AUSTRALIAN
INDUSTRY
STANDARDS

ESI TRANSMISSION, DISTRIBUTION AND RAIL IRC WORKPLAN

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AUSTRALIAN INDUSTRY STANDARDS

ELECTRICITY SUPPLY INDUSTRY (ESI) TRANSMISSION, DISTRIBUTION AND RAIL IRC WORKPLAN

This Four-Year Workplan has been submitted by the ESI Transmission, Distribution and Rail Industry Reference Committee (IRC) to Australian Industry and Skills Committee (AISC) for approval.

The Workplan identifies the priority skill needs of the ESI Transmission, Distribution and Rail industry following a research and stakeholder consultation process conducted by Australian Industry Standards on behalf of the IRC.

Once approved by the AISC the Workplan informs the development of a four year rolling National Schedule for development and review work of the Transmission, Distribution and Rail Sector Training Package. More information on the National Schedule can be found at: www.aisc.net.au/content/national-schedule

This Workplan was agreed to by the ESI Transmission, Distribution and Rail IRC Interim Chair on Friday, 7 October 2016:

Stuart Johnston
ESI TRANSMISSION & DISTRIBUTION IRC INTERIM CHAIR

HOW TO USE THIS DOCUMENT

This document contains links to assist the reader to navigate efficiently through the content of the Workplan. The tiles on the cover page, and the divider pages will link to the relevant content when clicked with a mouse, or touched on a tablet device.

The tiles at the bottom of pages can be clicked to return to the beginning of each section, or the front page of the Workplan as required.

ESI TRANSMISSION, DISTRIBUTION AND RAIL INDUSTRY REFERENCE COMMITTEE

The ESI Transmission, Distribution and Rail Industry Reference Committee has been assigned responsibility for the UET12 Transmission, Distribution and Rail Sector Training Package.

The UET12 Transmission, Distribution and Rail Sector Training Package provides the only nationally recognised Vocational Education and Training (VET) qualifications for occupations involved in: Transmission Structure and Line Assembly, National Broadband Network Cabling, Asset Inspection, Power Systems – Transmission Overhead (erection of towers, poles, structures and associated hardware), Power Systems – Distribution Overhead (installation, maintenance and inspection poles, structures and associated hardware), Power Systems – Distribution Cable Jointing, Power Systems and Power Systems Operations.

More information about the ESI Transmission, Distribution and Rail IRC and its work can be found here: http://www.australianindustrystandards.org.au/committee/esi-transmission-distribution-and-rail-irc-industry-reference-committee/

ESI TRANSMISSION, DISTRIBUTION AND RAIL SECTOR OVERVIEW

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AUSTRALIAN INDUSTRY STANDARDS

ESI TRANSMISSION, DISTRIBUTION AND RAIL INDUSTRY OVERVIEW

The ESI Transmission, Distribution and Rail industry refers to Australia's infrastructure networks that are used to transport high-voltage electricity from generators to distribution networks; and then directly to domestic and industrial users. The transmission network is inclusive of power lines and substations. The transmission industry accounts for $3.3 billion in revenue and employs more than 4500 people. The distribution network is significantly bigger generating $17.9 billion in revenue and employing nearly 34000 people.

It is a heavily regulated industry where the jurisdictional regulators play an effective role in determining revenue and performance outcomes. It is expected that decisions made by the over-arching Australian Energy Regulator (AER) over the next five years will have significant impacts on the industry. Energy demand from the private sector continues to grow with households being a major end-market for the industry. Another key market is the commissioning of large infrastructure projects. and as more of these come online the demand for electricity supply to sustain these projects will increase.

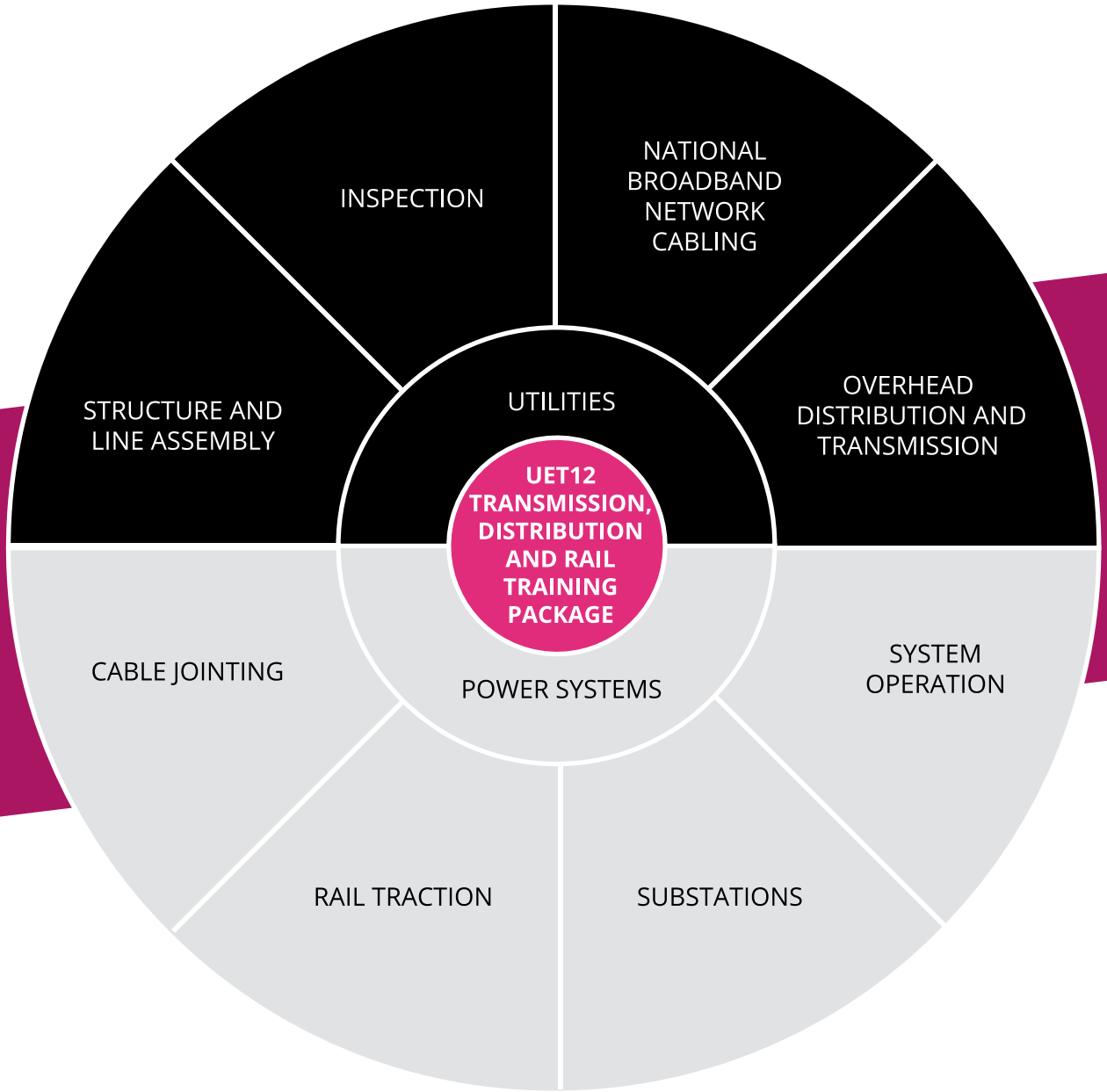
The UET12 Transmission, Distribution and Rail Sector Training Package provides the only nationally recognised Vocational Education and Training (VET) qualifications for occupations involved in: Transmission Structure and Line Assembly, National Broadband Network Cabling, Asset Inspection, Power Systems – Transmission Overhead (erection of towers, poles, structures and associated hardware), Power Systems – Distribution Overhead (installation, maintenance and inspection poles, structures and associated hardware), Power Systems – Distribution Cable Jointing, Power Systems and Power Systems Operations.

The UET12 Transmission, Distribution and Rail Sector Training Package comprises 16 qualifications, 18 skill sets and 223 units of competency and associated assessment requirements and covers: Overhead lines (distribution), Overhead lines (transmission), Overhead traction wiring systems (rail), cable jointing and equipment installation.

The UET12 Transmission, Distribution and Rail Sector Training Package contains the following qualifications:

- Certificate II in National Broadband Network Cabling (Electricity Supply Industry Assets)
- Certificate II in Transmission Structure and Line Assembly
- Certificate II in ESI - Asset Inspection
- Certificate II in ESI - Powerline Vegetation Control
- Certificate III in ESI - Power Systems - Distribution Cable Jointing
- Certificate III in ESI - Power Systems - Transmission Overhead
- Certificate III in ESI - Remote Community Utilities Worker
- Certificate III in ESI - Power Systems - Distribution Overhead
- Certificate III in ESI - Power Systems - Rail Traction
- Certificate IV in ESI - Network Systems
- Certificate IV in ESI - Power Systems Substations
- Certificate IV in ESI - Power Systems Network Infrastructure
- Diploma of ESI - Power Systems
- Diploma of ESI - Power Systems Operations
- Advanced Diploma of ESI - Power Systems
- Advanced Diploma of ESI - Power Systems Operations

TRANSMISSION, DISTRIBUTION AND RAIL SECTOR TRAINING PACKAGE ARCHITECTURE

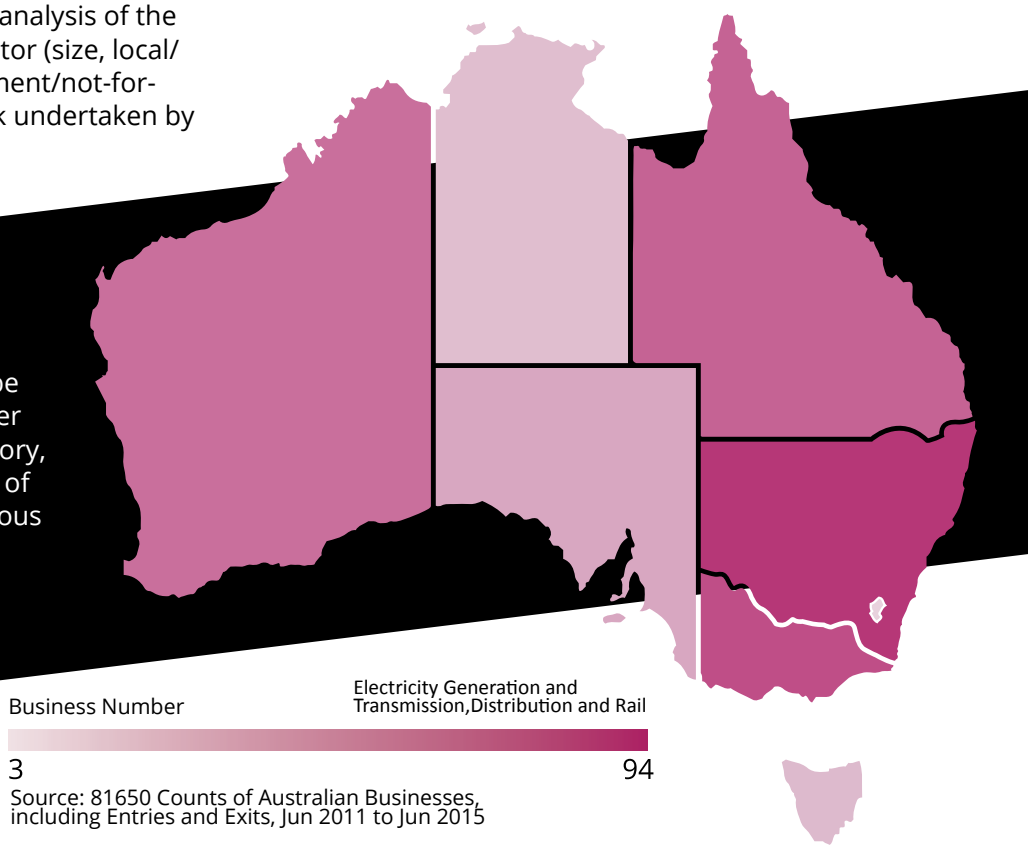


SECTOR OVERVIEW FRONT PAGE

ESI TRANSMISSION, DISTRIBUTION AND RAIL BUSINESS ANALYSIS

The following image provides analysis of the businesses involved in the sector (size, local/ state/national/global, government/not-for-profit/for-profit, scope of work undertaken by those businesses).

Population density seems to be inversely related to the number of enterprises per State/Territory, with the lowest concentration of enterprises in the most populous Territory, ACT.

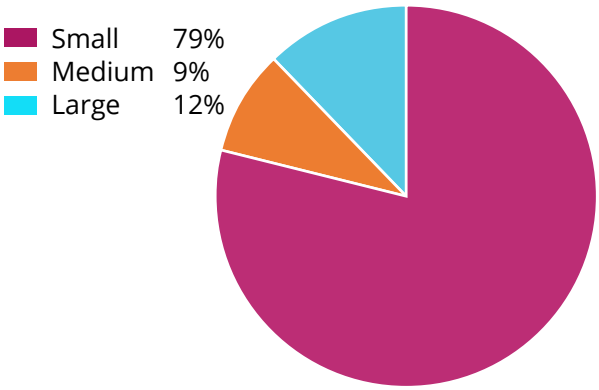


Source: 81650 Counts of Australian Businesses, including Entries and Exits, Jun 2011 to Jun 2015

Business Analysis Metrics

Revenue ($ m)	20,918.70
Profit ($ m)	5440.8
Average Wage ($)	90,885.53
No. of Businesses	29
Employment Growth (% to 2021)	-8%

Business Size (Composition)



SECTOR OVERVIEW
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KEY ESI TRANSMISSION, DISTRIBUTION AND RAIL STAKEHOLDERS

Stakeholder Category	Organisation	
Employers	Actew AGL AGL Australia Ausgrid AusNet Services Basslink Citipower ElectraNet Endeavour Energy Energex Ergon Energy Essential Energy Horizon Power Jemena Origin Energy	Powercor Powerlink Qld Power and Water Corporation - NT Sydney Trains TasNetworks Territory Generation Transend Networks Transgrid Transmission Operations Australia (TOA) Transmission Operations Australia 2 (TOA2) United Energy Westernpower
Employer Representatives	Energy Networks Association	
Employee Representatives	Electrical Trades Union	
Licensing/ Regulatory	Australian Energy Regulator Clean Energy Regulator Energy Safe Victoria	Energy Safety Safe Work Australia
Government	Federal, State/Territory Departments	
Industry Advisory	ACT Electrotechnology and Energy Advisory Board Inc. Electrotechnology, Power and Communications Industries Industry Energy Skills - QLD Energy Skills - SA	Industry Skills Advisory Council - NT NSW Utilities and Electrotechnology Industry Training Advisory Board Training Board – Victoria Utilities, Engineering, Electrical and Automotive Training Council
Training Organisations	TAFEs, Private RTOs, Enterprise RTOs	

The Transmission, Distribution and Rail Sector Training Package is in the Scope of Registration of 255 Registered Training Organisations.

INDUSTRY CHALLENGES AND OPPORTUNITIES

DIGITALISATION OF THE WORKFORCE

As the national Future Grid Forum[1] has noted, Australia's established electricity systems are "now facing complex and unprecedented challenges that have the power to affect all links in the electricity supply chain and to encourage new market structures, actors, and business models to emerge". The future grid will require the deployment of new smart technologies such as computer diagnostics of device faults and advanced communications requirements to provide two-way flows of data/energy. The future workforce will need to be prepared to work with intelligent technical support equipment (e.g.: smart technologies – inverters, meters and new technologies such as storage at various scales) which are capable of providing remote and real-time diagnostics, automated failure finding, interoperability, and are centrally controlled and by application software.

THE CHANGING GRID

Consumers in Australia are embracing the future of electricity by actively integrating distributed energy resources (DER) and engaging with new electricity services and technologies at record levels[2]. As such, Australia is recognised globally as being at the forefront of key aspects of energy transformation. The transformation required to enable the integration of distributed energy resources and enable new system functionality will require new operational responses. This will require the existing workforce to evolve from its current skill base to meet and service these new requirements[3].

EMPLOYMENT

EMPLOYMENT STATISTICS

WORKFORCE CHALLENGES AND OPPORTUNITIES

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EMPLOYMENT

EXPLANATORY NOTES

Workforce

The size of an industry's workforce is established by the Australian Bureau of Statistics (ABS) using two different approaches. The Labour Force survey, which provides a 30-year view of the industry, assigns each industry category based on the main job of the respondent. The Australian Industry dataset (which the Workforce Projections charts are based on), uses a top-down approach where industries are primarily classified by the single predominant industry class associated with a business' ABN. An industry's workforce therefore is bounded in the first instance by the occupations of workers and in the second by the primary business of an enterprise. The different approaches can therefore result in quite different workforce figures.

AIS has chosen to distinguish these approaches using the terms **Workforce – Occupation based** and **Workforce – Employer based**.

Enterprise size

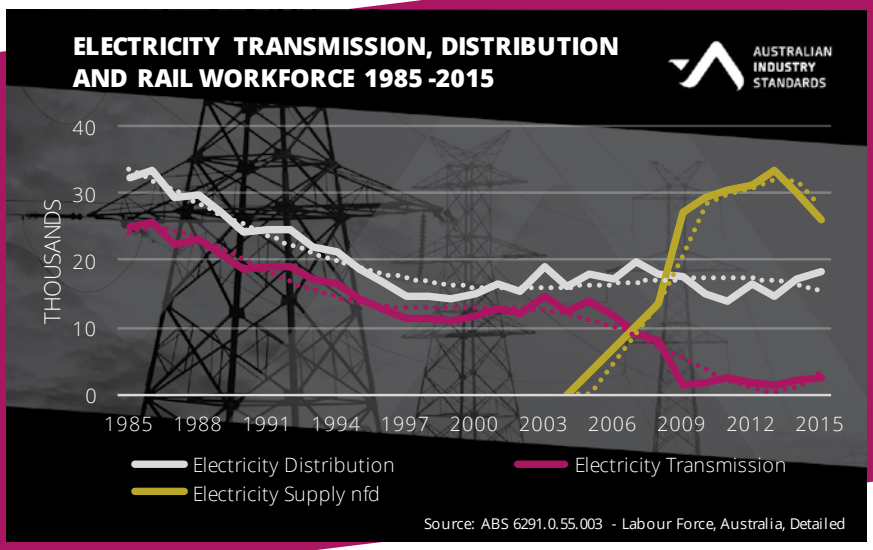
Industry definition by ABN also applies to the Counts of Australian Businesses data (size and distribution). Furthermore, low level values in these tables are subject to perturbation to anonymise the data. This may result in some areas with a low level value being perturbed to zero.

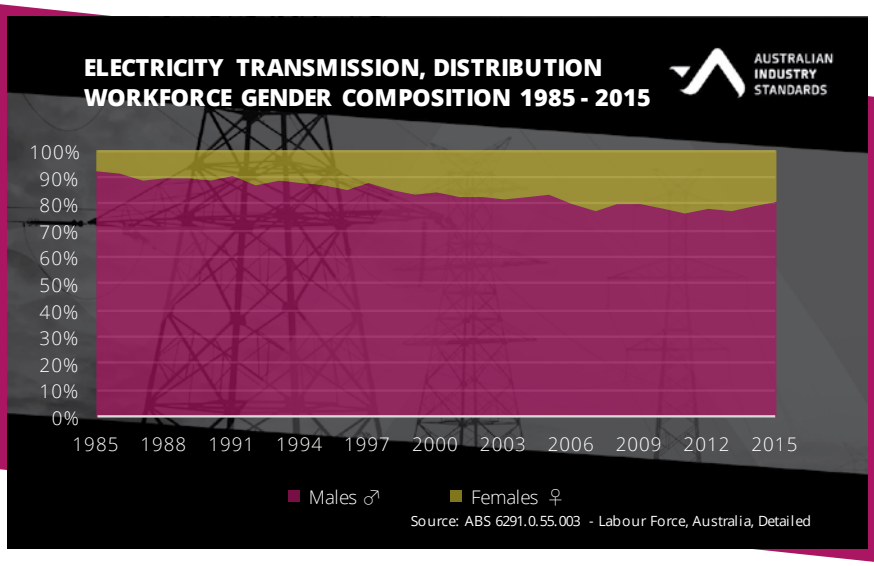
Exemptions

The scope of the Labour Force Survey is limited to the civilian population of Australia and therefore members of permanent defence forces are excluded from the survey.

EMPLOYMENT HISTORY - OCCUPATION BASED

The disaggregation of the Transmission and Distribution workforces becomes visible around 2004 having often been single companies previously. It's likely that the decline in the workforce in recent years is being offset by the rise in "Electricity Supply - Not further defined", though this category also includes Electricity Generation workers.

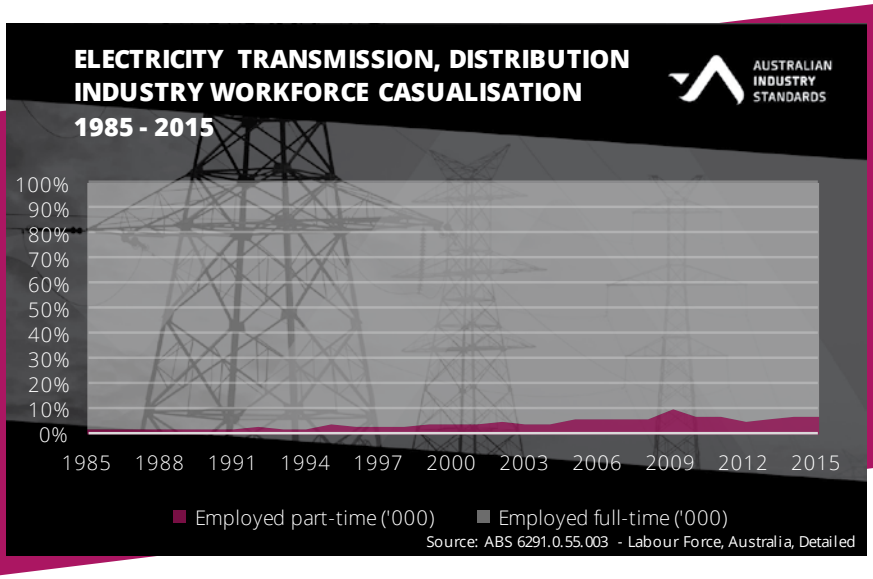




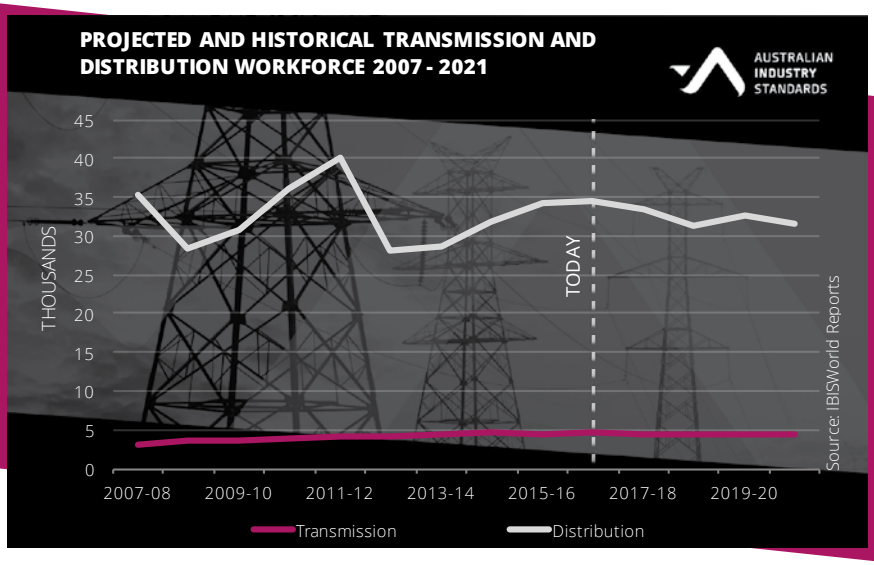
Female participation in the industry has almost doubled in 30 years while the proportion of women has more than doubled.

EMPLOYMENT FRONT PAGE

The number of part-time workers has more than tripled in thirty years to 6.1% of the workforce today.



EMPLOYMENT PROJECTION - EMPLOYER BASED



The Transmission and Distribution workforces are projected to decline by as much as 8% in the coming five years with the decline primarily affecting the Distribution workforce.

EMPLOYMENT FRONT PAGE

WORKFORCE SUPPLY-SIDE CHALLENGES AND OPPORTUNITIES

SKILLS FOR NEW SERVICES

The most progressive utilities globally are planning multiple evolutions of their business models. Australian electricity networks and their workforces will need to respond to their own unique circumstances. Distribution Network Service Providers (DNSPs) can offer services beyond the traditional pricing around kilowatt hours (kWh), such as frequency control, system inertia and back-up systems - in effect, acting as a trading platform for all users. Further, if the Distribution Network Operators (DNP) take on the role of Distribution System Operator (DSO), then their utilisation is likely to both increase and become more complex[4]. Future business model iterations and related revenue opportunities for DNSPs are dependent upon an interconnected, data-rich environment and a highly-skilled workforce that can service those requirements[5].

EDUCATION AND TRAINING PACKAGE REVIEW RESPONSIVENESS

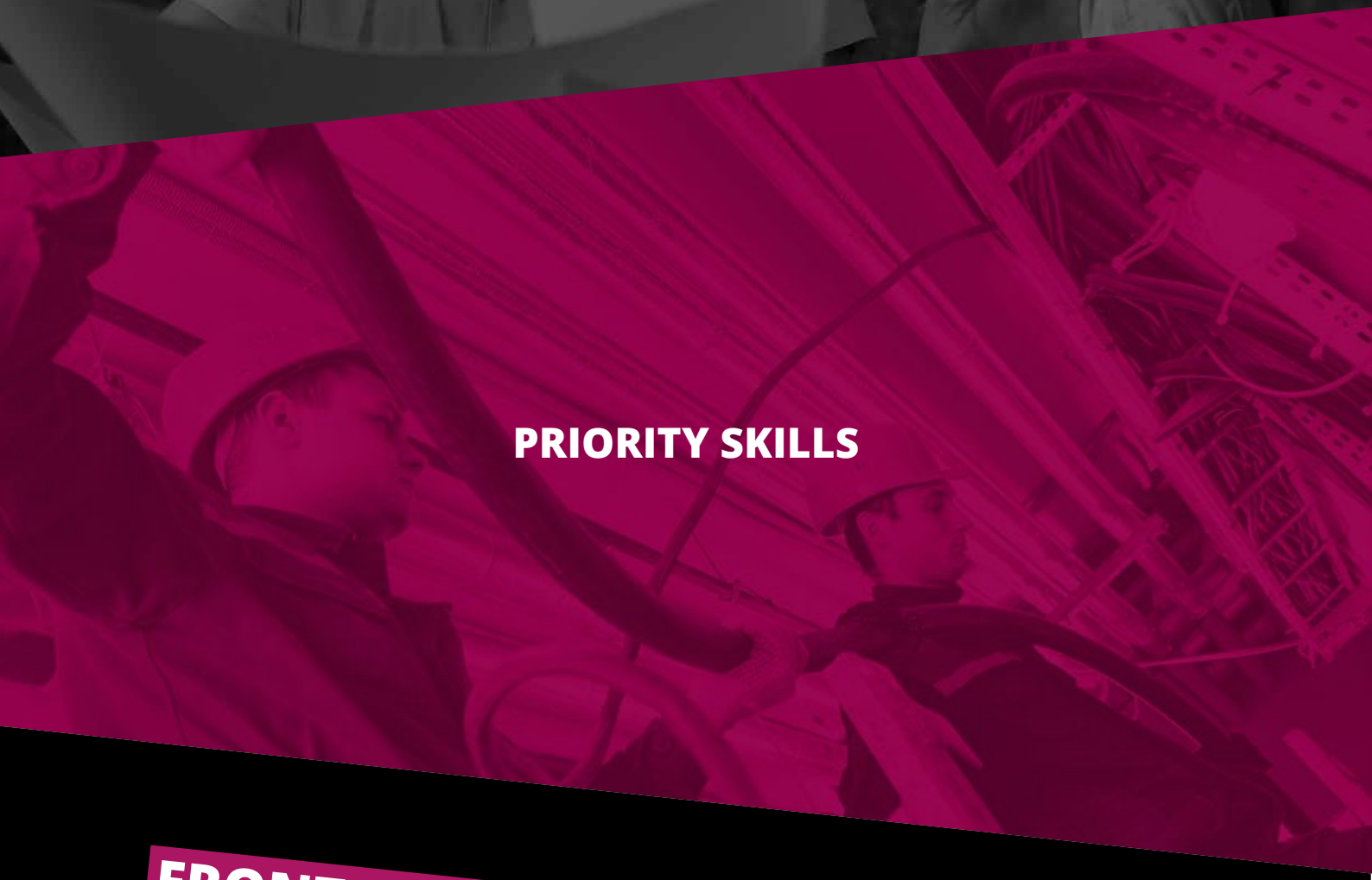
There is a pressing need to ensure the ESI Transmission, Distribution and Rail workforce is properly resourced and skilled to meet the demands of new technologies. With the development and review of Training Packages still in the initial phases of roll-out under the recent reforms to the VET national system, the challenge is for this model to be sufficiently responsive and flexible to keep up with new and emerging technologies. The tertiary education sector will also need to adapt their curriculum to meet future skills needs (e.g.: there is no Information and Communications Technology (ICT) degree that specialises in energy).

CONSTRAINED FUNDING FOR HIGHER LEVEL SKILLS (HLS)

The speed at which emerging technologies are entering the market will result in a clear skills gap should the existing workforce not have access to funding for training. While it is anticipated that the industry and workforce will take on more responsibility for skills and training requirements, it should be acknowledged that any transformation of the workforce will require leadership and involvement from governments. Funding levers at Federal and State and Territory levels will need to be reconsidered in order to enable the initial rapid transformation of appropriately skilled workers.

SKILLS OUTLOOK

INTERNATIONAL / NATIONAL WORKPLACE TRENDS



PRIORITY SKILLS

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SKILLS OUTLOOK

INTERNATIONAL / NATIONAL WORKPLACE TRENDS

Australia is recognised globally as being at the forefront of key aspects of energy transformation. The transformation required to enable the integration of distributed energy resources and enable new system functionality will require new operational responses. This will require the current workforce to evolve from its current skill base to meet and service these new requirements.

The future grid will require the deployment of new smart technologies such as computer diagnostics of device faults and advanced communications requirements to provide two-way flows of data/energy. The future workforce will need to be prepared to work with intelligent technical support equipment (smart technologies of inverters, meters and new technologies of storage at various scales) which are capable of providing remote and real-time diagnostics, automated failure finding, interoperability, and are centrally controlled by application software.

FUNDING

Variations in jurisdictional funding and traineeship arrangements are reported as impacting the viability of delivering training, in particular for narrow markets and in specialist technical areas. Longer-term this situation may lead to capacity constraints for employers and training organisations alike. These conditions also present challenges for RTOs and when considering future investment in training infrastructure and equipment, particularly those involved in new technology.

PRIORITY SKILLS

KEY ESI TRANSMISSION, DISTRIBUTION AND RAIL TECHNICAL SKILLS

Australian Industry Standards has developed this list of technical skills from analysis of the qualifications in the UET12 Transmission, Distribution and Rail Sector Training Package.

These skills can be grouped into seven categories:

1. Cable Jointing
2. Electricity Distribution
3. Rail Traction
4. Substation Operations
5. Electricity Transmission
6. Switch Scheduling
7. Power System Operations

The interim IRC Chair strongly indicated that ESI Transmission, Distribution and Rail Technical Skills were the highest priority for the industry.

GENERIC SKILLS

Ranking of the 12 generic workforce skills in order of importance to the ESI Transmission, Distribution and Rail industry.

Skill	Priority
Science, Technology, Engineering, Mathematics (STEM)	1
Design mindset / Thinking critically / System thinking / Solving problems	2
Learning agility / Information literacy / Intellectual autonomy and self-management	3
Communication / Virtual collaboration / Social intelligence	4
Data analysis	5
Technology	6
Managerial / Leadership	7
Customer service / Marketing	8
Language, Literacy and Numeracy (LLN)	9
Environmental and Sustainability	10
Financial	11
Entrepreneurial	12

The interim ESI Transmission, Distribution and Rail IRC Chair indicated that two Technical Skills were less important than Generic Skills.

CROSS-SECTORAL SKILLS

A list of cross-sector skills was derived from analysis of the qualifications in the UEE, UEG, UEP and UET Training Packages.

The five most important cross-sectoral workforce skills are listed below in order of importance to the ESI Transmission, Distribution and Rail industry

The list of priority skills below is based on advice from the interim ESI Transmission, Distribution and Rail Industry Reference Committee Chair.

Skill	Priority
Equipment and Systems Operations	1
Safety	2
Installation	3
Equipment Testing and Maintenance	4
Fault Rectification	5

The interim ESI Transmission, Distribution and Rail IRC Chair indicated that one Technical Skill was less important than Cross-Sectoral Skills.

ESI TRANSMISSION, DISTRIBUTION AND RAIL SKILLS - RELATED INSIGHTS

The ESI Transmission, Distribution and Rail industry refers to infrastructure networks that transport high-voltage electricity from generators to distribution networks, and on to domestic and industrial users. This includes power lines and transformer stations around Australia. The industry employs almost 40,000 people across the transmission and distribution sectors, and has an estimated annual revenue of $20.9 billion, adding $12.7 billion to the Australian economy in 2015-16.

The industry has highlighted a number of issues that impact upon activity and service delivery, including ageing infrastructure and workforce, matching the existing electricity supply with new and emerging energy sources such as renewables, updating the existing national grid, modern infrastructure and new functionality for the industry.

Stakeholders indicate the planning, development and roll out of large infrastructure projects to meet demand is also a challenge, given the growing number of alternate energy sources such as wind and solar. The national grid is considered to be aged and outdated.

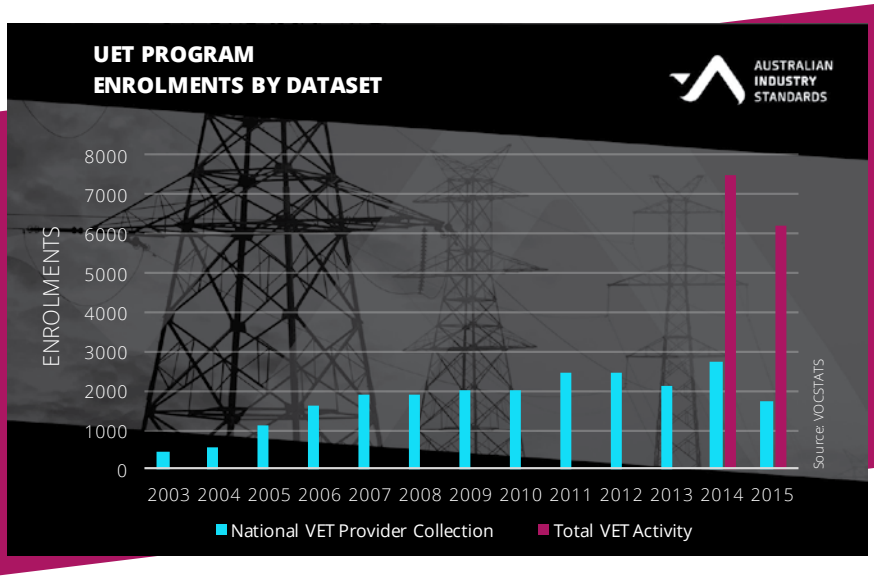
Industry also identifies the need to ensure government regulations and governance need to be co-ordinated to match the existing grid with the delivery of new technologies.

The interim ESI Transmission, Distribution and Rail Industry Reference Committee (IRC) Chair has strongly indicated that ESI Transmission, Distribution and Rail Technical Skills are the highest priority for the industry. It has highlighted the need for a balance of technical and human skills to prepare the workforce for current and future challenges. Technical skills focus on areas related to Cable Jointing, Electricity Distribution, Rail Traction, Substation Operations, Electricity Transmission, Switch Scheduling and Power System Operations.

There is also a need to ensure the ESI Transmission, Distribution and Rail industry and workforce are properly resourced and skilled to meet the demands of this emerging sector. With the development and review of Training Packages still in the initial phases of roll-out under the recent reforms to the VET national system, it is unknown if the model will be sufficiently responsive and flexible to keep up with new and emerging technologies.

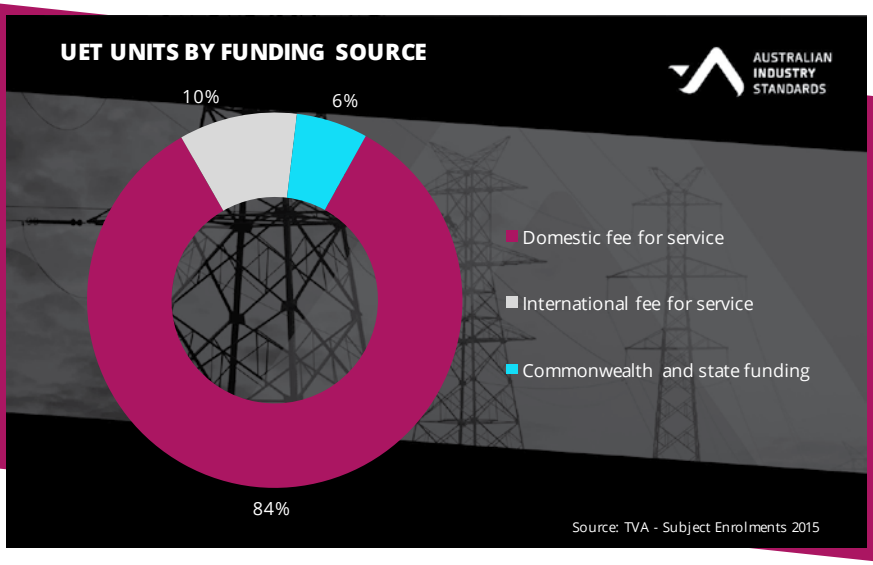
It was noted that there is a knowledge gap surrounding some processes such as home battery and smart meter installation, with inadequately skilled and unlicensed workers often carrying out this work. This means there is a requirement for a nationally recognised accreditation process for energy storage devices.

The industry is supported by the UET12 Transmission, Distribution and Rail Sector Training Package consisting of qualifications for overhead lines distribution, overhead lines transmission, overhead tractions wiring systems (rail), cable jointing and equipment installation. Total VET activity enrolments have decreased over the past two years, possibly due to changes in State and territory funding arrangements.



Both datasets recorded a drop in enrolments in 2015 however the decline in the more comprehensive Total VET Activity data (-16%) was only half that of the VET Provider Collection.

The cost of training is primarily borne by industry (84%) with International fee for service constituting a greater portion of total funding than Government support.



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Differences between Transmission and Distribution workforce figures have only been noticeable since 2004 due to the effects of industry disaggregation and marked declines since then are likely to have been exaggerated by coarser grained reporting over the same period.

The Transmission and Distribution workforces are projected to decline further by as much as 8 per cent through to 2021, with the decline primarily affecting the larger Distribution workforce.

The number of females in the industry has almost doubled in 30 years resulting in their proportional representation more than doubling. The number of part-time workers has more than tripled in thirty years to 6.1 per cent of the workforce today.

EXPLANATORY NOTES

The Training Enrolments charts compare two datasets; the **National VET Provider Collection** and the **Total VET Activity (TVA)** dataset. The primary distinction between the two is that Total VET Activity data is collected from all types of providers and not only those in receipt of Commonwealth or state funding. TVA data collection commenced in 2014.

Exemptions

Where the submission of training data to TVA conflicts with defence or national security legislation, or jeopardise the security or safety of personnel working in defence, border protection, customs or Australian police departments, an exemption from reporting training data is available.

Organisations that deliver training for vital services to the community (such as emergency, fire, first-aid and rescue organisations) may have received an exemption to submit data to TVA. From 1 January 2016 however, the exemption from reporting will apply only in respect of training activity not delivered on a fee-for-service/commercial basis.

REFERENCES

INDUSTRY CHALLENGES AND OPPORTUNITIES

[1] Future Grid. http://www.futuregrid.org.au/

[2] Australian PV Institute. Australian PV market since 2001. http://pv-map.apvi.org.au/analyses

[3] Electricity Network Transformation Roadmap. http://www.ena.asn.au/sites/default/files/roadmap_interim_report_final.pdf

WORKFORCE SUPPLY-SIDE CHALLENGES AND OPPORTUNITIES

[4] Energy Networks Association. Transition from distribution network operator to distribution system operator. http://www.ena.asn.au/transition-distribution-network-operator-distribution-system-operator

[5] Accenture. Network business model evolution: an investigation of the impact of current trends on DNSP business model evolution

AUSTRALIAN INDUSTRY STANDARDS

TRANSMISSION, DISTRIBUTION AND RAIL TRAINING PACKAGE REVIEW PLAN 2016/17 - 2019/20

REVIEW PLAN – TIMING AND PRIORITISATION

The Training Package Workplan priorities will be constantly monitored and formally reviewed annually by the IRC. This will allow the Workplan to remain at the forefront of the IRC goals and objectives and have the flexibility to respond to the industry needs as they arise.

The ESI Transmission, Distribution and Rail IRC does not anticipate that any of the Transmission, Distribution and Rail Sector Training Package qualifications, skill sets or units of competency contained within the Training Package, will be required to be reviewed more than once in the four-year period. The exception to this would be where there is regulatory or legislative change, or industry driven change due to safety requirements or specific technology advancement.

The ESI Transmission, Distribution and Rail IRC has not identified any training product that is expected to be contentious or lengthy in terms of development timelines

TRANSITION

2016 – 2018

Once established, the ESI Transmission, Distribution and Rail IRC will set the direction and prioritisation of activities for the UET12 Transmission, Distribution and Rail Sector Training Package transition to the 2012 Standards for Training Packages. The work covers the transition of all 16 qualifications in the UET12 Transmission, Distribution and Rail Sector Training Package and the relevant units of competency and skill sets.

The planning and prioritisation of work to transition the UET12 Transmission, Distribution and Rail Sector Training Package is contingent on the establishment of the Electrotechnology IRC, as the UET12 Transmission, Distribution and Rail Sector Training Package has a number of interrelated dependencies on the Electrotechnology Training Package. Both the ESI Generation and Electrotechnology IRC are under review by the AISC.

2017 -2020

The ESI Transmission, Distribution and Rail IRC will identify Training Package review and development priorities, for Workplan inclusion, once it has been formed.

LEGISLATIVE / REGULATORY REQUIREMENTS

Any legislative or regulatory change requirements identified would take precedence over other reviews planned as these are often associated with higher workplace risk.

As legislation or regulations are updated the UET12 Transmission, Distribution and Rail Sector Training Package and Companion volume affected need to be updated.

INTERDEPENDENCIES

UET12 Transmission, Distribution and Rail Sector Training Package qualifications include imported units of competency, within core and elective qualification packaging rules. Industry sector interdependencies that will potentially initiate future ESI Transmission, Distribution and Rail qualification reviews include imported units from 13 interdependent Training Packages (inclusive of predecessor releases).

- AHC10 - Agriculture, Horticulture and Conservation and Land Management
- BSB07 - Business Services Training Package
- CPC08 - Construction, Plumbing and Services Training Package
- FPI05 - Forest and Forest Products Training Package
- HLT - Health
- ICT10 - Integrated Telecommunications Training Package
- MEM05 - Metal and Engineering Training Package
- NWP07 - Water Training Package
- RII09 - Resources and Infrastructure Industry Training Package
- TLI10 - Transport and Logistics Training Package
- UEE11 - Electrotechnology Training Package
- UEP12 - Electricity Supply Industry - Generation Sector Training Package
- UEG11 - Gas Industry Training Package

It is important to note that the ESI Transmission, Distribution and Rail qualifications, skill sets and units of competency form part of the Electrotechnology Training Package. The UET12 Transmission, Distribution and Rail Sector Training Package has interdependencies with multiple different qualifications.

IRC Training Product Review Plan – 2016/17 – 2019/20
ESI Transmission, Distribution and Rail Industry Reference Committee
Contact details: GM IRC Operations, Australian Industry Standards
Date submitted: 30 September 2016

TRANSITION 2016-2018

Planned review start (year)	Training Package code	Training Package name	Qualification code	Qualification name	Unit of competency code	Unit of competency name
2016 - 2017	UET12 – Transmission, Distribution and Rail Sector		UET20312	Certificate II in ESI - Powerline Vegetation Control	All Training Package Components to be transitioned to the 2012 Standards for Training Packages. This work has commenced as per the executed Additional Activity Order	
			UET20412	Certificate II in Transmission Structure and Line Assembly		
			UET20511	Certificate II in National Broadband Network Cabling (Electricity Supply Industry Assets)		
			UET20612	Certificate II in ESI - Asset Inspection		
			UET30912	Certificate III in ESI - Remote Community Utilities Worker		
			UET30712	Certificate III in ESI - Power Systems - Rail Traction		
			UET30812	Certificate III in ESI - Power Systems - Distribution Cable Jointing		

Planned review start (year)	Training Package code	Training Package name	Qualification code	Qualification name	Unit of competency code	Unit of competency name
2016 - 2017	UET12 – Transmission, Distribution and Rail Sector		UET30512	Certificate III in ESI - Power Systems - Transmission Overhead		
			UET30612	Certificate III in ESI - Power Systems - Distribution Overhead		
			UET40512	Certificate IV in ESI - Power Systems Substations		
			UET40412	Certificate IV in ESI - Network Systems		
			UET40612	Certificate IV in ESI - Power Systems Network Infrastructure		
			UET50212	Diploma of ESI - Power Systems		
			UET50312	Diploma of ESI - Power Systems Operations		

Planned review start (year)	Training Package code	Training Package name	Qualification code	Qualification name	Unit of competency code	Unit of competency name
2016 - 2017	UET12 – Transmission, Distribution and Rail Sector		UET60312	Advanced Diploma of ESI - Power Systems Operations		
			UET60212	Advanced Diploma of ESI - Power Systems		
2018 -2020	UET12 – Transmission, Distribution and Rail Sector			To be prioritised with formation of IRC		

Appendix A

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AUSTRALIAN INDUSTRY STANDARDS

Australian Industry Standards (AIS) provides high-quality, professional secretariat services to the ESI Transmission, Distribution and Rail Industry Reference Committee, in our role as a Skills Service Organisation.

AIS provide services to 11 allocated IRCs which cover the Gas, Electricity, Electrotechnology, Corrections, Public Safety (including Police, Fire Services, Defence), Water, Aviation, Rail, Transport and Logistics and Maritime industries. AIS supports these important industry sectors using our world-class in-house capability and capacity in technical writing, quality assurance, project management and industry engagement in the production of Training Packages.

AIS was established in early 2016, 20 years after its predecessor the Transport and Logistics Industry Skills Council (TLISC) was established in 1996. More information about AIS can be found at www.australianindustrystandards.org.au

- We support industry growth and productivity through our modern innovative approach to establishing skills standards
- We provide high-quality, professional secretariat services to help our allocated industry reference committees develop the skills that industry needs
- We partner with industry to shape the workforce of the future

AUSTRALIAN
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AUSTRALIAN INDUSTRY STANDARDS

P (03) 9604 7200
E enquiries@australianindustrystandards.org.au
Level 2, 31 Market Street South Melbourne 3205

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Australian Industry Standards acknowledges the financial support received by the Commonwealth to operate as a Skills Service Organisation.