



**UEP06**  
**Electricity Supply Industry – Generation Sector**  
**Training Package**

**Volume 1 – Part 2**  
**Competency Standards**

**Volume 1 of 2**

## Electricity Supply Industry – Generation Sector Training Package UEP06

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## Volume 1 Part 2

### Introduction

This section outlines how the competency standards were developed in broad terms. The industry coverage they can apply to, as well as the format and construction of the individual Competency Standard Units. Matters related to language, literacy and numeracy, access and equity and the regulatory environment in which the units may apply is also covered, as is the interrelated Essential Knowledge and Associated Skills. Competency Standard Units in this Training Package are interrelated and linked with the Definitions/Glossary and Essential Knowledge and Associated Skills sections. No Competency Standard Unit can be used in isolation or exported without these interrelated components.

There are over 350 Competency Standard Units included.

A definitions/glossary to compliment the competency standard units is included in Volume 2 Part 1. It provides a description of the words used in the competency standard units to define terms in more detail. It also forms an integral part of each unit. An Essential Knowledge and Associated Skills section follows the Competency Standard Units and also forms an integrated part of each unit.

Included in this section is:

- an index of the Competency Standard Units – Table 1. The units have been placed in schedules that would typically relate to a particular or special area of industry need and for ease in recognition of related unit groupings. Included at the end of Table 1 are the imported units that are located within the core of the qualifications in this Training Package.
- prerequisites of each Competency Standard Unit can be obtained from Table 2. Reference is also given for the correlation of the units within a qualification(s).
- a list of imported Competency Standard Units – Table 1.

### 1.2.1 Competency Standards

National Competency Standards are the benchmark for the national system of vocational education and training. Through national standards, the industry has established the competencies required for effective performance in employment. Hence, the system is industry led and responsive to its changing skill needs. A competency-based system involves the delivery, assessment and certification of training. It is predicated on the identification and demonstrated attainment of the knowledge, the skills and the application required for effective performance in work. Hence the system is oriented towards outcomes rather than a traditional preoccupation with inputs.

Competency Standards, which are developed by industry parties and subsequently endorsed by the National Quality Council (NQC) form the keystone of the National vocational education and training system. The development, endorsement and ongoing review of Competency Standards provides a vehicle for industry parties to ensure the integrity and continuing relevance of national vocational education and training, both on and off-the-job.

National standards define the competencies required for effective performance in the workplace. A competency comprises the specification of knowledge and skill and the application of that knowledge and skill to the standard of performance required in the workplace.

- The concept of competency focuses on what is expected of an employee in the workplace rather than on the learning process and embodies the ability to transfer and apply skills and knowledge to new situations and environments.
- In competency standards the emphasis is on outcomes and on the application of skills and knowledge, not just specification.

- Competency standards are concerned with what people are able to do, eg maintain and use networks, and also with the ability to do this in a range of contexts, eg maintain and use networks of suppliers, government agencies.

The national concept of competency includes all aspects of work performance, not only narrow task skills. The four components of competency are:

- task skills
- task management skills
- contingency management skills
- job/role environment skills.

While not every unit will contain all four components, in a group of units these components of competency should be covered effectively. The four components of competency may emerge in the different parts of the standard format, ie Elements, Performance Criteria and the Range Statement.

In developing the respective competency standard units the following policy considerations were included:

- a) A combination of units must cover the four primary components of competency:
  - task skills
  - task management skills
  - contingency management skills
  - job/role environment skills.
- b) Competency standards must be drafted to:
  - avoid any direct or indirect bias or discrimination
  - support participation by a diverse workforce
  - encourage successful outcomes.
- c) When developing competency standards developers must incorporate other relevant industry or cross-industry standards in consultation with the original developer. If relevant standards are not used, the reason for this decision must be stated in the Training Package endorsement submission.
- e) A single Competency Standard Unit is the smallest competency achievement that can be nationally recognised and recorded.
- f) The standards developed must be the result of an extensive consultation process and the application of sound development methodologies. Key stakeholders, both from within and outside the industry for which the standards were developed must validate the outcomes.

Some of the issues associated with constructing competency standard units included:

- breadth
- unit size
- transferability
- interrelationships between units

### **Breadth**

In best practice standards, units:

- reflect a broad based expression of the application of knowledge and skills
- are useful for the purposes of recognition and transferability of competencies particularly noting the requirements of the Australian Quality Training Framework
- facilitate use in a variety of locations, eg in different enterprises.

### **Unit size**

Because a competency standard unit must be useful and manageable for the purposes of recognition and assessment, it is difficult to generalise about an appropriate size. The size of the unit is a reflection of the complexity of skills and knowledge incorporated, or the range of activities undertaken and what was considered important for attention when constructing the units. Factors such as the apparent 'importance' of discrete functions within an industry, or the time required for training were not considered indicators of appropriate unit size.

Whatever concept of appropriate size, care was taken not to have widely different approaches to the size of units in the same Training Package. This was not always possible however, and measures were introduced to attend to differences such as a weighting system for qualifications and completion requirements.

Development of the Competency Standard Units also focused on the uses of the standards and the relative breadth required for flexible job construction. This meant consideration was given to constructing units so as not to be so broad that they contained functions that would not normally all be completed by one person, as competency in that unit could not normally be achieved. Alternatively, if units were too small, assessment would become inefficient as it would be repetitive and unnecessarily fragmented. At best, a balance between these two issues was achieved.

### **Transferability**

Transferability refers to the need for standards to be used in a range of different contexts within an Industry or across Industries. Development required the use of other endorsed industry or cross industry standards where those standards were relevant. This supported the portability of standards and helped to reduce duplication of development. In general terms, the standards needed to be broad enough to be used across a range of settings, but flexible enough to be useful in any specific context.

### **Interrelationship between units**

Competency Standard Units are constructed in such a way that they can facilitate the recognition, certification and transferability of skills. It is for these reasons that units in their construction deal with discrete functions. At the same time, it was important to examine the interdependence of units as they were being developed. Some closely related competencies emerged which were sufficiently discrete to warrant specification in separate units, but which logically benefited being assessed together.

Importantly however, prerequisites have been designed such that it does not preclude concurrent training and formative assessment events to occur prior to conducting the final assessment event, which attributes competence. Regard must be had for any prevailing regulatory requirements that may apply. It is the final assessment event that must ensure that the prerequisite and co requisite advice is adhered to.

### **Language, literacy, numeracy and key competencies**

The Competency Standards have been written to reflect the technical and operational needs of industry and include appropriate language and literacy requirements.

In general the Key Competencies are embedded within the technical aspects of the industry units and in some instances, the Units of Competency directly address the Key Competencies. The relationship of Key Competencies to industry competencies is shown in the relevant section of each respective competency standard unit.

### **Access and equity**

The knowledge and skills required of employees in the ESI – Generation Industry are comprehensive and the competency standards reflect the range of knowledge and skills

required. They are written in a non-exclusive manner so as to increase the participation rates of under-represented groups and to minimise unintentional bias.

## **Development of ESI – Generation Competency Standards**

Competency Standards were initially developed for Generation Production Plant in 1996. These competency standard units were updated and incorporated into the new Training Package framework and were endorsed in 1998 as the Training Package for the Electricity Supply Industry – Generation Sector of the Utilities Industry (UTP98). Subsequent minor amendments were made to qualifications, and variations and additions to competency standard units have been completed since 1998. As a result, these units have again been revised to now make up the group of units within this Training Package (UEO06). They cover a broad range of knowledge and skills applied in the Generation industry.

The development project satisfied the following characteristics:

- EE-OZ Training Standards and its nation wide focus groups were appropriately representative of the industry throughout Australia.
- Development, consultation, and validation included appropriate processes with a wide range of industry employer/employee, practitioners, providers, stakeholders/community, and regulatory and government agency representatives.
- The draft standards were distributed throughout the national, State and Territory ITAB network and to industry stakeholders and, feedback from other industries was also actively encouraged.
- The competency standards have been subject to further scrutiny during the process of developing this Training Package that contains vocational standards for the Industry.

## **Industry Coverage**

The Electricity Supply Industry Generation Sector (ANZSIC Code 3610) is defined as consisting of plant and equipment that is mainly engaged in the generation, transmission or distribution of electricity.

Generation encompasses all activities from the point of supply/acceptance of energy resources and consumables to the point of exit of electrical energy and by-products of the generation processes. Within these boundaries it includes all operations, maintenance, systems support, scientific, engineering and design support, management, marketing and administration functions required to establish and meet business objectives.

The sector has been characterised during the last few years by reductions in the size of the workforce, the privatisation of many enterprises and the out-sourcing of many functions and activities.

Notwithstanding these changes these Competency Standards cover approximately one third of the Electricity Supply Industry's direct workforce of 47,000 employees. The Standards may also provide coverage for the increasing contractor workforce, which is required to support sector activities.

The preceding statements should not be construed as the national ESI – Generation Sector Training Package has having coverage of any particular industry or sector of industry. The intent of the national ESI – Generation Sector Training Package is to describe the skills and knowledge, which pertain to vocations within the field of Generation, and to offer a choice and range of qualifications or competency standard units through appropriate training for organisations, and personnel seeking formal recognition of respective skills and knowledge. It is recognised that other training pathways may exist in the form of other Training Packages and arrangements.

The Generation Industry contributes greatly to the economic and future needs of Australia. Appendix 2 – The Electricity Generation Industry describes the Industry in detail.

### **Language, Literacy, Numeracy and Key Competencies**

The Competency Standards have been written to reflect the technical and operational needs of the industry and include appropriate language and literacy requirements. A new and specific section related to literacy and numeracy skills has been included in the competency standard units for the purposes of providing advice to Registered Training Organisations on the entry requirements for each unit. It characterises how participants are to be best equipped to achieve the respective unit, in terms of reading, writing and maths skill levels.

A specific section for Literacy and Numeracy Skills, Key Competencies and Skills Enabling Employment has been encompassed in Volume 2 of this Training Package. In addition, there is an explanation on their relationship to the Performance Criteria and assessed in accordance with the critical aspects of evidence within each competency standard unit.

### **Access, Equity and Cultural Diversity**

The skills required of employees in the Generation sector of the Energy Utilities Industry are comprehensive. The Competency Standards reflect the range of knowledge and skills required in the Industry. They are written in a non-exclusive manner so as to increase the participation rates of under-represented groups and to minimise unintentional bias.

As a matter of policy the Industry and this Training Package do not exclude any persons from participating in competency development, training and employment. This includes encouraging under-represented groups such as Indigenous peoples, people with disabilities, women, and people from rural and remote areas or cultural diversity to join the Industry.

### **Contextualisation**

In the competency standard units, ‘notes’ have been placed against respective aspects that include scope, Performance Criteria, Range Statement and Essential Knowledge and associated skills and other related sections. The insertion of these ‘notes’ is primarily to provide users and support material developers with examples of the form and type related to technical content principles, technology, equipment, or processes that may be used to cover the outcomes. The examples should be treated as information that adds clarity and provides guidance regarding the depth and breadth of learning objectives.

As the type, form, process, or technique of technology and equipment may change it is therefore expected and encouraged on RTOs to continue to be current in the content of their delivery arrangements. It is therefore appropriate for RTOs to use the notes in relation to technology and equipment references as advisory information. In these instances RTOs should aim to accommodate the adoption of improved and new technologies in the scope/range and essential knowledge and associated skills of the competency standard units by varying the context examples given in the referenced ‘Notes:’ to the Performance criteria, Range Statement and Essential Knowledge and associated Skills. However, the contextualisation must not be such that the outcome of the competency standard units is altered in any way.

Where contextualisation of the notes varies the outcome of the competency standard units and its related content, RTOs should consult with EE-Oz Training Standards to explore options for incorporating and/or covering the new arrangements, so that currency of the Training package is maintained.

It should be noted that any need to alter the competency standard units from its intended outcome requires a new or varied competency standard unit. Such changes are to be undertaken through the continuous improvement processes required of Training Packages, which in relation to this Training Package is managed by EE-Oz Training Standards.

Also refer to Volume 1 Part 1 – Qualifications Framework, of this national ESI – Generation Sector Training Package that describes vocational standards for the Industry.

### **Other Industry Standards**

It is recognised that the Generation Sector Standards do not cover all the competencies, which are likely to be required and applied within our workplaces. Nationally endorsed competency standards from other industries will be used, where appropriate, and the concept of cross-industry disciplinary standards will be encouraged. Specific rules for the importation of units from elsewhere have been included within this Training Package.

### **Unit Construction**

Competency Standard Units that have been successfully attained by learners are to be acknowledged. Some Training Packages have been constructed in a manner that will allow reporting without further explanation. However, there are competency standard units that have been constructed in a manner that require further explanation for the purposes of reporting the units intended outcome. These units include a reporting statement associated with the explanation. For example, one term used is *Endorsements*. This statement has been included in recognition of the high degree of commonality in process or function related to Elements and Performance Criteria when applied across the industry irrespective of the required technical knowledge. For instance, *Endorsements* provide the means of including information in the Evidence Guide of the Units that relate to a particular application and vocational outcome. This type of unit is considered to be several units in one. That is, every *Endorsement* within the unit proper represents the equivalence of one unit. Hence a unit with five *Endorsements* has five specific outcomes. Additional information is contained within the respective units.

Recognition of a specific outcome for a unit that includes *Endorsement* requires that all aspects of a selected *Endorsement* must be completed in order to attribute formal recognition.

It should be noted that in some instances the *Endorsement* may be affected by, and interrelated with, the selection of same for the requisite qualifications which are detailed in, and to be completed in accordance with Volume 1 Part 1 – Qualifications of this Training Package. In particular refer to section re Qualifications Structure. In such cases where units that contain *Endorsement* should not be interpreted independently from the qualification selected, as detailed in Volume 1 Part 1 – Qualifications Framework, which requires the nomination of an *Endorsement*.

### **Prerequisites**

It is important to note that in relation to training delivery of pre-requisite competency standard units, training and formative staged assessments may be delivered for all, or part of the sequence of competency standard units concurrently and at a different stage to the final assessment of each unit. However, the final assessment event and judgement for attributing competence for each unit is to follow the pre-requisite sequence.

## **1.2.2 Components of Competency Standard Units**

Competency Standards in Training Packages are determined by industry to meet identified industry skill needs. Competency standards are made up of a number of competency standard units each of which describes a key function or role in a particular job function or occupation.

The components of Competency Standard Units are summarised below, in the order in which they appear in the unit:

### **Unit Title**

The unit title is a succinct statement of the outcome of the competency standard unit. Each Competency Standard Unit title is unique both within and across Training Packages.

### **Scope/Unit Descriptor**

The unit scope /descriptor broadly communicates the content and purpose of the Competency Standard Unit and the skill area it addresses. Where Competency Standard Units have been contextualised from Competency Standard Units from other endorsed Training Packages, summary information is provided.

### **Prerequisite Competencies and Language, Literacy and Numeracy (optional)**

If there are any Competency Standard Units that must be completed before or concurrently, these will be listed. Also, included maybe a sub-section on entry advice, related to levels of language and numeracy applicable to the unit.

### **Application of the Unit**

This sub-section fleshes out the scope, purpose and operation of the Competency Standard Unit in different contexts eg, by showing how it applies in the workplace. It may include a sub-section or second paragraph that describes its relationship with other industry sectors and any licensing application or requirements, such as a licence to practice.

### **Competency Field (Optional)**

The competency field either reflects the way the competency standard units are categorised in the Training Package or denotes the industry sector, specialisation or function. It is an optional component of the Competency Standard Unit.

### **Sector (optional)**

The industry sector is a further categorisation of the competency field and identifies the next classification, for example an elective or supervision field.

### **Elements of Competency**

The elements of competency are the basic building blocks of the competency standard unit. They describe in terms of outcomes the significant functions and tasks that make up the competency.

### **Performance Criteria**

The Performance Criteria specify the required performance in relevant tasks, roles, processes, skills and in the applied knowledge that enables competent performance. They are usually written in passive voice. Critical terms or phrases may be written in bold italics and then defined in Range Statement, in the order of their appearance in the Performance Criteria.

### **Required Essential Knowledge and Associated Skills**

The essential knowledge and associated skills (EKAS) are identified within the competency standard units. Knowledge identifies what a person needs to know to perform the work in an informed and effective manner. Skills describe the application of knowledge to situations where understanding is converted into a workplace outcome and includes the ability to transfer it to new situations and environments.

### **Range Statement**

The Range Statement provides a context for the competency standard unit, describing essential operating conditions that may be present with training and assessment, depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts. As applicable, the meanings of key terms used in the Performance Criteria will also be explained in the Range Statement.

## Evidence Guide

The Evidence Guide is an integral part of the competency standard unit as it provided the critical assessment information to the RTO and Assessors about the critical aspects of assessment and how the described competency may be demonstrated. The Evidence Guide does this by providing a range of evidence and assessment contexts. The Evidence Guide describes:

- conditions under which competency must be assessed including variables such as the assessment environment or necessary equipment
- relationships with the assessment of any other competency standard units
- suitable methodologies for conducting assessment including the potential for workplace simulation
- resource implications, for example access to particular equipment, infrastructure or situations
- how consistency in performance can be assessed over time, various contexts and with a range of evidence,
- the required critical aspects and underpinning knowledge and skills, and
- application against relevant legislation, regulation, industrial instruments, codes of practice, guidelines and advisory standards. This also includes anti-discrimination and equal employment opportunity statutes (encompassing application of access, equity and cultural diversity principles associated with under-represented groups).

## Key Competencies

All Training Packages require the integration of Key Competencies either in each competency standard unit, or across a qualification, depending on industry needs and preferences.

The Key Competencies were first defined in 1992 in the project report, *Putting General Education to Work: The Key Competencies Report* (Mayer Committee 1992). The skills and knowledge they describe are essential for effective workplace participation and involve the sorts of capabilities commonly used by employers as selection criteria. They underpin the ability of employees to adapt to technological, organisational, societal and functional change.

The Key Competencies are generic, in that they apply to work in general, rather than to particular occupations or industries. They focus on the application of knowledge and skills in an integrated way in workplace situations. The seven Key Competencies are:

### 1. Collecting, analysing and organising information

The capacity to locate, sift and sort information in order to select what is required and to present it in a useful way and evaluate both the information itself and the sources and methods used to collect it.

### 2. Communicating ideas and information

The capacity to communicate effectively with others using the range of spoken, written, graphic and other non-verbal means of expression.

### 3. Planning and organising activities

The capacity to plan and organise one's own work activities, including making good use of time and resources, sorting out priorities and monitoring one's performance.

### 4. Working with others in teams

The capacity to interact effectively with other people both on a one-to-one basis and in groups, including understanding and responding to the needs of a client and working effectively as a member of a team to achieve a shared goal.

## 5. Solving problems

The capacity to apply problem-solving strategies in purposeful ways, both in situations where the problem and the solution are clearly evident and in situations requiring creative thinking and a creative approach to achieve a desired outcome.

## 6. Using mathematical ideas and techniques

The capacity to use mathematical ideas, such as number and space, and techniques such as estimation and approximation for practical purposes.

## 7. Using technology

The capacity to apply technology, combining the physical and sensory skills needed to operate equipment with the understanding of scientific and technological principles needed to explore and adapt systems.

### Performance Levels

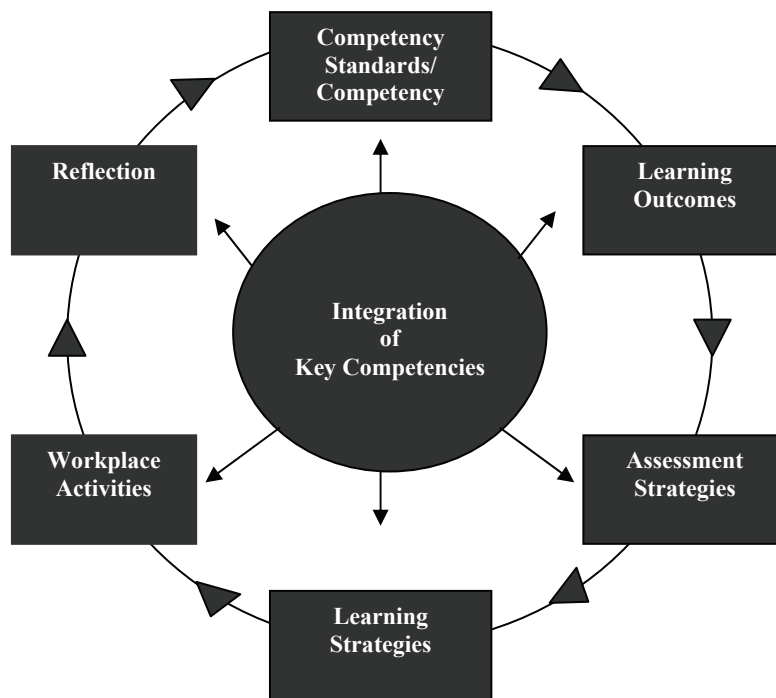
There are three levels of performance defined within the Key Competencies. These are stand-alone levels and do not correspond to the AQF qualification levels.

- **Performance Level 1** is concerned with the level of competence needed to **undertake** activities efficiently with sufficient self-management to meet the explicit requirements of the activity, and to make judgements about the quality of outcomes against established criteria.
- **Performance Level 2** describes the competence needed to **manage** activities requiring the selection, application and integration of a number of elements, and to select from established criteria to judge quality of process and outcome.
- **Performance Level 3** describes the competence needed to **evaluate and reshape** processes, to establish and use principles in order to determine appropriate ways of approaching activities, and to establish criteria for judging quality of process and outcome.

However relating performance to the specific industry or workplace context may be more useful than interpreting the somewhat abstracted performance levels provided above. Where the Key Competencies are defined in the competency standard unit they are included in a table together with examples of their application to help with assessment of their performance. Further, in evaluating the level of performance for the Key Competencies consideration has been given to the performance expectations at the AQF qualification level involved.

### Delivery and Assessment of Key Competencies

The Key Competencies are integral to workplace competency and as such must be explicitly considered in the design, customisation, delivery and assessment of vocational education and training programs as represented diagrammatically below.



### Skills Enabling Employment

A new feature included on the competency standard units of this Training Package is the inclusion of Skills Enabling Employment.

The enabling skills and knowledge performance conditions required for employment are essential for effective workplace participation and involve the sorts of aptitudes and capabilities commonly used by employers as selection criteria. They enable employees to develop and use skills for real life experiences in work, self-learning, reflecting on performance, interpreting the workplace, planning and organising work, responding to new situations that are non-routine.

Skills enabling employment are generic, in that they apply to work in general as enabling skills, rather than to particular occupations or industries. They focus on the enabling qualities of knowledge and skills as they are applied in an integrated way in workplace situations. There are six enabling knowledge and skills performance conditions:

1. Developing and using skills within a real workplace
2. Learning to learn in the workplace
3. Reflecting on the outcome and process of work task
4. Interacting and understanding of the context of the work task
5. Planning and organising the meaningful work task
6. Performing the work task in non-routine or contingent situations

### 1.2.3 Assessment Guidelines

The ESI Generation Sector has developed guidelines for the assessment of these standards. The guidelines are included at Volume 1 Part 3 – Assessment Guidelines of this Training Package.

## 1.2.4 National Qualifications

The ESI – Generation Sector has identified qualifications, which are linked to and use these competency standards. These are included in Volume 1 Part 1 – Qualifications Framework of this Training Package.

A list of the qualification titles contained in this Training Package is provided in Volume 1 Part 1. Included are details of the content and composition of the qualifications, the Industry Qualifications Framework, completion requirements and the rules for structuring and flexibility arrangements and the qualifications structure for each qualification. Further, there is a full description provided for each qualification, which explains their application and gives added meaning to the group of units making up the respective qualification.

## 1.2.5 Regulatory Arrangements – Generation Sector

The Electricity Generation Industry is subject to a high level of regulation and codes of practice related to the assembly, installation and maintenance of parts, components and the control and operation of equipment, apparatus and the like. The regulations and Codes of Practice are based on principles of the operation of wiring systems and associated circuits involving equipment, apparatus and systems, public safety, safety and health of individuals who work on systems and apparatus/equipment and other Codes and Practices related to the environment in which they are installed and maintained.

### Statutes, Regulations and Codes of Practice

Federal, State and Territory Electricity, Telecommunications, Occupational Health and Safety and Work Cover Acts and Regulations typically cover the Generation Industry. Further, there are other statutes, regulations, industrial instruments, Codes of Practice, guidelines and advisory standards, Australian/New Zealand and International Standards, that apply to the Generation Industry.

Information relevant to the Generation sector can be found in the following Internet sites:

[www.fed.gov.au](http://www.fed.gov.au)

[www.nsw.gov.au](http://www.nsw.gov.au)

[www.qld.gov.au](http://www.qld.gov.au)

[www.sa.gov.au](http://www.sa.gov.au)

[www.nt.gov.au](http://www.nt.gov.au)

[www.act.gov.au](http://www.act.gov.au)

[www.wa.gov.au](http://www.wa.gov.au)

[www.tas.gov.au](http://www.tas.gov.au)

[www.standards.org.au](http://www.standards.org.au)

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<http://www.acma.gov.au>

<http://www.dewr.gov.au/>

<http://www.ascc.gov.au/>

<http://www.workplace.gov.au/tra>

<http://www.dest.gov.au/>

<http://training.com.au/>

Other sources of information are also available.

### Contextualisation of Competency Standard Units by RTOs

Registered Training Organisation (RTOs) may contextualise Competency Standard Units to reflect local outcomes required, provided all requirements and /or completion rules of the Training Package are not infringed upon. This also includes any prevailing regulatory requirements that may apply to the Competency Standard Units. Contextualisation, provided it does not dilute in any way the Competency Standard Units could involve additions or amendments to suit particular delivery methods, learner profiles, specific enterprise equipment requirements, or to otherwise meet local needs. The integrity of the overall intended outcome of the competency standard units must be maintained and not reduced.

Any contextualisation of Competency Standard Units in this endorsed Training Package must be within the bounds of the following advice. In contextualising Competency Standard Units, RTOs:

- must not contravene, diminish or detract from any regulatory/licensing arrangement that may apply to the unit, or its related delivery arrangements
- must not remove or add to the number and content of Elements and Performance Criteria
- may add specific industry terminology to Performance Criteria where this does not distort or narrow the competency outcomes, **and /or**
- may make amendments and additions to the Range Statement as long as such changes do not diminish the breadth of application of the competency and reduce its portability, **and/or**
- may add detail to the Evidence Guide in areas such as the critical aspects of evidence or resources and infrastructure required where these expand the breadth of the competency but do not limit its use.

### **Exporting ESI CSUs from this Training Package**

Competency Standard Units in this Training Package are interrelated and linked with the Definitions/Glossary sections of the Volume and each unit includes relevant Essential Knowledge and Associated Skills. It also includes, matters related to language, literacy and numeracy, access, equity, cultural diversity and any regulatory arrangements in which the competency standard units may apply. No Competency Standard Unit is to be used in isolation or exported without these interrelated components.

## **1.2.6 Maintenance of Competency Standards**

The Electricity Supply Industry Generation Sector Competency Standards were developed by, and are therefore owned by, the industry. However, it is acknowledged that copyright ownership with respect to this material rests with the Commonwealth.

The Competency Standards must be maintained so that they reflect the ongoing needs of the ESI – Generation Sector Training Package and respond in a timely manner to changed technologies and circumstances.

### **What is competency?**

A competency comprises the specification of the knowledge and skill, and the application of that knowledge and skill, within an industry, to the standard of performance required in employment. The broad concept of ‘industry competency’ relates to demonstrated performance of specified tasks and duties, expected in the workplace to a given standard as expressed in industry standards.

Competency covers all aspects of workplace performance and involves performing individual tasks; managing a range of different tasks; responding to contingencies or breakdowns; and dealing with the responsibilities of the workplace including the work environment and working with others.

Work performance competency requires the demonstrated application of specified skills, knowledge and aptitudes consistently over time and to a quality standard in the workplace, as well as the ability to transfer it to new situations and environments. In line with this concept of competency, Training Packages describe the vocational standards for industry and focus on what is expected of a competent individual in the workplace as an outcome of learning, rather than focussing on the learning process itself. The measure is not what the individual/learner knows, but has the individual/learner demonstrated performance to a standard, with what they know in a range of situations and range of applications.

The parties (as detailed in the Introduction to this Training Package) who constitute the ESI – Generation Sector of the ElectroComms and EnergyUtilities Industry Skills Council share responsibility for the maintenance of the Competency Standards:

- Competency Standards maintenance will be coordinated and managed by ElectroComms and EnergyUtilities Industry Skills Council Ltd trading as EE-Oz Training Standards or its successor.

- Suggestions and proposals for changes from all parties are welcomed. These should be documented and submitted to EE-Oz Training Standards in accordance with its policies and procedures.

### 1.2.7 List of ESI – Generation Competency Standard Units

The following pages contain an index of the competency standard units together with scope descriptors contained in this Training Package. The Competency Standards Units are contained within eight (8) Schedules. Schedules 1 to 7 have been compiled based on a notional AQF level for the respective units within the streams of Operations and Maintenance. Schedule 8 lists those units approved for importation from other Training Packages into qualifications from this Training Package.

The Schedules are as follows:

SCHEDULE	DISCIPLINE	SERIES
SCHEDULE 1	Operations Units AQF 2	UEPOPS201A – UEPOPS250A
SCHEDULE 2	Operations Units AQF 3	UEPOPS301A – UEPOPS357A
SCHEDULE 3	Maintenance Units AQF 3	UEPMNT301A – UEPMNT360A
SCHEDULE 4	Operations Units AQF 4	UEPOPS401A – UEPOPS442A
SCHEDULE 5	Maintenance Units AQF 4	UEPMNT401A – UEPMNT433A
SCHEDULE 6	Operations Units AQF 5	UEPOPS501A – UEPOPS515A
SCHEDULE 7	Maintenance Units AQF 5	UEPMNT501A – UEPMNT504A
SCHEDULE 8	Imported Units	

**Table 1: Index of Competency Standard Units and Scopes/Descriptors****Schedule 1 OPERATION UNITS UEPOPS201A – UEPOPS250A**

<b>Schedule 1 Operation Units UEPOPS201 – UEPOPS250A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS201A</b>	<p><b>Comply with Occupational Health and Safety policy and procedures</b></p> <p>This unit deals with the skills and knowledge required to follow defined Occupational Health and Safety policies and procedures related to the work being undertaken in order to ensure the individual's own safety and that of others in the workplace.</p>
<b>UEPOPS202A</b>	<p><b>Apply Quality Systems to Work</b></p> <p>This unit deals with the skills and knowledge required to apply the desired standards to work as specified within the quality system.</p>
<b>UEPOPS203A</b>	<p><b>Operate and Monitor Communications System</b></p> <p>This unit deals with the skills and knowledge required to operate and monitor the application of communications systems.</p>
<b>UEPOPS204A</b>	<p><b>Maintain and Utilise Records</b></p> <p>This unit deals with the skills and knowledge required to maintain and use of recorded data.</p>
<b>UEPOPS205A</b>	<p><b>Conduct Minor Mechanical Maintenance</b></p> <p>This unit deals with the skills and knowledge required to conduct a range of minor/basic maintenance functions associated with, but not limited to, mechanical equipment.</p>
<b>UEPOPS206A</b>	<p><b>Conduct Minor Electrical Maintenance</b></p> <p>This unit deals with the skills and knowledge required to conduct a range of minor/basic maintenance functions associated with electrical equipment</p>
<b>UEPOPS207A</b>	<p><b>Perform Plant Lubrication</b></p> <p>This unit deals with the skills and knowledge required to maintain grease, oil levels and quality in all areas of plant.</p>
<b>UEPOPS208A</b>	<p><b>Operate Local Systems</b></p> <p>This unit deals with the skills and knowledge required to operate plant at the local position in conjunction with co-ordinated systems under the control of appropriate authorised personnel.</p>
<b>UEPOPS209A</b>	<p><b>Perform Process Plant Inspections</b></p> <p>This unit deals with the skills and knowledge required to conduct the inspection of generation production plant and associated equipment.</p>

<b>Schedule 1 Operation Units UEPOPS201 – UEPOPS250A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS210A</b>	<p><b>Conduct First Response within a Workplace Team</b></p> <p>This unit deals with the skills and knowledge required to conduct first response within emergency team operations.</p>
<b>UEPOPS211A</b>	<p><b>Clean Plant and Equipment</b></p> <p>This unit deals with the skills and knowledge required to clean industrial plant, machinery and surrounds associated with Electricity Generation stations and related surroundings which may include the appropriate removal of excess or oil based soil.</p>
<b>UEPOPS212A</b>	<p><b>Perform Basic Rigging Work</b></p> <p>This unit deals with the skills and knowledge required to undertake rigging work associated with, but not limited to, movement of plant and equipment, in particular hoists, safety nets and static lines, safety screens and shutters.</p>
<b>UEPOPS213A</b>	<p><b>Perform Intermediate Rigging Work</b></p> <p>This unit deals with the skills and knowledge required to undertake rigging work associated with, but not limited to, movement of plant and equipment, all hoists, rigging of cranes, dual lifts, demolition.</p>
<b>UEPOPS214A</b>	<p><b>Perform Dogging Work</b></p> <p>This unit deals with the skills and knowledge required to apply slinging techniques, including the selection and inspection of lifting gear, and provision of direction to the crane/hoist operator in the movement of the load including when the load is out of view of the operator.</p>
<b>UEPOPS215A</b>	<p><b>Perform Basic Scaffolding</b></p> <p>This unit deals with the skills and knowledge required to perform the application of scaffolding work in an environment where electricity is being generated. This would include, but not limited to, free standing prefabricated scaffolds, cantilevered hoist with maximum working load limit not exceeding 500kg (materials only), bracket scaffolds (tank and formwork).</p>
<b>UEPOPS216A</b>	<p><b>Perform Intermediate Scaffolding</b></p> <p>This unit deals with the skills and knowledge required to erect and dismantle scaffolding work in an environment where electricity is being generated including, but not limited to, tube and coupler scaffolds, cantilevered and spurred scaffolds, barrow ramps and sloping platforms, mast climbers.</p>
<b>UEPOPS217A</b>	<p><b>Conduct Elevating Work Platform Operations</b></p> <p>This unit deals with the skills and knowledge required to conduct the inspection and pre-operational tests, positioning, setting up and operation of elevating work platforms in an environment where electricity is being generated.</p>

<b>Schedule 1 Operation Units UEPOPS201 – UEPOPS250A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS218A</b>	<p><b>Shift and Transfer Materials using a Bulldozer</b></p> <p>This unit deals with the skills and knowledge required to undertake the shifting, loading and carrying of materials using a bulldozer in an environment where electricity is being generated.</p>
<b>UEPOPS219A</b>	<p><b>Shift and Transfer Materials using a Grader</b></p> <p>This unit deals with the skills and knowledge required to undertake the shifting, loading and carrying of materials using a Grader in an environment where electricity is being generated.</p>
<b>UEPOPS220A</b>	<p><b>Shift and Transfer Materials using a Scraper</b></p> <p>This unit deals with the skills and knowledge required to undertake the shifting, loading and carrying of materials using a scraper in an environment where electricity is being generated.</p>
<b>UEPOPS221A</b>	<p><b>Shift and Transfer Materials using a Front End Loader</b></p> <p>This unit deals with the skills and knowledge required to undertake the shifting, loading and carrying of materials using a front end loader in an environment where electricity is being generated.</p>
<b>UEPOPS222A</b>	<p><b>Shift and Transfer Materials using a Skidsteer Loader</b></p> <p>This unit deals with the skills and knowledge required to undertake the shifting, loading and carrying of materials using a Skidsteer Loader in an environment where electricity is being generated.</p>
<b>UEPOPS223A</b>	<p><b>Shift and Transfer Materials using a Telescopic materials handler-loader</b></p> <p>This unit deals with the skills and knowledge required to undertake the shifting, loading and carrying of materials using a telescopic materials handler-loader in an environment where electricity is being generated.</p>
<b>UEPOPS224A</b>	<p><b>Shift and Transfer Materials using a Backhoe</b></p> <p>This unit deals with the skills and knowledge required to undertake the shifting, loading and carrying of materials using a backhoe in an environment where electricity is being generated.</p>
<b>UEPOPS225A</b>	<p><b>Shift and Transfer Materials using an Excavator</b></p> <p>This unit deals with the skills and knowledge required to undertake the shifting, loading and carrying of materials using an excavator in an environment where electricity is being generated.</p>
<b>UEPOPS226A</b>	<p><b>Shift and Transfer Materials using Bobcats – wheeled and tracked</b></p> <p>This unit deals with the skills and knowledge required to undertake the shifting, loading and carrying of materials using Bobcats – wheeled and tracked in an environment where electricity is being generated.</p>

<b>Schedule 1 Operation Units UEPOPS201 – UEPOPS250A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS227A</b>	<p><b>Shift and Transfer Materials using Borers and related attachments</b></p> <p>This unit deals with the skills and knowledge required to undertake the shifting, loading and carrying of materials using borers and related attachments in an environment where electricity is being generated.</p>
<b>UEPOPS228A</b>	<p><b>Conduct Forklift Operations</b></p> <p>This unit deals with the skills and knowledge required to undertake the inspection and pre-operational tests, driving, manoeuvring and the lifting and relocating of loads using a fork-lift in an environment where electricity is being generated.</p>
<b>UEPOPS229A</b>	<p><b>Operate Lifting and Load Shifting Equipment for Loads less than 10 tonnes</b></p> <p>This unit deals with the skills and knowledge required to undertake the operation of specified cranes and lifting equipment in an environment where electricity is being generated and used to facilitate the installation, modification or maintenance of equipment associated with the Power Generation industry sector.</p>
<b>UEPOPS230A</b>	<p><b>Operate Lifting and Load Shifting Equipment for Loads greater than ten tonnes</b></p> <p>This unit deals with the skills and knowledge required to undertake the operation of particular cranes and hoists for loads greater than ten tonnes in an environment where electricity is being generated and used to facilitate the installation, modification or maintenance of equipment associated with the Power Generation industry sector.</p>
<b>UEPOPS231A</b>	<p><b>Operate Explosive Powered Tool</b></p> <p>This unit deals with the skills and knowledge required to operate an explosive powered tool commonly known as a ramset gun.</p>
<b>UEPOPS232A</b>	<p><b>Transport Plant and Equipment</b></p> <p>This unit deals with the skills and knowledge required to transport plant and equipment.</p>
<b>UEPOPS233A</b>	<p><b>Perform Machining Operations</b></p> <p>This unit deals with the skills and knowledge required to perform basic machining operations that would not require the use of precision measuring instruments, or scaling from drawings and prints.</p>

<b>Schedule 1 Operation Units UEPOPS201 – UEPOPS250A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS234A</b>	<p><b>Perform Routine Oxyacetylene (Fuel Gas) Welding (OAW)</b></p> <p>This unit deals with the skills and knowledge required to be applied in a maintenance environment where welding is not required to meet Australian Standard 1554 general purpose or equivalent Codes and/or licensing requirements.</p>
<b>UEPOPS235A</b>	<p><b>Perform Routine Manual Arc Welding</b></p> <p>This unit deals with the skills and knowledge required to be applied in a maintenance environment where welding is not required to meet Australian Standard 1554 general purpose or equivalent Codes and/or licensing requirements.</p>
<b>UEPOPS236A</b>	<p><b>Perform Manual Heating, Thermal Cutting and Gouging</b></p> <p>This unit deals with the skills and knowledge required to be applied in a maintenance environment and would be used to facilitate a wide range of maintenance activities.</p>
<b>UEPOPS237A</b>	<p><b>Perform Tool Store Duties</b></p> <p>This unit deals with the skills and knowledge required to cover the management and storage of tools and consumable items used in a workshop or similar environment associated within the Generation industry sector.</p>
<b>UEPOPS238A</b>	<p><b>Maintain Battery Banks and Cells</b></p> <p>This unit deals with the skills and knowledge required to undertake the maintenance of all battery cells/banks including hydrogen generation cells/banks.</p>
<b>UEPOPS239A</b>	<p><b>Conduct Minor/Basic Electrical Maintenance</b></p> <p>This unit deals with the skills and knowledge required to conduct a range of minor/basic maintenance functions associated with electrical equipment.</p>
<b>UEPOPS240A</b>	<p><b>Operate and Monitor Fuel Supply (Coal)</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor coal delivery systems to the generating unit storage bunker.</p>
<b>UEPOPS241A</b>	<p><b>Operate and Monitor Ash and Dust Disposal Plant</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor ash and dust disposal plants associated with a coal fired power station.</p>
<b>UEPOPS242A</b>	<p><b>Operate and Monitor Dust Collection Plant</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor dust collection plant associated with a power station.</p>

<b>Schedule 1 Operation Units UEPOPS201 – UEPOPS250A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS243A</b>	<b>Operate Air Conditioning Plant</b> This unit deals with the skills and knowledge required to operate and inspect all air conditioning plant.
<b>UEPOPS244A</b>	<b>Operate and Monitor Site Services Water Systems</b> This unit deals with the skills and knowledge required to operate, inspect and monitor of site services water systems, excluding fixed fire water services.
<b>UEPOPS245A</b>	<b>Conduct Chemical Batching Operations</b> This unit deals with the skills and knowledge required to conduct mixing of chemicals for the treatment of a primary substance.
<b>UEPOPS246A</b>	<b>Operate Waste and Contaminated Water Plant</b> This unit deals with the skills and knowledge required to operate, inspect and monitor waste contaminated water plant associated with a power generating complex.
<b>UEPOPS247A</b>	<b>Operate and Monitor an Internal Combustion Single Fuel Reciprocating Engine</b> This unit deals with the skills and knowledge required to operate, inspect and monitor single fuel internal combustion engines.
<b>UEPOPS248A</b>	<b>Operate and Monitor an Internal Combustion Dual Fuel Reciprocating Engine</b> This unit deals with the skills and knowledge required to operate, inspect and monitor dual fuel reciprocating engines.
<b>UEPOPS249A</b>	<b>Liaise with Stakeholders</b> This unit deals with the skills and knowledge required to communicate with staff and external/internal stakeholders.
<b>UEPOPS250A</b>	<b>Perform process plant inspections</b> This unit deals with the skills and knowledge required to conduct the inspection of generation production plant and associated equipment.

## Schedule 2 OPERATION UNITS UEPOPS301A – UEPOPS357A

<b>Schedule 2 Operation Units UEPOPS301A – UEPOPS357A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS301A</b>	<p><b>Conduct Single Energy Source Isolation Procedures for Permit to Work</b></p> <p>This unit deals with the skills and knowledge required to apply single energy source isolation procedures of the permit to work procedures at the isolating level.</p> <p>Job requirements including permits are co-ordinated with other personnel involved in, or affected by, the isolation in accordance with enterprise/site requirements.</p>
<b>UEPOPS302A</b>	<p><b>Perform Advanced Rigging Work</b></p> <p>This unit deals with the skills and knowledge required to undertake rigging work associated with, but not limited to, movement of plant and equipment, all hoists, rigging of cranes, dual lifts, suspended scaffolds and fabricated hung scaffolds.</p>
<b>UEPOPS303A</b>	<p><b>Perform Advanced Scaffolding</b></p> <p>This unit deals with the skills and knowledge required to perform the application of scaffolding work in an environment where electricity is being generated including, but not limited to, hung scaffolds, including scaffolds hanging from tubes, wire ropes and chains, and suspended scaffolds.</p>
<b>UEPOPS304A</b>	<p><b>Make and Spread a Stockpile</b></p> <p>This unit deals with the skills and knowledge required to make and spread stockpiles.</p>
<b>UEPOPS305A</b>	<p><b>Operate &amp; Monitor Briquette Coal Cooling Plant</b></p> <p>This unit deals with the skills and knowledge required for operations associated with the cooling of coal in the briquette manufacturing process.</p>
<b>UEPOPS306A</b>	<p><b>Operate &amp; Monitor Briquette Coal Drying Plant</b></p> <p>This unit deals with the skills and knowledge required for operations associated with the drying of coal in the briquette manufacturing process.</p>
<b>UEPOPS307A</b>	<p><b>Operate &amp; Monitor Briquette Coal Press Plant</b></p> <p>This unit deals with the skills and knowledge required for operations associated with the pressing of dried raw fine coal into briquettes.</p>
<b>UEPOPS308A</b>	<p><b>Perform Briquette Laboratory Tests</b></p> <p>This unit deals with the skills and knowledge required for activities associated with the testing of coal briquette products.</p>

<b>Schedule 2 Operation Units UEPOPS301A – UEPOPS357A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS309A</b>	<p><b>Operate and Monitor Air Conditioning Equipment and Ventilation Systems</b></p> <p>This unit deals with the skills and knowledge required to diagnose and repair faults in air conditioning equipment/ventilation systems, and associated accessories and wiring systems.</p>
<b>UEPOPS310A</b>	<p><b>Operate Bulk Coal Handling Plant</b></p> <p>This unit deals with the skills and knowledge required to address the storage, reclaiming and dispatching of bulk coal.</p>
<b>UEPOPS311A</b>	<p><b>Operate Fabric Filter Dust Collection Plant</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor fabric filter dust collection plant associated with coal fired power stations.</p>
<b>UEPOPS312A</b>	<p><b>Operate and Monitor Fuel Supply</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor fuel supply from source to recipient unit storage.</p>
<b>UEPOPS313A</b>	<p><b>Operate and Monitor Boiler Draught System</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor boiler draught equipment</p>
<b>UEPOPS314A</b>	<p><b>Operate and Monitor Fuel Firing Plant (Gas or Oil)</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor gas or oil firing plant.</p>
<b>UEPOPS315A</b>	<p><b>Operate and Monitor Fuel Firing Plant (Coal)</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor coal firing plant.</p>
<b>UEPOPS316A</b>	<p><b>Operate and Monitor Boiler Steam/Water Cycle</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor boiler steam/water cycle.</p>
<b>UEPOPS317A</b>	<p><b>Operate and Monitor Fixed Fire Protection Systems</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor fixed fire protection systems.</p>
<b>UEPOPS318A</b>	<p><b>Operate and Monitor Compressed Gas Systems</b></p> <p>This unit deals with the skills and knowledge required to operate compressed gas systems excluding air/steam.</p>

<b>Schedule 2 Operation Units UEPOPS301A – UEPOPS357A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS319A</b>	<b>Operate and Monitor Gas Production Plant</b> This unit deals with the skills and knowledge required to operate, inspect and monitor gas producing plant.
<b>UEPOPS320A</b>	<b>Operate and Monitor Compressed Air Systems</b> This unit deals with the skills and knowledge required to operate compressed air systems.
<b>UEPOPS321A</b>	<b>Operate and Monitor Water Treatment Plant</b> This unit deals with the skills and knowledge required to operate, inspect and monitor water treatment and purification plant.
<b>UEPOPS322A</b>	<b>Operate and Monitor Alkalinity Reduction Plant</b> This unit deals with the skills and knowledge required to operate, inspect and monitor alkalinity reduction plant which includes cooling tower water dosing plant.
<b>UEPOPS323A</b>	<b>Operate and Monitor Reverse Osmosis Plant</b> This unit deals with the skills and knowledge required to operate, inspect and monitor reverse osmosis plant.
<b>UEPOPS324A</b>	<b>Operate and Monitor Brine Concentrator Plant</b> This unit deals with the skills and knowledge required to operate, inspect and monitor of brine concentrator plant.
<b>UEPOPS325A</b>	<b>Operate and Monitor Water Quality Control Systems</b> This unit deals with the skills and knowledge required to operate and monitor water quality control systems in a power station.
<b>UEPOPS326A</b>	<b>Operate and Monitor Oil Systems</b> This unit deals with the skills and knowledge required to operate, monitor and inspect oil systems.
<b>UEPOPS327A</b>	<b>Monitor and Maintain Civil Assets</b> This unit deals with the skills and knowledge required to monitor and conduct remedial maintenance required to ensure the integrity of civil assets encountered with in the hyrdo-electric generating system.
<b>UEPOPS328A</b>	<b>Undertake Dam Safety Surveillance</b> This unit deals with the skills and knowledge required to conduct ongoing surveillance of water storage facilities to ensure structural integrity and water quality is maintained.
<b>UEPOPS329A</b>	<b>Operate and Monitor Auxiliary Steam Systems</b> This unit deals with the skills and knowledge required to operate, inspect and monitor auxiliary steam systems in a power station.

<b>Schedule 2 Operation Units UEPOPS301A – UEPOPS357A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS330A</b>	<p><b>Operate and Monitor Heat Exchangers</b></p> <p>This unit deals with the skills and knowledge required to operate and monitor heat exchangers/cooling systems within power stations.</p>
<b>UEPOPS331A</b>	<p><b>Operate and Monitor Water Systems (Condensate and Feedwater)</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor the condensation and feedwater system.</p>
<b>UEPOPS332A</b>	<p><b>Operate and Monitor Condensing and Cooling Water Systems</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor condenser cooling water and auxiliary cooling water systems.</p>
<b>UEPOPS333A</b>	<p><b>Operate and Monitor H.R.S.G. Hot Gas Control System</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor waste heat recovery systems.</p>
<b>UEPOPS334A</b>	<p><b>Operate and Monitor a Wind Generator</b></p> <p>This unit deals with the skills and knowledge required to operate, inspect and monitor wind generator plant of any capacity.</p>
<b>UEPOPS335A</b>	<p><b>Operate a Hydro Generator/Synchronous Condenser/Pump Unit</b></p> <p>This unit deals with the skills and knowledge required to start-up, maintain steady state running and shutdown a hydro unit operating in generator or synchronous condenser or pump mode.</p>
<b>UEPOPS336A</b>	<p><b>Manage, Operate and Monitor a Gas Turbine Unit</b></p> <p>This unit deals with the skills and knowledge required to undertake the management of an in-service gas turbine unit.</p>
<b>UEPOPS337A</b>	<p><b>Maintain Quality Systems Within the Team</b></p> <p>This unit deals with the skills and knowledge required to oversee compliance with performance indicators through the maintenance of quality systems within a team environment.</p>
<b>UEPOPS338A</b>	<p><b>Facilitate Effective Workplace Communication</b></p> <p>This unit deals with the skills and knowledge required to facilitate effective workplace communication.</p>
<b>UEPOPS339A</b>	<p><b>Operate and Monitor a Boiler Unit</b></p> <p>This unit deals with the skills and knowledge required to operate and monitor the in-service boiler unit capable of supplying steam.</p>

<b>Schedule 2 Operation Units UEPOPS301A – UEPOPS357A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS340A</b>	<b>Operate and Monitor a Steam Turbine</b> This unit deals with the skills and knowledge required to operate and monitor of an in-service steam turbine.
<b>UEPOPS341A</b>	<b>Shut-down a Steam Turbine</b> This unit deals with the skills and knowledge required to conduct a shut-down of a steam turbine to where it can be placed at rest.
<b>UEPOPS342A</b>	<b>Interpret and Analyse Single Operation Protection Devices</b> This unit deals with the skills and knowledge required to interpret and analyse of the operation of single operation protection devices.
<b>UEPOPS343A</b>	<b>Operate Hydro-Electric Generating Plant and Auxiliary Equipment</b> This unit deals with the skills and knowledge required to operate a hydro-electric generating station. This will include both the operational and maintenance activities associated with such plant.
<b>UEPOPS344A</b>	<b>Conduct Water Conveyance and Control</b> This unit deals with the skills and knowledge required for the operation of storage, conveyance and control systems of hydro generation water supplies.
<b>UEPOPS345A</b>	<b>Implement Dam Safety Surveillance Procedures</b> This unit deals with the skills and knowledge required for the scheduling, implementation and reporting of dam safety surveillance.
<b>UEPOPS346A</b>	<b>Conduct Non-Routine Operational Testing</b> This unit deals with the skills and knowledge required to conduct testing of generation plant and associated equipment which may be of a non-routine nature.
<b>UEPOPS347A</b>	<b>Operate and Monitor Supervisory, Control and Data Acquisition Systems</b> This unit deals with the skills and knowledge required to undertake monitoring and operation of screen based supervisory, control and data acquisition systems.
<b>UEPOPS348A</b>	<b>Respond to Critical Incidents</b> This unit deals with the skills and knowledge required to respond to incidents of a critical nature that may impact on the operational effectiveness of the plant or system, endanger human life or property, or have an adverse impact on the environment.
<b>UEPOPS349A</b>	<b>Operate H.V. Primary Switchgear</b> This unit deals with the skills and knowledge required to undertake the local operation of high voltage primary circuit breaking devices.

<b>Schedule 2 Operation Units UEPOPS301A – UEPOPS357A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS350A</b>	<p><b>Develop Contingency Plans</b></p> <p>This unit deals with the skills and knowledge required to prepare contingency plans required to support the integrity of the enterprise.</p>
<b>UEPOPS351A</b>	<p><b>Operate H.V. Condition Changing Apparatus</b></p> <p>This unit deals with the skills and knowledge required to undertake the local operation of all high voltage condition modifying devices.</p>
<b>UEPOPS352A</b>	<p><b>Conduct Operational Checks on In-service Mechanical Plant</b></p> <p>This unit deals with the skills and knowledge required to conduct operational checks on in-service mechanical plant.</p>
<b>UEPOPS353A</b>	<p><b>Conduct Operational Checks on In-service Electrical Plant</b></p> <p>This unit deals with the skills and knowledge required to conduct operational checks on in-service electrical plant.</p>
<b>UEPOPS354A</b>	<p><b>Operate and Monitor Dual Fuel Firing Plant</b></p> <p>This unit deals with the skills and knowledge required for the operation, inspection and monitoring of dual fuel firing plant in which each fuel source is capable of providing 100% Maximum Continuous Rating.</p>
<b>UEPOPS355A</b>	<p><b>Monitor the Implementation of Under Frequency Load Shedding</b></p> <p>This unit deals with the skills and knowledge required to implement and monitor Under Frequency Load Shedding facilities for isolated and integrated generation/network systems.</p>
<b>UEPOPS356A</b>	<p><b>Apply Environmental and Sustainable Energy Procedures</b></p> <p>This competency standard addresses unit deals with the skills and knowledge required for the implementation of environmental procedures to demonstrate duty of care and to identify assess and control environmental risks and the impact of work related activities. It includes a commitment to the principles of sustainable energy.</p>
<b>UEPOPS357A</b>	<p><b>Operate H.V. Secondary Switchgear</b></p> <p>This unit deals with the skills and knowledge required to undertake the local operation of high voltage secondary circuit breaking devices.</p>

## Schedule 3 MAINTENANCE UNITS UEPMNT301A – UEPMNT360A

<b>Schedule 3 Maintenance Units UEPMNT301A – UEPMNT360A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT301A</b>	<p><b>Install and Maintain Hydraulic/Pneumatic Components</b></p> <p>This unit deals with the skills and knowledge required to undertake the installation, repair and/or maintenance of fluid power components on stationary/mobile equipment.</p>
<b>UEPMNT302A</b>	<p><b>Install and Maintain Industrial Pipework</b></p> <p>This unit deals with the skills and knowledge required to undertake all work associated with the installation, maintenance, and fabrication of industrial pipework which may also involve fault finding and repairs.</p>
<b>UEPMNT303A</b>	<p><b>Maintain Mechanical Valves</b></p> <p>This unit deals with the skills and knowledge required to undertake fault finding, diagnosis, repair and/or overhaul of mechanical valves, but excluding any associated servo or actuating unit.</p>
<b>UEPMNT304A</b>	<p><b>Maintain Mechanical Pumps</b></p> <p>This unit deals with the skills and knowledge required to undertake the installation and maintenance of mechanical pumps, compressors and blowers and the installation of which requires no more than basic alignment.</p>
<b>UEPMNT305A</b>	<p><b>Maintain Industrial Fans</b></p> <p>This unit deals with the skills and knowledge required to undertake all work required to maintain / overhaul industrial fans and may involve fault finding, diagnosis, repair and could require the removal and replacement of rotating elements with modulating controls.</p>
<b>UEPMNT306A</b>	<p><b>Maintain Industrial Transmissions</b></p> <p>This unit deals with the skills and knowledge required to undertake all work associated with the installation and maintenance of industrial transmissions and may involve fault finding, diagnosis and repairs.</p>
<b>UEPMNT307A</b>	<p><b>Maintain Industrial Screens, Strainers and Filters</b></p> <p>This unit deals with the skills and knowledge required to undertake the fault finding diagnosis, repair and/or overhaul of industrial screens, strainers and filters.</p>
<b>UEPMNT308A</b>	<p><b>Maintain Conveyors and Associated Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake the fault finding, diagnosis and repair, adjustments, exchange of rollers and preparations for belt splicing /repairs.</p>

<b>Schedule 3 Maintenance Units UEPMNT301A – UEPMNT360A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT309A</b>	<p><b>Maintain Material Feeders</b></p> <p>This unit deals with the skills and knowledge required to undertake the in-service fault finding, diagnosis and out of service inspection (internal/external), repairs and/or overhaul of material feeders.</p>
<b>UEPMNT310A</b>	<p><b>Maintain Material Crushers</b></p> <p>This unit deals with the skills and knowledge required to undertake the in-service fault finding, diagnosis and out of service inspection, repairs, and/or overhauls of material crushers and would involve roll/door assemblies.</p>
<b>UEPMNT311A</b>	<p><b>Maintain Fuel Transport Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct the installation and repair /overhaul of fuel carriage /delivery and associated systems.</p>
<b>UEPMNT312A</b>	<p><b>Maintain Industrial Pressure Vessels</b></p> <p>This unit deals with the skills and knowledge required to maintain the boiler pressure parts, pressure vessels and associated components</p>
<b>UEPMNT313A</b>	<p><b>Maintain Internal Combustion Engines</b></p> <p>This unit deals with the skills and knowledge required to conduct maintenance and major overhauls of fixed or pad mounted internal combustion engines.</p>
<b>UEPMNT314A</b>	<p><b>Maintain Hydro Turbines</b></p> <p>This unit deals with the skills and knowledge required for the removal from service and overhaul of hydro turbines.</p>
<b>UEPMNT315A</b>	<p><b>Maintain Wind Turbines</b></p> <p>This unit deals with the skills and knowledge required for the removal from service and overhaul of hydro turbines.</p>
<b>UEPMNT316A</b>	<p><b>Perform Advanced Machining Operations</b></p> <p>This unit deals with the skills and knowledge required to perform advanced machining operations that may require complex calculations, a high level of precision or quality and using a full range of materials including non-standard metals and alloys. It would also be expected that the full range of machine accessories could be employed.</p>
<b>UEPMNT317A</b>	<p><b>Diagnose and Repair Faults In Mechanical Equipment</b></p> <p>This unit deals with the skills and knowledge required to diagnose and repair faults in a range of mechanical equipment and may entail the work to be carried out whilst machinery/plant is on line.</p>

<b>Schedule 3 Maintenance Units UEPMNT301A – UEPMNT360A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT318A</b>	<p><b>Conduct Generator Mechanical Maintenance</b></p> <p>This unit deals with the skills and knowledge required to conduct mechanical maintenance of an electrical generating unit.</p>
<b>UEPMNT319A</b>	<p><b>Maintain and Test Fixed Fire Protection Systems</b></p> <p>This unit deals with the skills and knowledge required to conduct maintenance, fault finding and in-service testing of fixed fire protection systems.</p>
<b>UEPMNT320A</b>	<p><b>Inspect and Repair/Replace Faults in Mechanical Equipment/Components</b></p> <p>This unit deals with the skills and knowledge required to inspect and repair faults in a range of mechanical equipment/components which may require fabrication work to be carried out.</p>
<b>UEPMNT321A</b>	<p><b>Weld Using Manual Metal Arc Welding Process (MMAW)</b></p> <p>This unit deals with the skills and knowledge required to perform general purpose Manual Metal Arc Welding to AS1554.GP.</p>
<b>UEPMNT322A</b>	<p><b>Weld Using Gas Metal Arc Welding Process (GMAW)</b></p> <p>This unit deals with the skills and knowledge required to perform General Purpose Gas Metal Arc Welding to AS1554.GP.</p>
<b>UEPMNT323A</b>	<p><b>Weld Using Gas Tungsten Arc Welding Process (GTAW)</b></p> <p>This unit deals with the skills and knowledge required to perform General Purpose Gas Tungsten Arc Welding to AS1554 GP.</p>
<b>UEPMNT324A</b>	<p><b>Weld Using Oxyacetylene Welding Process (OAW)</b></p> <p>This unit deals with the skills and knowledge required to perform Oxyacetylene (Fuel Gas) Welding to AS1554.GP.</p>
<b>UEPMNT325A</b>	<p><b>Weld Using Submerged Arc Welding Process (SAW)</b></p> <p>This unit deals with the skills and knowledge required to perform submerged arc welding to AS1554.GP.</p>
<b>UEPMNT326A</b>	<p><b>Perform Advanced Welding Using Manual Metal Arc Welding Process (MMAW)</b></p> <p>This unit deals with the skills and knowledge required to perform special purpose Manual Metal Arc Welding to AS1554 SP.</p>
<b>UEPMNT327A</b>	<p><b>Perform Advanced Welding Using Gas Metal Arc Welding (GMAW)</b></p> <p>This unit deals with the skills and knowledge required to perform special purpose Gas Metal Arc Welding to AS1544.S.P.</p>

<b>Schedule 3 Maintenance Units UEPMNT301A – UEPMNT360A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT328A</b>	<p><b>Perform Advanced Welding Using Gas Tungsten Arc Welding (GTAW)</b></p> <p>This unit deals with the skills and knowledge required to perform special purpose Gas Tungsten Arc Welding to AS1554.SP.</p>
<b>UEPMNT329A</b>	<p><b>Perform Advanced Welding Using Oxyacetylene Welding Process (OAW)</b></p> <p>This unit deals with the skills and knowledge required to perform special purpose Oxy Acetylene Welding to AS1554.SP.</p>
<b>UEPMNT330A</b>	<p><b>Perform Manual Metal Arc Welding Process to Weld to AS1796 Certificate 1/1E (Low Carbon Steel Sheet and Plate)</b></p> <p>This unit deals with the skills and knowledge required to weld to AS1796 Certificate 1/1E (low carbon steel sheet and plate) using Manual Metal Arc Welding process.</p>
<b>UEPMNT331A</b>	<p><b>Perform Manual Metal Arc Welding Process to Weld to AS1796 Certificate 2 (Low Carbon Steel Pipe)</b></p> <p>This unit deals with the skills and knowledge required to weld to AS1796 Certificate 2 (lcs pipe) using Manual Metal Arc Welding process.</p>
<b>UEPMNT332A</b>	<p><b>Perform Manual Metal Arc Welding to Weld to AS1796 Certificate 3/3E (Alloy Steel Plate)</b></p> <p>This unit deals with the skills and knowledge required to weld to AS1796 Certificate 3/3E (alloy steel plate) using Manual Metal Arc Welding process.</p>
<b>UEPMNT333A</b>	<p><b>Perform Manual Metal Arc Welding Process to Weld to AS1796 Certificate 4 (Alloy Steel Pipe)</b></p> <p>This unit deals with the skills and knowledge required to weld to AS1796 Certificate 4 (alloy steel pipe) using Manual Metal Arc Welding process.</p>
<b>UEPMNT334A</b>	<p><b>Perform Gas Tungsten Arc Welding and Manual Metal Arc Welding Processes to Weld to AS1796 Certificate 5 (Alloy Steel Pipe)</b></p> <p>This unit deals with the skills and knowledge required to weld to AS1796 Certificate 5 (alloy steel pipe) using Gas Tungsten Arc Welding and manual Metal Arc Welding processes.</p>

<b>Schedule 3 Maintenance Units UEPMNT301A – UEPMNT360A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT335A</b>	<p><b>Perform Oxyacetylene Welding Process (Fuel Gas) to AS1796 Certificate 6/6E</b></p> <p>This unit deals with the skills and knowledge required to weld to AS1796 Certificate 6/6E using Oxy Acetylene (fuel gas) welding process.</p>
<b>UEPMNT336A</b>	<p><b>Perform Gas Tungsten Arc Welding to Weld to AS1796 Certificate 7 (Pipe)</b></p> <p>This unit deals with the skills and knowledge required to weld to AS1796 Certificate 7 (pipe) using Gas Tungsten Arc welding process.</p>
<b>UEPMNT337A</b>	<p><b>Perform Gas Metal Arc Welding to Weld to AS1796 Certificate 8/8E (Plate and Pipe)</b></p> <p>This unit deals with the skills and knowledge required to weld to AS1796 Certificate 8/8e (plate and pipe) using Gas Metal Arc Welding process.</p>
<b>UEPMNT338A</b>	<p><b>Perform Submerged Arc Welding to Weld to AS1796 Certificate 9</b></p> <p>This unit deals with the skills and knowledge required to weld to AS1796 Certificate 9 using Submerged Arc Welding process.</p>
<b>UEPMNT339A</b>	<p><b>Perform Sheet Metal Work</b></p> <p>This unit deals with the skills and knowledge required to undertake marking out and development, fabrication and installation of sheet metal work.</p>
<b>UEPMNT340A</b>	<p><b>Fabricate Metal Structures and Components</b></p> <p>This unit deals with the skills and knowledge required to fabricate metal structures and components required to facilitate the installation, modification and maintenance of equipment associated with the Generation industry sector.</p>
<b>UEPMNT341A</b>	<p><b>Repair/Replace/Modify Metal Structures and Components</b></p> <p>This unit deals with the skills and knowledge required to repair, replacement and /or modification of metal structures and components used in the Generation industry sector.</p>
<b>UEPMNT342A</b>	<p><b>Install Electrical Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake the installation of electrical equipment including, but not limited to, rotating and static machines, appliances, luminaries and associated control equipment, but excludes H.V. equipment.</p>

<b>Schedule 3 Maintenance Units UEPMNT301A – UEPMNT360A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT343A</b>	<p><b>Install Electrical Wiring Systems</b></p> <p>This unit deals with the skills and knowledge required to undertake the installation of electrical wiring systems including, but not limited to, general low voltage lighting, power circuits, control/indication and alarm circuits.</p>
<b>UEPMNT344A</b>	<p><b>Install Complex Electrical Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake the installation of complex / H.V electrical equipment.</p>
<b>UEPMNT345A</b>	<p><b>Install Electronic Electrical Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake the installation of electronic electrical equipment containing solid state components, complex control panels and complex control equipment.</p>
<b>UEPMNT346A</b>	<p><b>Maintain Electrical Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake the maintenance of electrical equipment including, but not limited to, rotating and static machines, appliances, luminaries and associated control equipment, but excludes H.V. equipment.</p>
<b>UEPMNT347A</b>	<p><b>Maintain Complex Electrical Equipment</b></p> <p>This unit refers to the maintenance of complex and H.V. electrical equipment.</p>
<b>UEPMNT348A</b>	<p><b>Maintain Electrical Electronic Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake the maintenance of electronic electrical equipment containing solid state components, complex control panels and complex control equipment.</p>
<b>UEPMNT349A</b>	<p><b>Diagnose and Repair Faults in Electrical Equipment</b></p> <p>This unit deals with the skills and knowledge required to diagnose and repair faults in electrical equipment, which may involve the work to be carried out with equipment online.</p>
<b>UEPMNT350A</b>	<p><b>Modify Electrical Equipment</b></p> <p>This unit deals with the skills and knowledge required to perform modifications of electrical equipment and may include, but not be limited to, alterations, additions or adjustments.</p>
<b>UEPMNT351A</b>	<p><b>Test and Commission Electrical Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct testing and commissioning of electrical wiring systems and equipment.</p>

<b>Schedule 3 Maintenance Units UEPMNT301A – UEPMNT360A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT352A</b>	<p><b>Test and Commission Electronic Electrical Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct testing and commissioning of electrical electronic equipment.</p>
<b>UEPMNT353A</b>	<p><b>Install Instrumentation Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake installation of instrumentation used in a “closed loop” system, including, but not limited to, sensor elements, signal characterising equipment, input/output blocks, controllers, transducers and final elements.</p>
<b>UEPMNT354A</b>	<p><b>Install Instrumentation Wiring Systems</b></p> <p>This unit deals with the skills and knowledge required to undertake installation of instrumentation wiring systems include, but not limited to cords and cables such as flexible multicore, thermocouple, co-axial, ribbon and hook up cable, signal and data cable.</p>
<b>UEPMNT355A</b>	<p><b>Install Complex / Electronic Instrumentation Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake installation of instrumentation used in a “multi-loop” configuration, including, but not limited to, signal characterising equipment, totaliser units, microprocessor control equipment, interface equipment, laboratory and field analysers, ultrasonic and nucleonics equipment.</p>
<b>UEPMNT356A</b>	<p><b>Maintain Instrumentation Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake maintenance of instrumentation equipment including, but not limited to, process measurement and control and analytical instrumentation.</p>
<b>UEPMNT357A</b>	<p><b>Diagnose and Repair Faults in Instrumentation Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake the diagnose and repair (to block level) of instrumentation used in “closed loop” system, including, but not limited to, sensor elements, signal characterising equipment, input/output blocks, controllers, transducers and final elements.</p>
<b>UEPMNT358A</b>	<p><b>Modify Instrumentation Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct modification of instrumentation used in a closed loop system, including, but not limited to, sensor elements, signal characterising equipment, input/output blocks, controllers, transducers, final elements.</p>
<b>UEPMNT359A</b>	<p><b>Test and Commission Instrumentation Systems</b></p> <p>This unit deals with the skills and knowledge required to conduct testing and commissioning of instrumentation systems and all ancillary equipment including, but not limited to, PC operating systems, distributive control systems, programmable logic control systems, process control systems.</p>

<b>Schedule 3 Maintenance Units UEPMNT301A – UEPMNT360A</b>	
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<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT360A</b>	<b>Terminate Fibre Optic Cables</b> This unit deals with the skills and knowledge required to undertake termination of fibre optic cables to equipment including, but not limited to, digital process controllers, distributive control systems, process computers, complex fire/security systems.

## Schedule 4 OPERATION UNITS UEPOPS401A – UEPOPS443A

<b>Schedule 4 Operation Units UEPOPS401A – UEPOPS443A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS401A</b>	<p><b>Monitor Compliance with Occupational Health and Safety Policy and Procedures</b></p> <p>This unit deals with the skills and knowledge required to implement and monitor the organisation's Occupational Health and Safety policies, procedures and programs in the relevant work area to achieve and maintain Occupational Health and Safety standards.</p> <p>It requires the ability to implement and comply with workplace procedures in hazard identification and risk control, observation of others safe practices during work operations and conduct of participative arrangements for maintaining health and safety in the workplace.</p>
<b>UEPOPS402A</b>	<p><b>Conduct Multiple Energy Source Isolation Procedures for Permit to Work</b></p> <p>This unit deals with the skills and knowledge required for the application of permit to work procedures where multiple energy sources require isolation for safe access to high voltage, low voltage or mechanical apparatus.</p>
<b>UEPOPS403A</b>	<p><b>Coordinate Permit to Work System</b></p> <p>This unit deals with the skills and knowledge required to co ordinate the permit to work system, its implementation and application on a day to day basis and during major outages and projects.</p>
<b>UEPOPS404A</b>	<p><b>Coordinate First Response Team Operation</b></p> <p>This unit deals with the skills and knowledge required to co-ordinate and manage a first response team.</p>
<b>UEPOPS405A</b>	<p><b>Operate and Monitor AC Electrical Systems</b></p> <p>This unit deals with the skills and knowledge required to operate and monitor local and remote operation of AC electrical switchgear, ring mains, switchboards and distribution systems including transformers and the remote operation of high voltage switch yards.</p>
<b>UEPOPS406A</b>	<p><b>Operate and Monitor DC Electrical Systems</b></p> <p>This unit deals with the skills and knowledge required to operate and monitor the local and remote operation of DC electrical switchgear, ring mains, switchboards, rectification and distribution systems.</p>
<b>UEPOPS407A</b>	<p><b>Start and Run up a Gas Turbine</b></p> <p>This unit deals with the skills and knowledge required for the establishment of combustion in a gas turbine, and establishing the gas turbine at operational speed.</p>

<b>Schedule 4 Operation Units UEPOPS401A – UEPOPS443A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS408A</b>	<p><b>Shut Down a Gas Turbine</b></p> <p>This unit deals with the skills and knowledge required to shut down a gas turbine unit to a standby state.</p>
<b>UEPOPS409A</b>	<p><b>Start Up a Boiler Unit</b></p> <p>This unit deals with the skills and knowledge required to establish combustion in a boiler through to a stage at which combustion support energy is no longer necessary.</p>
<b>UEPOPS410A</b>	<p><b>Shut Down a Boiler Unit</b></p> <p>This unit deals with the skills and knowledge required to conduct the shutdown of a boiler unit to a de-pressurised state.</p>
<b>UEPOPS411A</b>	<p><b>Run Up a Steam Turbine</b></p> <p>This unit deals with the skills and knowledge required to conduct a steam turbine run up to a stable operating condition.</p>
<b>UEPOPS412A</b>	<p><b>Undertake Operations Commissioning/Decommissioning</b></p> <p>This unit deals with the skills and knowledge required to undertake the decommissioning of plant and equipment and its subsequent recommissioning following maintenance and, or overhaul.</p>
<b>UEPOPS413A</b>	<p><b>Co-ordinate Operational Strategies for Power Production</b></p> <p>This unit deals with the skills and knowledge for the co-ordination of operational strategies to achieve the short and long term goals of the production plant.</p>
<b>UEPOPS414A</b>	<p><b>Perform Risk Analysis of Generation Plant</b></p> <p>This unit deals with the skills and knowledge required to identify and analyse the risk in loss of generation/production plant.</p>
<b>UEPOPS415A</b>	<p><b>Perform Cost Estimations</b></p> <p>This unit deals with the skills and knowledge required to perform cost estimations for planned and forced plant outages (plant may be a single item or whole unit).</p>
<b>UEPOPS416A</b>	<p><b>Monitor the Implementation of the Enterprise's Production/Maintenance Quality Control Procedures</b></p> <p>This unit deals with the skills and knowledge required to monitor the implementation of the production or maintenance quality control procedures at the enterprise level.</p>

<b>Schedule 4 Operation Units UEPOPS401A – UEPOPS443A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS417A</b>	<p><b>Monitor and Implement Environmental Plans and Procedures</b></p> <p>This unit deals with the skills and knowledge required to address the monitoring and implementation of the application of environmental plans and procedures and the development of environmental procedures for the local work area.</p>
<b>UEPOPS418A</b>	<p><b>Deliver and Review Training</b></p> <p>This unit deals with the skills and knowledge required by individuals who play a key role in providing and reviewing training to raise the levels of competency in the workforce.</p>
<b>UEPOPS419A</b>	<b>Reserved</b>
<b>UEPOPS420A</b>	<p><b>Coordinate the Network/System</b></p> <p>This unit deals with the skills and knowledge required for the co-ordination of a network/system. Systems may be interconnected, remote or isolated.</p>
<b>UEPOPS421A</b>	<p><b>Manage Critical Incidents</b></p> <p>This unit refers to the management of incidents of a critical nature that may impact on the operational effectiveness of the plant or system, endanger human life or property, or have an adverse impact on the environment.</p>
<b>UEPOPS422A</b>	<p><b>Schedule Generation</b></p> <p>This unit deals with the skills and knowledge required to undertake the scheduling of a generation plant to economically meet forecast demand.</p>
<b>UEPOPS423A</b>	<p><b>Plan a Scheduled Outage</b></p> <p>This unit deals with the skills and knowledge required to plan for a Scheduled outage.</p>
<b>UEPOPS424A</b>	<p><b>Coordinate Local H.V. Networks</b></p> <p>This unit deals with the skills and knowledge required to coordinate the local control and management of HV substations and/or local networks.</p>
<b>UEPOPS425A</b>	<p><b>Produce Maintenance Plans for Generation Production Plant</b></p> <p>This unit deals with the skills and knowledge required to undertake the establishment and implementation of maintenance plans for generation production plant that may include boiler, turbine, hydro, electrical, control and monitoring, ash and dust; water treatment and fuel plant.</p>

<b>Schedule 4 Operation Units UEPOPS401A – UEPOPS443A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS426A</b>	<p><b>Interpret and Analyse Multi-Operation Protection Devices</b></p> <p>This unit deals with the skills and knowledge required to interpret and analyse multi-operation high voltage protection schemes and related low voltage protection.</p>
<b>UEPOPS427A</b>	<p><b>Interpret and Analyse Low Voltage and Mechanical Protection Devices</b></p> <p>This unit deals with the skills and knowledge required to interpret and analyse the conditions that have initiated the operation of low voltage and or mechanical protection device and to subsequently take corrective action in response to the operation of the device.</p>
<b>UEPOPS428A</b>	<p><b>Develop H.V. Switching Programs</b></p> <p>This unit deals with the skills and knowledge required to develop switching programs where multiple sources of supply must be considered and managed.</p>
<b>UEPOPS429A</b>	<p><b>Co-ordinate and Direct Switching Program</b></p> <p>This unit deals with the skills and knowledge required to coordinate and direct resources when managing a switching program.</p>
<b>UEPOPS430A</b>	<p><b>Control Permit to Work Operations</b></p> <p>This unit deals with the skills and knowledge required to perform work in association with a permit system.</p>
<b>UEPOPS431A</b>	<p><b>Collect and Analyse Hydrological and Metereological Data</b></p> <p>This unit deals with the skills and knowledge required to predict and determine inflows in catchment areas.</p>
<b>UEPOPS432A</b>	<p><b>Start Up a Heat Recovery Steam Generator Unit</b></p> <p>This unit deals with the skills and knowledge required to prepare a Heat Recovery Steam Generator for service.</p>
<b>UEPOPS433A</b>	<p><b>Operate and Monitor a Heat Recovery Steam Generator Unit</b></p> <p>This unit deals with the skills and knowledge required to operate an in-service Heat Recover Steam Generator.</p>
<b>UEPOPS434A</b>	<p><b>Shut Down a Heat Recovery Steam Generator Unit</b></p> <p>This unit deals with the skills and knowledge required to a shut down of an in-service Heat Recovery Steam Generator unit.</p>
<b>UEPOPS435A</b>	<p><b>Operate and Monitor Flue Gas Nox Mitigation Systems</b></p> <p>This unit deals with the skills and knowledge required for the operation, inspection and monitoring of flue gas Nox mitigation systems.</p>

<b>Schedule 4 Operation Units UEPOPS401A – UEPOPS443A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS436A</b>	<p><b>Operate and Monitor Dual Fuel Firing Plant</b></p> <p>This unit deals with the skills and knowledge required for the operation, inspection and monitoring of dual fuel firing plant in which each fuel source is capable of providing 100% Maximum Continuous Rating.</p>
<b>UEPOPS437A</b>	<p><b>Manage System Re-start</b></p> <p>This unit refers to the operation and control of multiple generators sharing load under the control of one operator in an isolated system.</p>
<b>UEPOPS438A</b>	<p><b>Co-ordinate Electrical Energy Production</b></p> <p>This unit deals with the skills and knowledge required to coordinate the safe and effective management of energy production to meet demand on an electricity generating unit.</p>
<b>UEPOPS439A</b>	<p><b>Plan and Organise Work</b></p> <p>This unit deals with the skills and knowledge required to undertake the planning and organising of tasks to be undertaken by the team.</p>
<b>UEPOPS440A</b>	<p><b>Co-ordinate Team Activities</b></p> <p>This unit deals with the skills and knowledge required to direct and coordinate team activities required to achieve agreed goals.</p>
<b>UEPOPS441A</b>	<p><b>Operate and Monitor System Equipment</b></p> <p>This unit deals with the skills and knowledge required to operate, monitor and control H.V. apparatus on the system, via SCADA control.</p>
<b>UEPOPS442A</b>	<p><b>Monitor and Coordinate the Operation of a Combined Cycle Gas Turbine Unit</b></p> <p>This unit deals with the skills and knowledge required to simultaneously operate and monitor a Combined Cycle Plant for the safe and effective management of energy production to meet demand on combined cycle gas turbine electricity generating unit</p>

**Schedule 5 MAINTENANCE UNITS UEPMNT401A – UEPMNT433A**

<b>Schedule 5 Maintenance Units UEPMNT401A – UEPMNT433A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT401A</b>	<p><b>Install and Maintain Complex Mechanical Seals</b></p> <p>This unit deals with the skills and knowledge required to undertake all work associated with the installation and maintenance of complex mechanical seals and which may involve fault finding, diagnosis and repairs.</p>
<b>UEPMNT402A</b>	<p><b>Conduct Complex Levelling and Alignment</b></p> <p>This unit deals with the skills and knowledge required to conduct the advanced alignment of plant and machinery and may include high speed rotating plant.</p>
<b>UEPMNT403A</b>	<p><b>Maintain Complex Mechanical Valves</b></p> <p>This unit deals with the skills and knowledge required to undertake the fault finding, diagnosis, repair and/or overhaul of complex mechanical valves, but excluding associated servo or actuating units.</p>
<b>UEPMNT404A</b>	<p><b>Maintain Complex Mechanical Pumps</b></p> <p>This unit deals with the skills and knowledge required to undertake the installation and maintenance of multi-stage centrifugal pumps, axial flow compressors, fans and blowers.</p>
<b>UEPMNT405A</b>	<p><b>Maintain Fluid Power Systems</b></p> <p>This unit deals with the skills and knowledge required to undertake the fault finding, diagnosis, repair and/or maintenance of fluid power systems and components on stationary/mobile equipment.</p>
<b>UEPMNT406A</b>	<p><b>Install and Maintain a Steam Turbine</b></p> <p>This unit deals with the skills and knowledge required to install HP, IP, LP, SFPT, cylinders, rotors and steam units.</p>
<b>UEPMNT407A</b>	<p><b>Install and Maintain a Gas Turbine</b></p> <p>This unit deals with the skills and knowledge required to undertake the repair of compressors, turbines and associated equipment on gas turbine units.</p>
<b>UEPMNT408A</b>	<p><b>Install Hydro Turbines</b></p> <p>This unit deals with the skills and knowledge required to install Hydro Turbines.</p>

<b>Schedule 5 Maintenance Units UEPMNT401A – UEPMNT433A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT409A</b>	<p><b>Conduct Welding Inspection/Supervision</b></p> <p>This unit deals with the skills and knowledge required to satisfy the code requirements relating to welding and supervision procedures including Australian and/or International Standards Codes of Practice enterprise procedures and Manufacturer's specifications.</p>
<b>UEPMNT410A</b>	<p><b>Diagnose and Repair Faults in Electronic Equipment</b></p> <p>This unit deals with the skills and knowledge required to diagnose and repair faults in electronic equipment to board and component level and may involve the work to be carried out with equipment online.</p>
<b>UEPMNT411A</b>	<p><b>Diagnose and Repair Faults in Complex Electrical Equipment</b></p> <p>This unit deals with the skills and knowledge required to diagnose and repair faults in complex and H.V. electrical equipment, and may involve the work to be carried out with equipment online.</p>
<b>UEPMNT412A</b>	<p><b>Modify Complex Electrical Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake modifications of complex and H.V. electrical equipment and may include, but not be limited to, alterations, additions or adjustments.</p>
<b>UEPMNT413A</b>	<p><b>Modify Electronic Electrical Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake modification of electronic electrical equipment and may include, but not be limited to, alterations, additions or adjustments.</p>
<b>UEPMNT414A</b>	<p><b>Test and Commission Complex Electrical Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct testing and commissioning of complex and H.V. electrical wiring systems and equipment.</p>
<b>UEPMNT415A</b>	<p><b>Diagnose and Repair Faults in Complex Refrigeration/ Air Conditioning Equipment</b></p> <p>This unit deals with the skills and knowledge required to diagnose and repair faults in complex refrigeration/air conditioning equipment, and associated accessories and wiring systems.</p>
<b>UEPMNT416A</b>	<p><b>Overhaul Electrical Generators</b></p> <p>This unit deals with the skills and knowledge required for the overhaul of an electrical generating set.</p>
<b>UEPMNT417A</b>	<p><b>Inspect Electrical Generators and Diagnose Faults</b></p> <p>This unit deals with the skills and knowledge required to conduct inspections and diagnose faults in electrical generating sets.</p>

<b>Schedule 5 Maintenance Units UEPMNT401A – UEPMNT433A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT418A</b>	<p><b>Perform Mechanical and Fabrication Drafting</b></p> <p>This unit deals with the skills and knowledge required to perform the drafting and use of drawing equipment as applied to the production of schematic and plan drawings.</p>
<b>UEPMNT419A</b>	<p><b>Perform Civil Drafting</b></p> <p>This unit deals with the skills and knowledge required to perform the drafting and use of drawing equipment as applied to the production of sectional, arrangement, schematic and plan drawings.</p>
<b>UEPMNT420A</b>	<p><b>Perform Electrical/Electronic Drafting</b></p> <p>This unit deals with the skills and knowledge required to perform drafting of electrical circuits and use of drawing equipment as applied to the production of schematic and wiring diagrams.</p>
<b>UEPMNT421A</b>	<p><b>Conduct Technical Inspection of Process Plant and Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct the technical inspection of a generation plant, equipment, processes and associated infrastructure.</p>
<b>UEPMNT422</b>	<p><b>Conduct Performance Testing on Process Plant and Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct performance testing on generation plant equipment and processes to assess plant efficiency.</p>
<b>UEPMNT423A</b>	<p><b>Conduct/Implement Condition Monitoring</b></p> <p>This unit deals with the skills and knowledge required to conduct condition monitoring and testing to determine the efficiency of a range of rotational plant and associated equipment used in the generation industry.</p>
<b>UEPMNT424A</b>	<p><b>Monitor Efficiency of Thermal Steam Cycle Power Plant</b></p> <p>This unit deals with the skills and knowledge required for the collection of data and the calculation of the efficiency of plant associated with the thermal steam cycle.</p>
<b>UEPMNT425A</b>	<p><b>Maintain Complex Instrumentation Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct maintenance of complex instrumentation equipment including, but not limited to, multi-loop equipment such as signal characterising, analogue control equipment, microprocessor control such as programmable logic, laboratory and industrial analysers, ultra sonic and nucleonic equipment.</p>

<b>Schedule 5 Maintenance Units UEPMNT401A – UEPMNT433A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT426A</b>	<p><b>Maintain Electronic Instrumentation Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct maintenance of electronic instrumentation equipment.</p>
<b>UEPMNT427A</b>	<p><b>Diagnose and Repair Faults in Complex Instrumentation Equipment</b></p> <p>This unit deals with the skills and knowledge required to undertake the diagnose and repair of complex instrumentation configuration including, but not limited to, signal characterising equipment, totaliser units, microprocessor control equipment, interface equipment, laboratory and field analysers, ultrasonic and nucleonic equipment.</p>
<b>UEPMNT428A</b>	<p><b>Modify Complex Instrumentation Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct modification of complex instrumentation used in a “multi-loop” configuration, including, characterising equipment, microprocessor control equipment, interface equipment, laboratory and field analysers, ultra-sonic and nucleonic equipment.</p>
<b>UEPMNT429A</b>	<p><b>Modify Electronic Instrumentation Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct modification of electronic equipment including, but not limited to, process control instrumentation, power grid energy control, supervisory instrumentation, security equipment (CCTV).</p>
<b>UEPMNT430A</b>	<p><b>Test and Commission Complex Instrumentation Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct testing and commissioning of complex instrumentation used in “multi-loop” configuration, including, but not limited to signal characterising equipment, totaliser units, microprocessor control equipment, interface equipment, laboratory and field analysers, ultra-sonic and nucleonics equipment.</p>
<b>UEPMNT431A</b>	<p><b>Test and Commission Electronic Instrumentation Equipment</b></p> <p>This unit deals with the skills and knowledge required to conduct testing and commissioning of electronic wiring systems and complex digital/analogue equipment including, but not limited to, process control instrumentation, power grid energy control, supervisory instrumentation, security equipment (CCTV).</p>
<b>UEPMNT432A</b>	<p><b>Write Programs for Control Systems</b></p> <p>This unit deals with the skills and knowledge required to undertake the writing of programs from flow charts for electronic control systems.</p>
<b>UEPMNT433A</b>	<p><b>Conduct Routine Generator Electrical Maintenance</b></p> <p>This unit deals with the skills and knowledge required to undertake those routine maintenance tasks of an electrical generating set.</p>

Schedule 6 OPERATION UNITS UEPOPS501A – UEPOPS515A

<b>Schedule 6 Operation Units UEPOPS501A – UEPOPS515A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS501A</b>	<p><b>Manage Occupational Health and Safety Policy and Procedures</b></p> <p>This unit deals with the skills and knowledge required to establish and evaluate the organisation’s Occupational Health and Safety system in order to ensure that the workplace is, so far as is practicable, safe and without risks to the health of employees.</p>
<b>UEPOPS502A</b>	<p><b>Manage Permit to Work System</b></p> <p>This unit deals with the skills and knowledge required to manage the development implementation, and review of the permit to work system.</p>
<b>UEPOPS503A</b>	<p><b>Manage First Response Team Operations</b></p> <p>This unit deals with the skills and knowledge required to manage the operation of a response team. It covers the development, implementation</p>
<b>UEPOPS504A</b>	<p><b>Develop Implement and Monitor Environmental Management Systems</b></p> <p>This unit deals with the skills and knowledge required to identify the environmental requirements for the implementation of a management strategy and the monitoring and reviewing of its effectiveness.</p>
<b>UEPOPS505A</b>	<p><b>Produce Maintenance Strategies for Generation Production Plant</b></p> <p>This unit deals with the skills and knowledge required to undertake the establishment and implementation of maintenance strategies for generation production plant that may include boiler, turbine, hydro plant, electrical, control and monitoring, ash and dust; water treatment and fuel plant.</p>
<b>UEPOPS506A</b>	<p><b>Establish and Implement Operational Strategies for Power Production</b></p> <p>This unit deals with the skills and knowledge required to establish, develop and implement operational strategies to achieve the short and long term goals of the production plant.</p>
<b>UEPOPS507A</b>	<p><b>Conduct Project Management</b></p> <p>This unit deals with the skills and knowledge required to plan, implement, monitor and complete project work.</p>

<b>Schedule 6 Operation Units UEPOPS501A – UEPOPS515A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPOPS508A</b>	<p><b>Manage Commissioning/Decommissioning</b></p> <p>This unit deals with the skills and knowledge required to undertake the management of commissioning of plant and equipment and its subsequent decommissioning. It may also involve the decommissioning and recommissioning of plant and equipment for refurbishment.</p>
<b>UEPOPS509A</b>	<p><b>Manage Quality Control Procedures</b></p> <p>This unit deals with the skills and knowledge required to manage quality control procedures.</p>
<b>UEPOPS510A</b>	<p><b>Monitor Power Generation Plant Reliability</b></p> <p>This unit deals with the skills and knowledge required to monitor the generating plant reliability.</p>
<b>UEPOPS511A</b>	<p><b>Tune Process Plant and Equipment</b></p> <p>This unit deals with the skills and knowledge required to complete the investigation, nomination and adjustments of tuning parameters associated with generation plant, equipment and processes.</p>
<b>UEPOPS512A</b>	<p><b>Manage the Network/System</b></p> <p>This unit deals with the skills and knowledge required to manage a network/system (eg these systems may be interconnected, remote or isolated).</p>
<b>UEPOPS513A</b>	<p><b>Manage Operational Crisis to Maintain/Restore Power System Integrity</b></p> <p>This unit deals with the skills and knowledge required to manage a crisis of a magnitude which affects the integrity and effectiveness of the system.</p>
<b>UEPOPS514A</b>	<p><b>Control Hydro Generation/Pumping</b></p> <p>This unit deals with the skills and knowledge required to undertake remote control of hydro plant.</p>
<b>UEPOPS515A</b>	<p><b>Co-ordinate Power Generation</b></p> <p>This unit deals with the skills and knowledge required to coordinate operation and control of multiple generators sharing load under the control of one operator in an isolated system.</p>

**Schedule 7 MAINTENANCE UNITS UEPMNT501A – UEPMNT504A**

<b>Schedule 7 Maintenance Units UEPMNT501A – UEPMNT504A</b>	
<b>Unit Number</b>	<b>Title Descriptor</b>
<b>UEPMNT501A</b>	<p><b>Diagnose and Repair Faults in Electrical and Electronic Systems</b></p> <p>This unit deals with the skills and knowledge required to diagnose and repair faults in electrical/electronic systems.</p>
<b>UEPMNT502A</b>	<p><b>Test and Commission Electronic Electrical Systems</b></p> <p>This unit deals with the skills and knowledge required to conduct testing and commissioning of electrical/electronic systems. Systems can refer to a combination of electrical/electronic machinery/equipment.</p>
<b>UEPMNT503A</b>	<p><b>Diagnose and Repair Faults in Instrumentation Systems</b></p> <p>This unit deals with the skills and knowledge required to diagnose and repair of instrumentation systems and all ancillary equipment including, but not limited to, PC operating systems, distributive control systems, programmable logic control systems, process control systems.</p>
<b>UEPMNT504A</b>	<p><b>Test and Commission Instrumentation Systems</b></p> <p>This unit deals with the skills and knowledge required to conduct testing and commissioning of instrumentation systems and all ancillary equipment including, but not limited to, PC operating systems, distributive control systems, programmable logic control systems, process control systems.</p>

**SCHEDULE 8 IMPORTED COMPETENCY STANDARD UNITS**

<b>Schedule 8 Imported Units</b>		
<b>SOURCE TRAINING PACKAGE</b>	<b>Unit Number</b>	<b>Title Descriptor</b>
BSB01 Business Services	BSBADM304A BSBADM305A BSBCM108A BSBCM203A BSBCM209A BSBCM213A BSBCM302A BSBCM310A BSBCM311A BSBCM312A	Design and develop text documents Create and use data bases Develop keyboard skills Communicate in the workplace Provide information to clients Produce simple word processed documents Organise personal work priorities and development Deliver and monitor a service to customers Maintain workplace safety Support innovation and change
BSB Frontline Management (BSB01)	BSBFLM302A BSBFLM303B BSBFLM304A BSBFLM305B BSBFLM306B BSBFLM309B BSBFLM311B	Support leadership in the workplace Contribute to effective workplace relationships Participate in work teams Support operational plan Provide workplace information and resourcing plans Support continuous improvement systems and processes Support a workplace learning environment
BSB Frontline Management (BSB01)	BSBCM402A BSBFLM402A BSBFLM403B BSBFLM404A BSBFLM405B BSBFLM406B BSBFLM409A BSBCM404A BSBCM410A BSBCM411A BSBCM412A	Develop work priorities Show leadership in the workplace Implement effective workplace relationships Lead work teams Implement operational plans Implement workplace information system Implement continuous improvement Develop teams and individuals Coordinate implementation of customer service strategies Monitor a safe workplace Promote innovation and change
BSB Frontline Management (BSB01)	BSBFLM501B BSBFLM502A BSBFLM503B BSBFLM504A BSBFLM505B BSBFLM506B BSBFLM507B BSBFLM509B BSBFLM510B	Manage personal work priorities and professional development Provide leadership in the workplace Manage effective workplace relationships Facilitate work teams Manage operational plan Manage workplace information systems Manage quality customer service Facilitate continuous improvement

<b>Schedule 8 Imported Units</b>		
<b>SOURCE TRAINING PACKAGE</b>	<b>Unit Number</b>	<b>Title Descriptor</b>
	BSBFLM511B BSBFLM512A BSBMGT505A	Facilitate and capitalise on change and innovation Develop a workplace learning environment Ensure team effectiveness Ensure a safe workplace

### 1.2.8 Mapping Qualifications to the former Training Package (UTP98)

Detailed below is a summary of qualifications in this Training Package with a mapping to the qualifications in the former Electricity Supply Industry – Generation Sector Training Package (UTP98).

**Table 2 – Mapping Qualifications in this Training Package to the former UTP98**

<b>UEP06 Qualifications</b>	<b>Nature of Relationship to UTP98</b>	<b>Equivalent -full, part, or no</b>
UEP20106 Certificate II in ESI Generation (Operations Support)	Update on the previous Certificate II in ESI – Generation (Operations) UTP20198 New structure and a range of new units of competency available.	None
UEP30106 Certificate III in ESI Generation (Systems Operations)	New Qualification New structure and a range of new units of competency available.	None
UEP30206 Certificate III in ESI Generation (Operations)	Update on the previous Certificate III in ESI – Generation UTP30298 New structure and a range of new units of competency available.	None
UEP40106 Certificate IV in ESI Generation (Systems Operations)	Update on the previous Certificate IV in ESI – Generation (System Operations) UTP40398 New structure and a range of new units of competency available.	None
UEP40206 Certificate IV in ESI Generation (Operations)	Update on the previous Certificate IV in ESI – Generation (Operations) UTP40298 New structure and a range of new units of competency available.	None
UEP40306 Certificate IV in ESI Generation Maintenance (Mechanical)	Update on the previous Certificate IV in ESI – Generation (Mechanical) UTP40398 New structure and a range of new units of competency available.	None

<b>UEP06 Qualifications</b>	<b>Nature of Relationship to UTP98</b>	<b>Equivalent -full, part, or no</b>
UEP40406 Certificate IV in ESI Generation Maintenance (Fabrication)	New Qualification New structure and a range of new units of competency available.	None
UEP40506 Certificate IV in ESI Generation Maintenance (Electrical/Electronic)	Update on the previous Certificate IV in ESI – Generation (Electrical/Electronic) UTP40198 New structure and a range of new units of competency available.	None
UEP50106 Diploma of ESI Generation (Systems Operations)	New Qualification New structure and a range of new units of competency available.	None
UEP50206 Diploma of ESI Generation (Operations)	Update on the previous Diploma of ESI – Generation (Operations) UTP50298 New structure and a range of new units of competency available.	None
UEP50306 Diploma of ESI Generation (Maintenance)	New Qualification New structure and a range of new units of competency available.	None
UEP50406 Diploma of ESI Generation (Electrical/Electronic)	Update on the previous Diploma of ESI – Generation (Electrical/Electronic) UTP50198 New structure and a range of new units of competency available.	None

## 1.2.9 Mapping Competency Standard Units to the former Training Package (UTP98)

The following is a summary of:

1. Competency Standard Units in the Electricity Supply Industry – Generation Training Package;
2. The relationship to former Competency Standard Units from UTP98
3. AQF alignment and weighting points of each Competency Standard Unit; and
4. The prerequisite requirements.

Note:

- a. The following is a guide to assist RTOs in granting equivalent units when implementing this Training Package.
- b. The alignment of more than one UEP unit to a UTP unit does not necessarily mean that the one UTP unit is equivalent to all aligned UEP units.
- c. RTOs shall ensure appropriate analysis of all the skills and knowledge specified in the respective competency standard units in this Training Package is undertaken with that of the former Training Package (UTP98), in determining equivalence.
- d. In granting an equivalence of UEP unit for a UTP unit;
  - the prerequisite units specified for the UEP unit shall be included, and
  - the critical aspects of evidence of the UEP unit and its specified prerequisite units shall be at least equal to that of the UTP unit.
- e. Trade Certificate prerequisite requirement:  
Where prerequisites in the following table refer “Trade Certificate needed” each Competency Standard Unit should be reviewed for relevant comment. However, the following typically applies:

*Entry to the Maintenance Certificate IV qualifications requires the completion of a Trade Certificate III that includes the relevant pre-requisite units of competency from this Training Package or a Certificate III trade qualification from the National Electrotechnology or the Metals and Engineering Training Packages. Points achieved for units achieved cannot be double counted towards other qualifications.*
- f. Where reference is made to, “Trade may apply” this refers to said units that may be undertaken as part of an apprenticeship program under the auspices of a regulated contract prescribed by a relevant state/territory. Relevant information should be obtained from the relevant state/territory training authority and related regulator, where applicable, to confirm requirements.

**Table 3 – Mapping Competency Standard Units to the former Training Package and prerequisite requirements**

**Schedule 1 Units UEPOPS201A – UEPOPS250A**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT *	UTP98 UNIT CODE	EQUIVALENCE - FULL, PART OR NOT
UEPOPS201A	Comply with Occupational Health and Safety Policy and Procedures	2	30	None	UTPNEG001A	
UEPOPS202A	Apply Quality Systems To Work	2	30	None	UTPNEG204A	
UEPOPS203A	Operate and Monitor Communications Systems	2	30	None	UTPNEG268A	
UEPOPS204A	Maintain and Utilise Records	2	30	None	UTPNEG270A	
UEPOPS205A	Conduct Minor Mechanical Maintenance	2	30	None	UTPNEG079A	
UEPOPS206A	Conduct Minor Electrical Maintenance	2	30	None	UTPNEG136A	
UEPOPS207A	Perform Plant Lubrication	2	30	None	UTPNEG178A	
UEPOPS208A	Operate Local Systems	2	35	None	UTPNEG189A	
UEPOPS209A	Perform Process Plant Inspections	2	30	None	UTPNEG238A	
UEPOPS210A	Conduct First Response within a Workplace Team	2	40	None	UTPNEG007A	
UEPOPS211A	Clean Plant and Equipment	2	30	None	UTPNEG015A	
UEPOPS212A	Perform Basic Rigging Work	2	30	UEPOPS201A	UTPNEG016A	
UEPOPS213A	Perform Intermediate Rigging Work	2	30	UEPOPS212A	UTPNEG017A	
UEPOPS214A	Perform Dogging Work	2	30	UEPOPS201A	UTPNEG019A	
UEPOPS215A	Perform Basic Scaffolding	2	30	UEPOPS201A	UTPNEG020A	
UEPOPS216A	Perform Intermediate Scaffolding	2	30	UEPOPS215A	UTPNEG021A	
UEPOPS217A	Conduct Elevating Work Platform Operations	2	30	UEPOPS201A	UTPNEG027B	

\* for relevant prerequisite or co-requisite refer respective unit

**Schedule 1 Units UEPOPS201A – UEPOPS250A (cont)**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENCE - FULL, PART OR NOT
UEPOPS218A	Shift and Transfer Materials using a Bulldozer	2	40	UEPOPS201A	UTPNEG028Ba	
UEPOPS219A	Shift and Transfer Materials using a Grader	2	40	UEPOPS201A	UTPNEG028Ba	
UEPOPS220A	Shift and Transfer Materials using a Scraper	2	40	UEPOPS201A	UTPNEG028Bb	
UEPOPS221A	Shift and Transfer Materials using a Front end loader	2	40	UEPOPS201A	UTPNEG028Bc	
UEPOPS222A	Shift and Transfer Materials using a Skidsteer loader	2	40	UEPOPS201A	UTPNEG028Bd	
UEPOPS223A	Shift and Transfer Materials using a Telescopic materials handler-loader	2	40	UEPOPS201A	UTPNEG028Be	
UEPOPS224A	Shift and Transfer Materials using a Backhoe	2	40	UEPOPS201A	UTPNEG028Bf	
UEPOPS225A	Shift and Transfer Materials using an Excavator	2	40	UEPOPS201A	UTPNEG028Bg	
UEPOPS226A	Shift and Transfer Materials using Bobcats – wheeled and tracked	2	40	UEPOPS201A	UTPNEG028Bh	
UEPOPS227A	Shift and Transfer Materials using Borers and related attachments	2	40	UEPOPS201A	UTPNEG028Bi	
UEPOPS228A	Conduct Forklift Operations	2	30	UEPOPS201A	UTPNEG029A	
UEPOPS229A	Operate Lifting and Load Shifting Equipment for loads less than ten tonnes	2	30	UEPOPS201A	UTPNEG030A	
UEPOPS230A	Operate Lifting and Load Shifting Equipment for loads greater than ten tonnes	2	35	UEPOPS229A	UTPNEG031A	
UEPOPS231A	Operate Explosive Powered Tools	2	30	UEPOPS201A	UTPNEG032A	
UEPOPS232A	Transport Plant and Equipment	2	30	UEPOPS201A	UTPNEG038A	
UEPOPS233A	Perform Machining Operations	2	35	None	UTPNEG080A	
UEPOPS234A	Perform Routine Oxyacetylene (fuel Gas) Welding (OAW)	2	35	None	UTPNEG080A	
UEPOPS235A	Perform Routine Manual Arc Welding	2	30	None	UTPNEG112A	
UEPOPS236A	Perform Manual Heating, Thermal Cutting and Gouging	2	30	None	UTPNEG113A	
UEPOPS237A	Perform Tool Store Duties	2	30	None	UTPNEG114A	

**Schedule 1 Units UEPOPS201A – UEPOPS250A (cont)**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENT - FULL, PART OR NOT
UEPOPS238A	Maintain Battery Banks and Cells	2	30	None	UTPNEG133A	Full
UEPOPS239A	Conduct Minor/Basic Electrical Maintenance	2	30	None	UTPNEG136A	Full
UEPOPS240A	Operate and Monitor Fuel Supply (Coal)	2	40	None	UTPNEG152A	Full
UEPOPS241A	Operate and Monitor Ash and Dust Disposal Plant	2	40	None	UTPNEG153A	Full
UEPOPS242A	Operate and Monitor Dust Collection Plant	2	40	None	UTPNEG154A	Full
UEPOPS243A	Operate Air Conditioning Plant	2	30	None	UTPNEG163A	Full
UEPOPS244A	Operate and Monitor Site Services Water Systems	2	30	None	UTPNEG164A	Full
UEPOPS245A	Conduct Chemical Batching Operations	2	30	None	UTPNEG176A	Full
UEPOPS246A	Operate Waste and Contaminated Water Plant	2	35	None	UTPNEG177A	Full
UEPOPS247A	Operate and Monitor an Internal Combustion Single Fuel Reciprocating Engine	2	40	None	UTPNEG191A	Full
UEPOPS248A	Operate and Monitor an Internal Combustion Dual Fuel Reciprocating Engine	2	40	None	UTPNEG192A	Full
UEPOPS249A	Liaise with Stakeholders	2	30	None	UTPNEG269A	Full
UEPOPS250A	Perform Process Plant Inspections	2	35	None	UTPNEG238A	Full

**Schedule 2 Units UEPOPS301A – UEPOPS357A**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENT - FULL, PART OR NOT
UEPOPS301A	Conduct Single Energy Source Isolation Procedures for Permit to Work	3	90	UEPOPS201A	UTPNEG004A	Full
UEPOPS302A	Perform Advanced Rigging Work	3	90	UEPOPS213B	UTPNEG018A	Full
UEPOPS303A	Perform Advanced Scaffolding	3	90	UEPOPS216A	UTPNEG022A	Full
UEPOPS304A	Make and Spread a Stockpile	3	100	UEPOPS201A	UTPNEG045A	Full
UEPOPS305A	Operate & Monitor Briquette Coal Cooling Plant	3	80	UEPOPS201A	UTPNEG048A	Full
UEPOPS306A	Operate & Monitor Briquette Coal Drying Plant	3	80	UEPOPS201A	UTPNEG049A	Full
UEPOPS307A	Operate & Monitor Briquette Coal Press Plant	3	80	UEPOPS201A	UTPNEG050A	Full
UEPOPS308A	Perform Briquette Laboratory Tests	3	80	UEPOPS201A	UTPNEG051A	Full
UEPOPS309A	Operate and Monitor Air Conditioning Equipment and Ventilation Systems	3	100	None	UTPNEG134A	Full
UEPOPS310A	Operate Bulk Coal Handling Plant	3	100	None	UTPNEG150A	Full
UEPOPS311A	Operate Fabric Filter Dust Collection Plant	3	90	None	UTPNEG155A	Full
UEPOPS312A	Operate and Monitor Fuel Supply	3	80	None	UTPNEG156A	Full
UEPOPS313A	Operate and Monitor Boiler Draught System	3	90	None	UTPNEG157A	Full
UEPOPS314A	Operate and Monitor Fuel Firing Plant (Gas or Oil)	3	90	None	UTPNEG159A	Full
UEPOPS315A	Operate and Monitor Fuel Firing Plant (Coal)	3	90	None	UTPNEG161A	Full
UEPOPS316A	Operate and Monitor Boiler Steam/Water Cycle	3	90	None	UTPNEG162A	Full
UEPOPS317A	Operate and Monitor Fixed Fire Protection Systems	3	80	None	UTPNEG165A	Full
UEPOPS318A	Operate and Monitor Compressed Gas Systems	3	90	None	UTPNEG166A	Full
UEPOPS319A	Operate and Monitor Gas Production Plant	3	80	None	UTPNEG167A	Full
UEPOPS320A	Operate and Monitor Compressed Air Systems	3	90	None	UTPNEG168A	Full

**Schedule 2 Units UEPOPS301A – UEPOPS356A (cont)**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENT - FULL, PART OR NOT
UEPOPS321A	Operate and Monitor Water Treatment Plant	3	90	None	UTPNEG171A	Full
UEPOPS322A	Operate and Monitor Alkalinity Reduction Plant	3	80	None	UTPNEG172A	Full
UEPOPS323A	Operate and Monitor Reverse Osmosis Plant	3	80	None	UTPNEG173A	Full
UEPOPS324A	Operate and Monitor Brine Concentrator Plant	3	80	None	UTPNEG174A	Full
UEPOPS325A	Operate and Monitor Water Quality Control Systems	3	90	None	UTPNEG175A	Full
UEPOPS326A	Operate and Monitor Oil Systems	3	90	None	UTPNEG179A	Full
UEPOPS327A	Monitor and Maintain Civil Assets	3	90	None	UTPNEG180A	Full
UEPOPS328A	Undertake Dam Safety Surveillance	3	90	None	UTPNEG181A	Full
UEPOPS329A	Operate and Monitor Auxiliary Steam Systems	3	90	None	UTPNEG182A	Full
UEPOPS330A	Operate and Monitor Heat Exchangers	3	90	None	UTPNEG183A	Full
UEPOPS331A	Operate and Monitor Water Systems (Condensate & Feedwater)	3	90	None	UTPNEG184A	Full
UEPOPS332A	Operate and Monitor Condensing and Cooling Water System	3	90	None	UTPNEG185A	Full
UEPOPS333A	Operate and Monitor H.R.S.G. Hot Gas Control System	3	90	None	UTPNEG186A	Full
UEPOPS334A	Operate and Monitor a Wind Generator	3	80	None	UTPNEG190A	Full
UEPOPS335A	Operate A Hydro Generator/Synchronous Condenser / Pump Unit	3	90	None	UTPNEG193A	Full
UEPOPS336A	Manage Operate and Monitor a Gas Turbine Unit	3	90	None	UTPNEG196A	Full
UEPOPS337A	Maintain Quality Systems within the Team	3	80	UEPOPS202A	UTPNEG201A	Full
UEPOPS338A	Facilitate Effective Workplace Communication	3	80	None	UTPNEG203A	Full
UEPOPS339A	Operate and Monitor a Boiler Unit	3	90	None	UTPNEG207A	Full
UEPOPS340A	Operate and Monitor a Steam Turbine	3	90	None	UTPNEG210A	Full
UEPOPS341A	Shut Down a Steam Turbine	3	90	None	UTPNEG211A	Full

**Schedule 2 Units UEPOPS301A – UEPOPS356A (cont)**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENT - FULL, PART OR NOT
UEPOPS342A	Interpret and Analyse Single Operation Protection Devices	3	90	None	UTPNEG276A	Full
UEPOPS343A	Operate Hydro-Electric Generating Plant and Auxiliary Equipment	3	90	None	UTPNEG227A	Full
UEPOPS344A	Conduct Water Conveyance and Control	3	90	None	UTPNEG228A	Full
UEPOPS345A	Implement Dam Safety Surveillance Procedures	3	90	None	UTPNEG229A	Full
UEPOPS346A	Conduct Non-Routine Operational Testing	3	80	None	UTPNEG239A	Full
UEPOPS347A	Operate and Monitor Supervisory, Control and Data Acquisition Systems	3	90	None	UTPNEG266A	Full
UEPOPS348A	Respond to Critical Incidents	3	80	None	UTPNEG272A	Full
UEPOPS349A	Operate H.V. Primary Switchgear	3	80	None	UTPNEG277A	Full
UEPOPS350A	Develop Contingency Plans	3	80	None	UTPNEG278A	Full
UEPOPS351A	Operate H.V. Condition Changing Apparatus	3	80	None	UTPNEG283A	Full
UEPOPS352A	Conduct Operational Checks on In-Service Mechanical Plant	3	80	UEPOPS201A	NEW UNIT	
UEPOPS353A	Conduct Operational Checks on In-Service Electrical Plant	3	80	UEPOPS201A	NEW UNIT	
UEPOPS354A	Operate and Monitor Dual Fuel-Firing Plant	3	90	None	NEW UNIT	
UEPOPS355A	Monitor the Implementation of Under Frequency Load Shedding	3	80	None	NEW UNIT	
UEPOPS356A	Apply Environmental and Sustainable Energy Procedures	3	80	None	NEW UNIT	
UEPOPS357	Operate H.V. Secondary Switchgear	3	80	None	UTPNEG282A	Full

**Schedule 3 Units UEPMNT301A – UEPMNT360A**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENT - FULL, PART OR NOT
UEPMNT301A	Install and Maintain Hydraulic / Pneumatic Components	3	90	Trade may apply	UTPNEG058A	Full
UEPMNT302A	Install and Maintain Industrial Pipework	3	90	Trade may apply	UTPNEG059A	Full
UEPMNT303A	Maintain Mechanical Valves	3	90	Trade may apply	UTPNEG062A	Full
UEPMNT304A	Maintain Mechanical Pumps	3	90	Trade may apply	UTPNEG064A	Full
UEPMNT305A	Maintain Industrial Fans	3	90	Trade may apply	UTPNEG066A	Full
UEPMNT306A	Maintain Industrial Transmissions	3	90	Trade may apply	UTPNEG067A	Full
UEPMNT307A	Maintain Industrial Screens, Strainers and Filters	3	90	Trade may apply	UTPNEG069A	Full
UEPMNT308A	Maintain Conveyors and Associated Equipment	3	90	Trade may apply	UTPNEG070A	Full
UEPMNT309A	Maintain Material Feeders	3	100	Trade may apply	UTPNEG071A	Full
UEPMNT310A	Maintain Material Crushers	3	100	Trade may apply	UTPNEG072A	Full
UEPMNT311A	Maintain Fuel Transport Equipment	3	100	Trade may apply	UTPNEG073A	Full
UEPMNT312A	Maintain Industrial Pressure Vessels	3	100	Trade may apply	UTPNEG074A	Full
UEPMNT313A	Maintain Internal Combustion Engines	3	100	Trade may apply	UTPNEG076A	Full
UEPMNT314A	Maintain Hydro Turbines	3	100	UEPMNT402A	UTPNEG077A	Full
UEPMNT315A	Maintain Wind Turbines	3	100	UEPMNT402A	UTPNEG078A	Full
UEPMNT316A	Perform Advanced Machining Operations	3	100	Trade may apply	UTPNEG081A	Full
UEPMNT317A	Diagnose and Repair Faults in Mechanical Equipment	3	90	Trade may apply	UTPNEG082A	Full
UEPMNT318A	Conduct Generator Mechanical Maintenance	3	100	Trade may apply	UTPNEG083A	Full
UEPMNT319A	Maintain and Test Fixed Fire Protection Systems	3	90	Trade may apply	UTPNEG084A	Full
UEPMNT320A	Inspect and Repair/Replace Faults in Mechanical Equipment/Components	3	90	Trade may apply	UTPNEG085A	Full
UEPMNT321A	Weld using Manual Metal Arc Welding Process (MMAW)	3	80	Trade may apply	UTPNEG090A	Full

**Schedule 3 Units UEPMNT301A – UEPMNT360A (cont)**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENT - FULL, PART OR NOT
UEPMNT322A	Weld using Gas Metal Arc Welding Process (GMAW)	3	80	Trade may apply	UTPNEG091A	Full
UEPMNT323A	Weld using Gas Tungsten Arc Welding Process (GTAW)	3	80	Trade may apply	UTPNEG092A	Full
UEPMNT324A	Weld using Oxyacetylene Welding Process (OAW)	3	80	Trade may apply	UTPNEG093A	Full
UEPMNT325A	Weld using Submerged Arc Welding Process (SAW)	3	80	Trade may apply	UTPNEG094A	Full
UEPMNT326A	Perform Advanced Welding using Manual Metal Arc Welding Process (MMAW)	3	80	Trade may apply	UTPNEG095A	Full
UEPMNT327A	Perform Advanced Welding using Gas Metal Arc Welding (GMAW)	3	80	Trade may apply	UTPNEG096A	Full
UEPMNT328A	Perform Advanced Welding using Gas Tungsten Arc Welding (GTAW)	3	80	Trade may apply	UTPNEG097A	Full
UEPMNT329A	Perform Advanced Welding using Oxyacetylene Welding Process (OAW)	3	80	Trade may apply	UTPNEG098A	Full
UEPMNT330A	Perform Manual Metal Arc Welding Process to Weld to AS1796 Certificate 1/1E (Low Carbon Steel Sheet and Plate)	3	80	Trade may apply	UTPNEG099A	Full
UEPMNT331A	Perform Manual Metal Arc Welding Process to Weld to AS1796 Certificate 2 (Low Carbon Steel Pipe)	3	80	Trade may apply	UTPNEG100A	Full
UEPMNT332A	Perform Manual Metal Arc Welding to Weld to AS1796 Certificate 3/3E (Alloy Steel Plate)	3	80	Trade may apply	UTPNEG101A	Full
UEPMNT333A	Perform Manual Metal Arc Welding Process to Weld to AS1796 Certificate 4 (Alloy Steel Pipe)	3	80	Trade may apply	UTPNEG102A	Full
UEPMNT334A	Perform Gas Tungsten Arc Welding and Manual Metal Arc Welding Processes to Weld to AS1796 Certificate 5 (Alloy Steel Pipe)	3	80	Trade may apply	UTPNEG103A	Full
UEPMNT335A	Perform Oxyacetylene Welding Process (Fuel Gas) to AS1796 Certificate 6/6E	3	80	Trade may apply	UTPNEG104A	Full
UEPMNT336A	Perform Gas Tungsten Arc Welding to Weld to AS1796 Certificate 7 (Pipe)	3	80	Trade may apply	UTPNEG105A	Full
UEPMNT337A	Perform Gas Metal Arc Welding to Weld to AS1796 Certificate 8/8E (Plate and Pipe)	3	80	Trade may apply	UTPNEG106A	Full
UEPMNT338A	Perform Submerged Arc Welding to Weld to AS1796 Certificate 9	3	80	Trade may apply	UTPNEG107A	Full

**Schedule 3 Units UEPMNT301A – UEPMNT360A (cont)**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENT - FULL, PART OR NOT
UEPMNT339A	Perform sheet metal work	3	100	Trade may apply	UTPNEG108A	Full
UEPMNT340A	Fabricate metal structures and components	3	100	Trade may apply	UTPNEG109A	Full
UEPMNT341A	Repair/Replace/Modify metal structures and components	3	100	Trade may apply	UTPNEG110A	Full
UEPMNT342A	Install electrical equipment	3	90	Trade may apply	UTPNEG115A	Full
UEPMNT343A	Install electrical wiring systems	3	90	Trade may apply	UTPNEG116A	Full
UEPMNT344A	Install complex electrical equipment	3	90	Trade may apply	UTPNEG117A	Full
UEPMNT345A	Install electronic electrical equipment	3	90	Trade may apply	UTPNEG118A	Full
UEPMNT346A	Maintain electrical equipment	3	90	Trade may apply	UTPNEG119A	Full
UEPMNT347A	Maintain complex electrical equipment	3	90	Trade may apply	UTPNEG120A	Full
UEPMNT348A	Maintain electrical electronic equipment	3	90	Trade may apply	UTPNEG121A	Full
UEPMNT349A	Diagnose and repair faults in electrical equipment	3	90	Trade may apply	UTPNEG122A	Full
UEPMNT350A	Modify electrical equipment	3	90	Trade may apply	UTPNEG126A	Full
UEPMNT351A	Test and commission electrical equipment	3	90	Trade may apply	UTPNEG129A	Full
UEPMNT352A	Test and commission electronic electrical equipment	3	90	Trade may apply	UTPNEG131A	Full
UEPMNT353A	Install instrumentation equipment	3	90	Trade may apply	UTPNEG243A	Full
UEPMNT354A	Install instrumentation wiring systems	3	90	Trade may apply	UTPNEG244A	Full
UEPMNT355A	Install complex/electronic instrumentation equipment	3	90	Trade may apply	UTPNEG245A	Full
UEPMNT356A	Maintain instrumentation equipment	3	90	Trade may apply	UTPNEG246A	Full
UEPMNT357A	Diagnose and repair faults in instrumentation equipment	3	90	Trade may apply	UTPNEG249A	Full
UEPMNT358A	Modify instrumentation equipment	3	90	Trade may apply	UTPNEG252A	Full
UEPMNT359A	Test and Commission Instrumentation Systems	3	90	Trade may apply	UTPNEG255A	Full
UEPMNT360A	Terminate fibre optic cables	3	80	Trade may apply	UTPNEG259A	Full

**Schedule 4 Units UEPOPS401A – UEPOPS442A**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENT - FULL, PART OR NOT
UEPOPS401A	Monitor Compliance with Occupational Health and Safety Policy and Procedures	4	120	UEPOPS201A	UTPNEG002A	Full
UEPOPS402A	Conduct Multiple Energy Source Isolation Procedures for Permit to Work	4	130	UEPOPS301A	NEW UNIT	Full
UEPOPS403A	Coordinate Permit to Work System	4	130	UEPOPS402A	UTPNEG005A	Full
UEPOPS404A	Coordinate First Response Team Operation	4	120	UEPOPS201A	UTPNEG008A	Full
UEPOPS405A	Operate and Monitor AC Electrical Systems	4	130	UEPOPS426A	UTPNEG187A	Full
UEPOPS406A	Operate and Monitor DC Electrical Systems	4	120	UEPOPS426A	UTPNEG188A	Full
UEPOPS407A	Start and Run Up A Gas Turbine	4	120	None	UTPNEG195A	Full
UEPOPS408A	Shut Down a Gas Turbine	4	120	None	UTPNEG197A	Full
UEPOPS409A	Start-Up A Boiler Unit	4	130	None	UTPNEG206A	Full
UEPOPS410A	Shut Down A Boiler Unit	4	120	None	UTPNEG208A	Full
UEPOPS411A	Run Up A Steam Turbine	4	130	None	UTPNEG209A	Full
UEPOPS412A	Undertake Operations Commissioning / Decommissioning	4	130	None	UTPNEG217A	Full
UEPOPS413A	Coordinate Operational Strategies for Power Production	4	120	None	NEW UNIT	Full
UEPOPS414A	Perform Risk Analysis of Generation Plant	4	120	None	UTPNEG221A	Full
UEPOPS415A	Perform Cost Estimations	4	120	None	UTPNEG222A	Full
UEPOPS416A	Monitor the Implementation of the Enterprise's Production / Maintenance Quality Control procedures	4	120	UEPOPS338A	NEW UNIT	Full
UEPOPS417A	Monitor and Implement Environmental Plans and Procedures	4	120	None	UTPNEG230A	Full
UEPOPS418A	Deliver and Review Training	4	120	None	UTPNEG205A	Full
UEPOPS419A	Reserved			None		Full

**Schedule 4 Units UEPOPS401A – UEPOPS442A (cont)**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENT - FULL, PART OR NOT
UEPOPS420A	Coordinate the Network/System	4	130	None	NEW UNIT	
UEPOPS421A	Manage Critical Incidents	4	130	None	NEW UNIT	
UEPOPS422A	Schedule Generation	4	120	None	UTPNEG273A	Full
UEPOPS423A	Plan a Scheduled Outage	4	120	None	UTPNEG274A	Full
UEPOPS424A	Coordinate Local H.V. Networks	4	110	None	UTPNEG275A	Full
UEPOPS425A	Produce Maintenance Plans For Generation Production Plant	4	130	None	UTPNEG219A	Full
UEPOPS426A	Interpret and Analyse Multi-Operation Protection Devices	4	120	UEPOPS344A	NEW UNIT	
UEPOPS427A	Interpret and Analyse Low Voltage and Mechanical Protection Devices	4	120	None	NEW UNIT	
UEPOPS428A	Develop H.V. Switching Programs	4	120	None	UTPNEG281A	Full
UEPOPS429A	Coordinate and Direct Switching Program	4	110	None	UTPNEG284A	Full
UEPOPS430A	Control Permit to Work Operations	4	130	None	NEW UNIT	
UEPOPS431A	Collect and Analyse Hydrological and Meteorological Data	4	120	UEPOPS209A	NEW UNIT	
UEPOPS432A	Start up a Heat Recovery Steam Generator Unit	4	130	UEPOPS333A	NEW UNIT	
UEPOPS433A	Operate and Monitor a Heat Recovery Steam Generator Unit	4	120	UEPOPS33A	NEW UNIT	
UEPOPS434A	Shutdown an Heat Recovery Steam Generator Unit	4	130	None	NEW UNIT	
UEPOPS435A	Operate and Monitor Flue Gas Nox Mitigation Systems	4	110	None	NEW UNIT	
UEPOPS436A	Operate and Monitor Dual Fuel Firing Plant	4	120	None	NEW UNIT	
UEPOPS437A	Manage System Re-Start	4	110	None	NEW UNIT	
UEPOPS438A	Coordinate Electrical Energy Production	4	130	None	UTPNEG212A	Full
UEPOPS439A	Plan and Organise Work	4	110	None	UTPNEG200A	Full
UEPOPS440A	Co-ordinate Team Activities	4	110	None	UTPNEG202A	Full
UEPOPS441A	Operate and Monitor System Equipment	4	110	None	UTPNEG267A	Full
NEPOPS442A	Monitor and Co-ordinate the Operation of a Combined Cycle Gas Turbine Unit	4	110	NEPOPS314A	NEW UNIT	

**Schedule 5 Units UEPMNT401A – UEPMNT433A**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENT - FULL, PART OR NOT
UEPMNT401A	Install and Maintain Complex Mechanical Seals	4	120	Trade Cert. needed	UTPNEG060A	Full
UEPMNT402A	Conduct Complex Levelling and Alignment	4	120	Trade Cert. needed	UTPNEG061A	Full
UEPMNT403A	Maintain Complex Mechanical Valves	4	120	UEPMNT303A	UTPNEG063A	Full
UEPMNT404A	Maintain Complex Mechanical Pumps	4	120	UEPMNT304A	UTPNEG065A	Full
UEPMNT405A	Maintain Fluid Power Systems	4	130	UEPMNT301A	UTPNEG068A	Full
UEPMNT406A	Install and Maintain a Steam Turbine	4	130	UEPMNT402A	UTPNEG075A	Full
UEPMNT407A	Install and Maintain a Gas Turbine	4	130	UEPMNT402A	NEW UNIT	
UEPMNT408A	Install Hydro Turbines	4	130	Trade Cert. needed	NEW UNIT	
UEPMNT409A	Conduct Welding Inspection/Supervision	4	130	Trade Cert. needed	UTPNEG089A	Full
UEPMNT410A	Diagnose and Repair Faults in Electronic Equipment	4	120	Trade Cert. needed	UTPNEG123A	Full
UEPMNT411A	Diagnose and Repair Faults in Complex Electrical Equipment	4	120	Trade Cert. needed	UTPNEG124A	Full
UEPMNT412A	Modify Complex Electrical Equipment	4	120	Trade Cert. needed	UTPNEG127A	Full
UEPMNT413A	Modify Electronic Electrical Equipment	4	120	Trade Cert. needed	UTPNEG128A	Full
UEPMNT414A	Test and Commission Complex Electrical Equipment	4	120	Trade Cert. needed	UTPNEG130A	Full
UEPMNT415A	Diagnose and Repair Faults in Complex Refrigeration / Air Conditioning Equipment	4	120	Trade Cert. needed	UTPNEG135A	Full
UEPMNT416A	Overhaul Electrical Generators	4	130	UEPMNT351A	NEW UNIT	
UEPMNT417A	Inspect Electrical Generators and Diagnose Faults	4	120	Trade Cert. needed	NEW UNIT	
UEPMNT418A	Perform Mechanical and Fabrication Drafting	4	120	Trade Cert. needed	UTPNEG145A	Full
UEPMNT419A	Perform Civil Drafting	4	120	Trade Cert. needed	UTPNEG146A	Full
UEPMNT420A	Perform Electrical/Electronic Drafting	4	120	Trade Cert. needed	UTPNEG147A	Full
UEPMNT421A	Conduct Technical Inspection of Process Plant and Equipment	4	120	Trade Cert. needed	UTPNEG232A	Full

**Schedule 5 Units UEPMNT401A – UEPMNT433A (cont)**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENT - FULL, PART OR NOT
UEPMNT422A	Conduct Performance Testing on Process Plant and Equipment	4	120	Trade Cert. needed	UTPNEG233A	Full
UEPMNT423A	Conduct/Implement Condition Monitoring	4	120	Trade Cert. needed	UTPNEG234A	Full
UEPMNT424A	Monitor Efficiency of Thermal Steam Cycle Power Plant	4	110	Trade Cert. needed	UTPNEG235A	Full
UEPMNT425A	Maintain Complex Instrumentation Equipment	4	120	Trade Cert. needed	UTPNEG247A	Full
UEPMNT426A	Maintain Electronic Instrumentation Equipment	4	120	Trade Cert. needed	UTPNEG248A	Full
UEPMNT427A	Diagnose and Repair Faults in Complex Instrumentation Equipment	4	120	Trade Cert. needed	UTPNEG250A	Full
UEPMNT428A	Modify Complex Instrumentation Equipment	4	120	Trade Cert. needed	UTPNEG253A	Full
UEPMNT429A	Modify Electronic Instrumentation Equipment	4	120	Trade Cert. needed	UTPNEG254A	Full
UEPMNT430A	Test and Commission Complex Instrumentation Equipment	4	120	Trade Cert. needed	UTPNEG256A	Full
UEPMNT431A	Test and Commission Electronic Instrumentation Equipment	4	120	Trade Cert. needed	UTPNEG257A	Full
UEPMNT432A	Write Programs for Control Systems	4	120	Trade Cert. needed	UTPNEG260A	Full
UEPMNT433A	Conduct Routine Generation Electrical Maintenance	4	120	Trade Cert. needed	UTPNEG137A	Full

**Schedule 6 Units UEPOPS501 – UEPOPS515**

CODE	UNIT TITLE	NOTIONAL AQF LEVEL	WEIGHTING POINTS	PREREQUISITES UNIT	UTP98 UNIT CODE	EQUIVALENT - FULL, PART OR NOT
UEPOPS501A	Manage Occupational Health and Safety Policy and Procedures	5	160	UEPOPS401A	UTPNEG003A	Full
UEPOPS502A	Manage Permit to Work System	5	160	UEPOPS403A	NEW UNIT	
UEPOPS503A	Manage first response team operations	5	160	UEPOPS404A	NEW UNIT	
UEPOPS504A	Develop Implement and Monitor Environmental Management Systems	5	160	None	UTPNEG009A	Full
UEPOPS505A	Produce maintenance strategies for generation production plant	5	150	UEPOPS425A	UTPNEG218A	Full
UEPOPS506A	Establish and Implement Operational Strategies for Power Production	5	150	None	UTPNEG220A	Full
UEPOPS507A	Conduct project management	5	150	None	UTPNEG223A	Full
UEPOPS508A	Manage commissioning/ decommissioning	5	150	None	UTPNEG224A	Full
UEPOPS509A	Manage quality control procedures	5	150	None	UTPNEG225A	Full
UEPOPS510A	Monitor power generation plant reliability	5	140	None	UTPNEG236A	Full
UEPOPS511A	Tune Process Plant and Equipment	5	150	None	UTPNEG237A	Full
UEPOPS512A	Manage the Network/System	5	160	UEPOPS420A	UTPNEG271A	Full
UEPOPS513A	Manage Operational Crisis to Maintain/Restore Power System Integrity	5	140	None	UTPNEG279A	Full
UEPOPS514A	Control hydro generation/pumping	5	140	None	UTPNEG280A	Full
UEPOPS515A	Coordinate power generation	5	150	None	UTPNEG285A	Full

**Schedule 7 Units UEPMNT501 – UEPMNT504**

<b>CODE</b>	<b>UNIT TITLE</b>	<b>NOTIONAL AQF LEVEL</b>	<b>WEIGHTING POINTS</b>	<b>PREREQUISITES UNIT</b>	<b>UTP98 UNIT CODE</b>	<b>EQUIVALENT - FULL, PART OR NOT</b>
UEPMNT501A	Diagnose and Repair Faults in Electrical and Electronic Systems	5	160	Trade Cert. needed	UTPNEG125A	Full
UEPMNT502A	Test and Commission Electronic Electrical Systems	5	160	Trade Cert. needed	UTPNEG132A	Full
UEPMNT503A	Diagnose and Repair Faults in Instrumentation Systems	5	160	Trade Cert. needed	UTPNEG251A	Full
UEPMNT504A	Test and Commission Instrumentation Systems	5	160	Trade Cert. needed	UTPNEG258A	Full

### Schedule 8 Imported Units of Competence from other Training Packages

The following Schedule forms an Integral Part of a relevant qualification structure, it must be read and used in conjunction with such. The following Imported Units of Competency form part of this Schedule.

Users are advised that imported units are listed by notional AQF level and can be used as electives in qualifications from this package at the same AQF level or lower.

The list of imported units is included below and in Volume 1 Table 1 – Index of competency standard units and Scopes/Descriptors and again in Volume 2 Schedule 8 – Imported Units from other Training Packages. Users wishing to import units will need to contact the respective original Training Package developer or the NTIS to obtain copies of the most recent version of the competency standard unit to determine their relevance and, utilise them, where appropriate in accordance with the requirements of this Training Package.

Users intending to import units of competency from other Training Packages must have them approved and valued in accordance with the requirements of this Training Package, by the National Generation Training Group in order for them to contribute to an ESI qualification.

Contact EE-Oz Training Standards for information about having units of competency valued by the National Generation Training Group.

**Table 6 – List of Imported Competency Standard Units**

SOURCE TRAINING PACKAGE	UNIT CODE	UNIT TITLE	AQF	WGHT' POINTS
BSB01 Business Services	BSBADM304A	Design and develop text documents	3	80
	BSBADM305A	Create and use data bases	3	80
	BSBCMN108A	Develop keyboard skills	2	30
	BSBCMN203A	Communicate in the workplace	2	30
	BSBCMN209A	Provide information to clients	2	30
	BSBCMN213A	Produce simple word processed documents	2	30
	BSBCMN302A	Organise personal work priorities and development	3	80
	BSBCMN310A	Deliver and monitor a service to customers	3	80
	BSBCMN311A	Maintain workplace safety	3	80
	BSBCMN312A	Support innovation and change	3	80
BSB Frontline Management (BSB01)	BSBFLM302A	Support leadership in the workplace	3	80
	BSBFLM303B	Contribute to effective workplace relationships	3	80
	BSBFLM304A	Participate in work teams	3	80
	BSBFLM305B	Support operational plan	3	80
	BSBFLM306B	Provide workplace information and resourcing plans	3	80
	BSBFLM309B	Support continuous improvement systems and processes	3	80
	BSBFLM311B	Support a workplace learning environment	3	80

SOURCE TRAINING PACKAGE	UNIT CODE	UNIT TITLE	AQF	WGHT' POINTS
BSB Frontline Management (BSB01)	BSBCMN402A	Develop work priorities	4	110
	BSBFLM402A	Show leadership in the workplace	4	110
	BSBFLM403B	Implement effective workplace relationships	4	110
	BSBFLM404A	Lead work teams	4	110
	BSBFLM405B	Implement operational plans	4	110
	BSBFLM406B	Implement workplace information system	4	110
	BSBFLM409A	Implement continuous improvement	4	110
	BSBCMN404A	Develop teams and individuals	4	110
	BSBCMN410A	Coordinate implementation of customer service strategies	4	110
	BSBCMN411A	Monitor a safe workplace	4	110
	BSBCMN412A	Promote innovation and change	4	110
	BSB Frontline Management (BSB01)	BSBFLM501B	Manage personal work priorities and professional development	5
BSBFLM502A		Provide leadership in the workplace	5	140
BSBFLM503B		Manage effective workplace relationships	5	140
BSBFLM504A		Facilitate work teams	5	140
BSBFLM505B		Manage operational plan	5	140
BSBFLM506B		Manage workplace information systems	5	140
BSBFLM507B		Manage quality customer service	5	140
BSBFLM509B		Facilitate continuous improvement	5	140
BSBFLM510B		Facilitate and capitalise on change and innovation	5	140
BSBFLM511B		Develop a workplace learning environment	5	140
BSBFLM512A		Ensure team effectiveness	5	140
BSBMGT505A		Ensure a safe workplace	5	140