Ventilation Systems	20
UEPOPS310B	Operate Bulk Coal Handling Plant	40
UEPOPS311B	Operate Fabric Filter Dust Collection Plant	20
UEPOPS312B	Operate and Monitor Fuel Supply	20
UEPOPS313B	Operate and Monitor Boiler Draught System	40
UEPOPS314B	Operate and Monitor Fuel Firing Plant (Gas or Oil)	40
UEPOPS315B	Operate and Monitor Fuel Firing Plant (Coal)	40
UEPOPS316B	Operate and Monitor Boiler Steam/Water Cycle	40
UEPOPS317B	Operate and Monitor Fixed Fire Protection Systems	30
UEPOPS318B	Operate and Monitor Compressed Gas Systems	30
UEPOPS319B	Operate and Monitor Gas Production Plant	30
UEPOPS320B	Operate and Monitor Compressed Air Systems	30
UEPOPS321B	Operate and Monitor Water Treatment Plant	30
UEPOPS322B	Operate and Monitor Alkalinity Reduction Plant	30
UEPOPS323B	Operate and Monitor Reverse Osmosis Plant	30
UEPOPS324B	Operate and Monitor Brine Concentrator Plant	30

UEPOPS325B	Operate and Monitor Water Quality Control Systems	30
UEPOPS326B	Operate and Monitor Oil Systems	30
UEPOPS327B	Monitor and Maintain Civil Assets	30
UEPOPS328B	Undertake Dam Safety Surveillance	30
UEPOPS329B	Operate and Monitor Auxiliary Steam Systems	40
UEPOPS330B	Operate and Monitor Heat Exchangers	40
UEPOPS331B	Operate and Monitor Water Systems (Condensate & Feedwater)	40
UEPOPS332B	Operate and Monitor Condensing and Cooling Water System	40
UEPOPS333B	Operate and Monitor H.R.S.G. Hot Gas Control System	40
UEPOPS334B	Operate and Monitor a Wind Generator	60
UEPOPS335B	Operate A Hydro Generator/Synchronous Condenser / Pump Unit	60
UEPOPS336B	Manage Operate and Monitor a Gas Turbine Unit	60
UEPOPS338B	Facilitate Effective Workplace Communication	20
UEPOPS339B	Operate and Monitor a Boiler Unit	60
UEPOPS340B	Operate and Monitor a Steam Turbine	60
UEPOPS342B	Interpret and Analyse Single Operation Protection Devices	60
UEPOPS343B	Operate Hydro-Electric Generating Plant and Auxiliary Equipment	60
UEPOPS344B	Conduct Water Conveyance and Control	30
UEPOPS345B	Implement Dam Safety Surveillance Procedures	30
UEPOPS346B	Conduct Non-Routine Operational Testing	60
UEPOPS347B	Operate and Monitor Supervisory, Control and Data Acquisition Systems	40
UEPOPS349B	Operate H.V. Primary Switchgear	40

UEPOPS351B	Operate H.V. Condition Changing Apparatus	60
UEPOPS352B	Conduct Operational Checks on In-Service Mechanical Plant	40
UEPOPS354B	Operate and Monitor Dual Fuel-Firing Plant	80
UEPOPS355B	Monitor the Implementation of Under Frequency Load Shedding	60
UEPOPS356B	Apply Environmental and Sustainable Energy Procedures	20
UEPOPS357B	Operate H.V. Secondary Switchgear	40
UEPOPS358A	Monitor and Maintain Wind Farm Civil Assets	40
UEPOPS359A	Monitor Climatic Conditions for Renewable Energy Production	40
UEPOPS360A	Operate and Monitor a Hydro Turbine	60
UEPOPS361A	Operate and Monitor Hydro Plant Auxiliary Systems	60
UEPOPS362A	Operate and Monitor Generator/Alternator	60
UEPOPS364A	Ensure Compliance with Occupational Health and Safety policy and procedures	20
UEPOPS368A	Operate manual systems	30
UEPOPS371A	Carry out operational checks on in-service electrical plant	40

Group C Qualification Electives		Weighting Points
Complete units to a maximum weighting of 100 points		
UEENEEC005 B	Estimate electrotechnology projects	40
UEPOPS402B	Conduct Multiple Energy Source Isolation Procedures for Permit to Work	40
UEPOPS403B	Coordinate Permit to Work System	40
UEPOPS404B	Coordinate First Response Team Operation	20

UEPOPS405B	Operate and Monitor AC Electrical Systems	30
UEPOPS406B	Operate and Monitor DC Electrical Systems	30
UEPOPS407B	Start and Run Up A Gas Turbine	60
UEPOPS408B	Shut Down a Gas Turbine	60
UEPOPS409B	Start-Up A Boiler Unit	60
UEPOPS410B	Shut Down A Boiler Unit	60
UEPOPS411B	Run Up A Steam Turbine	60
UEPOPS412B	Undertake Operations Commissioning / Decommissioning	30
UEPOPS413B	Coordinate Operational Strategies for Power Production	20
UEPOPS414B	Perform Risk Analysis of Generation Plant	20
UEPOPS416B	Monitor the Implementation of the Enterprise's Production / Maintenance Quality Control procedures	20
UEPOPS419B	Shut down a steam turbine	60
UEPOPS422B	Schedule Generation	40
UEPOPS423B	Plan a Scheduled Outage	40
UEPOPS424B	Coordinate Local H.V. Networks	40
UEPOPS425B	Produce Maintenance Plans For Generation Production Plant	40
UEPOPS430B	Control Permit to Work Operations	30
UEPOPS431B	Collect and Analyse Hydrological and Meteorological Data	20
UEPOPS432B	Start up a Heat Recovery Steam Generator Unit	30
UEPOPS433B	Operate and Monitor a Heat Recovery Steam Generator Unit	20
UEPOPS434B	Shutdown an Heat Recovery Steam Generator Unit	30
UEPOPS435B	Operate and Monitor Flue Gas NOx Mitigation Systems	30

UEPOPS437B	Manage System Re-Start	40
UEPOPS439B	Plan and Organise Work	30
UEPOPS442B	Monitor and Co-ordinate the Operation of a Combined Cycle Gas Turbine Unit	60
UEPOPS443A	Coordinate Wind Farm Operations	40
UEPOPS444A	Start and Run-up a Hydro Turbine	60
UEPOPS445A	Shut Down a Hydro Turbine	60
UEPOPS446A	Operate and monitor hydro unit control and protection systems	80
UEPOPS447A	Coordinate photovoltaic solar power plant operations	60
UEPOPS450A	Coordinate effective workplace communication	40
UEPOPS451A	Coordinate the use of contingency plans	40
UEPOPS452A	Conduct operational checks and carry out corrective action on in-service electrical plant	40
UEPOPS457A	Control electrical energy production	40

Group D Qualification Electives		Weighting Points
You must complete units to a minimum weighting of 200. You may select units to a maximum weighting of 920.		
UEPOPS502B	Manage Permit to Work System	40
UEPOPS505B	Produce maintenance strategies for generation production plant	80
UEPOPS507B	Conduct project management	60
UEPOPS508B	Manage commissioning/ decommissioning	80
UEPOPS509B	Manage quality control procedures	40
UEPOPS510B	Monitor power generation plant reliability	60
UEPOPS511B	Tune Process Plant and Equipment	60

UEPOPS514B	Control hydro generation/pumping	60
UEPOPS520A	Evaluate cost estimations and initiate appropriate solutions	40
UEPOPS523A	Manage critical incidents	60
UEPOPS524A	Evaluate the scheduling of generation	60
UEPOPS525A	Coordinate and direct switching program	60
UEPOPS526A	Coordinate electrical energy production	60
UEPOPS527A	Manage first response team	40
UEPOPS528A	Manage environmental management systems	40
UEPOPS529A	Manage operational strategies for power production	80

Note:

1. Prerequisite pathways shall be identified and met for all elective units selected.
2. In selecting elective units considerations to career planning advice should be given to units that form part of a prerequisite pathway for the progression to achieve particular competencies or qualification at a higher level.

END OF QUALIFICATION

Custom Content Section

Not applicable.