

Introduction

We provide services to build safe, skilled and compliant workforces for Australia's electricity networks

The Electricity Supply Industry (ESI) is undergoing a significant transformation as the Australian energy market transitions to a broad generation technology mix of thermal, renewables, battery storage and distributed energy generation.

Australia's **transmission** sector is in step with this transformation and across the states and territories, the transmission infrastructure owners are commissioning major network strengthening and expansion projects.

This rapid and ongoing evolution of the energy network is resulting in a shortage of the skilled workers required to support the infrastructure build, perform ongoing operations and maintain our energy networks.

Thomson Bridge is committed to providing training and education services to the ESI across Australia. We have a national footprint and have developed significant expertise in training workforces in the skills required to build, operate and maintain transmission network infrastructure so that Network Service Providers and their alliance partners can maintain a competent workforce; operate with safe and consistent work practices; and meet regulatory compliance and audit readiness.

To maintain currency and relevance, our Subject Matter Experts and engineers undertake research and consultation with state, territory and federal electrical and safety authorities and regulators, Network Service Providers and peak industry bodies.

We are passionate about innovation in education. Our engineers, L&D professionals and digital platform and content innovators foster partnerships with world leading designers of advanced learning technologies ranging from simulations to virtual environments.



Contents

	Training, Management & Learning Systems1	
	Courses & Qualifications for electricity networks2	
	Designing flexible learning pathways for new and experienced workers4	
	Essential Tools for Workforce Training Management5	
	Learning Design & Content Development6	
	Some of Our Projects9	
	Our Clients 11	
	Our Team	
	Our Team12	
- 13		
1.83/1		
X		
		9
N/		
1-11-11	Contact us	0





Training, Management & Learning Systems

Improving essential electrical skills and safety leadership

Our training services foster the development of a safer and better skilled workforce in Australia's rapidly evolving energy and rail network landscape with a modern approach to education.

Our national training team includes energy practitioners, engineers, L&D professionals and digital platform and content innovators.

Our face to face and blended learning is complemented by flexible delivery which incorporates access to a range of training facilities, digital infrastructure, tools and content for online experiences.

Our training is founded on industry best practice and delivers improved essential electrical skills and safety leadership with over 150 courses, learning management and RTO services and learning systems offered nationally.



Courses and Qualifications for electricity networks

UET20421 Certificate II in Transmission Structure and Line Assembly This qualification covers assembling transmission towers and structures. It also includes stringing transmission overhead conductors prior to being tensioned.

Read more

UET30519 Certificate III in ESI - Power Systems -Transmission Overhead This qualification covers work on transmission overhead powerlines, such as the erection of towers, poles, structures and associated hardware, and the installation and maintenance of conductors and cables.

Read more

UET30819 Certificate III in ESI - Power Systems -Distribution Cable Jointing The qualification covers the laying, installation and maintenance of deenergised Low Voltage and High Voltage underground polymeric cables and the installation and maintenance of electrical equipment.

Read more

Skills sets for cable jointing

Our Cable Jointing programs are designed for experienced lineworkers and licenced electricians seeking to upskill. Courses provide essential practical and theory components and are delivered in tailored packages to suit client requirements.



High risk work licenses for transmission line construction

Our partner, Ironbark Training (RTO ID 45658), delivers essential construction and lineworker high risk work training for licensing in dogging, rigging, forklift, crane and EWP operations.

Founder and Managing Director, Dave Joyce, is a proud descendent of the Kamilaroi nation of Northern NSW. Ironbark Training is an Indigenous business with Supply National and NSW Indigenous Chamber of Commerce registration.

Read more

Electrical safe access

We provide a range of programs to work safely on or near live electrical apparatus as an electrical and non electrical worker. Courses include nationally accredited and non accredited programs as well as company specific inductions.

Read more

WHS Compliance

Initial and Refresher programs for lineworkers including first aid, rescue at height and first response.

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High Voltage Operations

Tailored courses for skilling HV operators for field and substation switching. Providing practical skills is operations, switching instructions, HV procedures and responsibilities including switching officer responsibilities, access, test and work permit issuing and recipient duties.

Read more

Power Systems Control

In keeping with our ongoing commitment to innovation in learning, Thomson Bridge is investing in the development of modular and agile training programs for renewable generators. Our programs aim to provide insight into the dynamics of voltage control, security and reliability; and the responsibilities and obligations that generators have under their connection agreements to transmission and distribution network service providers and to AEMO, the energy market regulator.



Designing flexible learning pathways for new and experienced workers

We provide a modern approach to the gaining of Qualifications in the ESI sector.

Our aim is to:

- Offer programs that are effective and flexible for today's learners and their employing organisations
- collaborate with Employers to build capability via mentoring and quality on-the-job experiences for each learner
- drive quality and consistency in training delivery with clear, measurable outcomes; and
- continue to engage with industry bodies and improve the validation of training and learning outcomes.

Experienced worker pathways

Whether the worker has Australian industry experience, or has career experience in another country, our ESI program managers are able to research and map legacy qualifications against current nationally recognised qualifications, prepare gap analysis, apply recognition of prior learning and design custom programs to enable the candidate to achieve the relevant Australian qualification.

Apprenticeship management

We have combined our ESI learning design and delivery expertise with industry collaboration to provide innovative, practical, and sustainable Apprenticeship programs for new entrants across the ESI streams of transmission, distribution, cable jointing and rail.

Partnering and RTO Auspice Services

We can work with your own in-house training professionals to deliver training and assessment services that incorporate company specific contextualised courses aligned to your work procedures and plant; map to Nationally Accredited Units of Competency; and reflect industry best practice.



Essential Tools for Workforce Training Management

We provide training services to foster the development of a safer and better skilled workforce in Australia's rapidly evolving energy landscape with a modern approach to education.

The Bridge for Learning Systems & Compliance Management We have developed a highly effective learning management system, The Bridge, that enables the scheduling of training, recording of attendance and certification tracking.

Features include:

- Certification management by using The Bridge to define skill sets and matrixes specific to a company, group or team and enable management of workers compliance.
- A Learning management system that gives students and trainers access to classes, enrolment, learning materials, assessments, progress tracking and certificates.
- Training history which stores and reports on individual training attendance and certificates.
- **Mobile phone App** to enable each employee to easily access and display records and compliance against required skill sets.
- Worker cards with a QR code linking back to the individual's records.
- **Contractor management** functionality enables a company to upload the records of a nominated work party and immediately demonstrate compliance against the skills and authorisations required to work on your asset, network or project.
- Host training and induction services on behalf of our clients which includes online enrolment, self paced learning and automated certification.
- **Content richness** incorporating a wide range of content including slides, images, animation, video and software scenario simulation content that can be deployed using a variety of classroom and virtual modes.
- **Multiple assessment modes** such as observation checklists, online quizzes and short answer modes and long form paper based.

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eLogBook

For the tracking of on-the-job training and field based task completions, our clients use the Thomson Bridge eLogBook application on mobile devices for a straight forward way of monitoring workers' progression toward the achievement of their qualifications, licenses and authorisations.



Learning Design & Content Development

Our engineers, ESI practitioners and L&D specialists work with industry Subject Matter Experts to develop courseware and learning media that is easy to use and contextualised to your company and operational needs. Our materials are compliant with regulatory requirements and Codes of Practice and reflect industry best practice.

We incorporate the best of traditional learning tools with state of the art digital technologies.



Technical writing

Our technical writers have detailed experience in the power industry and can produce documentation, illustrations, 3D models and infograpgics that helps you make how things should work explicit and agreed.

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Course design

We provide instructional design capability to build a training course from the ground up. Drawing on the principles of good instructional design and innovative content development, our Instructional Designers use a proven methodology that delivers a quality product, we call this methodology VOLTS.

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Contents Page Contact us



eLearning

Thomson Bridge provides a complete design studio capability for the development of eLearning content.

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Digital media

We aim to enhance learning experiences through the use of micro videos, 2D and 3D images and animation. Click on the images below, these are just some of the Custom Digital Assets we have created for our clients.

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Virtual assets

Thomson Bridge partners with innovative companies that can produce high end virtual reality products and simulations.

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View some of our Assets

Click here







Some of Our Projects



Providing contextualised, site based, high voltage operations training to wind farm sites across Australia.

Vestas Australia/New Zealand

View Case Study



Partnering with NSW's transmission network owner to create Apprenticeship pathways.

TransGrid

View Case Study



Delivering HV switching training to South Australia's HV Switching Community on behalf of ElectraNet.

ElectraNet SA

View Case Study



Partnering to provide industry workshops on underground medium voltage cable installation practices.

NKT Cable Solutions

View Case Study



Developed an audit tool to assess the utilisation and value of Site Safe Access Rules and procedures across all Palisade's solar and wind energy assets.

Palisade Infrastructure Fund

View Case Study



Thomson Bridge is proud to have collaborated with the significant cross section of the electricity generation industry to develop this important Arc Flash Hazard Management Guideline for Industry.

Australian Energy Council Electrical Arc Flash Hazard Management Guideline View Case Study



Developing a new competency framework for the distribution network's trade and non trade workforce.

Evo Energy ACT

View Case Study



Providing pathways to achieve qualifications to be a licensed lineworker in Victoria.

Victorian NSPs and Alliance Partners

View Case Study



Implementing a state-wide Transmission Network access accreditation program for South Australia.

ElectraNet SA

View Case Study



Addressing the growing skills shortages in qualified Transmission lineworkers.

Downer, UGL and Quanta Lines

View Case Study



Incorporating video into safety & skills learning for the Electricity Supply Industry.

Ausnet Services, Vic

View Case Study



Providing effective, reliable and engaging Apprenticeship programs for Cable Jointers during COVID.

Power Cables

View Case Study

Contact us 10

Our Clients



































Our Team



Lisa Parkinson Managing Director

Lisa has worked in corporate finance and funds management teams within investment banks and accounting firms, including Macquarie Bank, Credit Suisse First Boston, PricewaterhouseCoopers and KPMG. She has a considerable working knowledge of the current Australian power industry and the dynamics that drive the electricity networks, asset owners and the contractors within the transmission, distribution, rail, thermal and renewable sectors.



Jason Watson Director, Head of Advisory

Jason is an Electrical Engineer with extensive experience in the transmission and generation sectors. He has held senior positions in Australian and international organisations in the energy sector including EnergyAustralia, Acciona, Vestas, AusNet and Transfield. Jason has a depth of practical experience in the development and maintenance of large scale energy assets including wind farm and hydro generation assets.



Guy Broadbent Head of Training and Assessment

During his 34 years in ESI, Guy has held a range of operational roles across the energy industry including Network System Controller for AEMO, Network System Controller and Control room Shift Manager for Energex (Qld), Delivery Manager for Zinfra, managing execution of network augmentation contracts, and Resources Manager for Zinfra Projects Division. Guy's early career included work as a distribution field operator, electrician and distribution live liner. Throughout his career, Guy has been involved in training staff and being influential in the development of training management within large National organisations.



Richard Harvey Head of Client & Corporate Services

A skilled education professional, Richard has held senior technical L&D roles with thermal and renewable generation companies including AGL Energy and Suzlon. Richard is an advocate for Vocational Education and Training (VET) and is on the Generation Industry Reference Committee. He is a Fellow of the Australian Institute of Training and Development.



Peter DouchManager NSW/ACT - Electrical Networks

Peter draws on decades of experience with Essential Energy (NSW). He has a broad knowledge base of the electrical distribution industry, having worked across network and field operations, substation maintenance and testing. As a HV Switching Trainer and Assessor, he has trained and advised many distribution practitioners, renewable energy staff and HV Customers across the state. In his role as a Corporate Safety Specialist, Peter continues to develop electrical safety rules and implement system switching processes and protocols for the ESI industry.



Darren Linkins Manager Victoria – Electrical Networks

Darren has over 40 years in the electrical transmission and distribution network industry and working with other energy providers, network operators and external stakeholders. His roles at AusNet Services (Vic), included the provision of advice on Network control and safety, conducting professional incident lead investigation and auditing, the oversight of procedures and work practices. Darren was also responsible for training and authorisation of Network Operators in network management and high voltage switching across the transmission and distribution networks.



Lee HowardManager Western Australia - Electrical Networks

Lee has a broad knowledge of switching operations on transmission and distribution networks both in Australia and in Ireland. Most recently he has worked with Western Power on the distribution and transmission networks. In Ireland, he has managed large network upgrade projects and is a qualified electrician and switching operator, including Glove and Barrier.



Jamie Ilton National Manager – ESI Programs

As a Project manager, Jamie has been responsible for conception and delivery of transmission and distribution projects for utility networks across Australia and New Zealand. Jamie holds dual qualifications in as a transmission and distribution linesman. He has also worked as an HV backbone distribution operator on metal clad underground and Zone Substations. These career experiences provide Jamie with a solid grounding for the development of trade qualification pathways for new and experienced workers across transmission, distribution and cable jointing.



Gracie NgTeam Leader – Technical Engineering & Design Services

Gracie draws on her electrical engineering training and extensive knowledge of heavy industry electrical plant to oversee the development of training curriculum and electrical advisory services. Her work includes development of electrical safety policies and training tools for electrical safe access, preparation of switching instructions for energisation, planned and unplanned maintenance of high voltage electrical apparatus for renewable operators, establishment of Balance of Plant maintenance plans, and arc flash studies.



Terry FoxcroftAdvisory Committee, Power Systems Protection Engineer

Terry has 40 years in the power industry including 31 with Snowy Hydro where he was responsible for all control, protection, excitation and governor systems across diesel, gas, hydro, transmission and distribution assets. He currently consults to the power industry and provides training in protection systems.



Ken Wyper Advisory Committee

Ken draws on decades of experience with TransGrid (NSW) where he held roles such as Senior Asset Monitoring Engineer, Substation Systems Support Engineer and Technical Training Manager. These roles included the monitoring and managing of high voltage asset condition, fault investigations, development of asset replacement and maintenance policies, procedures and work instructions.



Dr Robin PodmoreAdvisory Committee, CEO IncSys PowerGrid Simulation

Robin is the CEO of Incremental Systems Corporation (IncSys), the North American partner to Thomson Bridge specialising in simulation software for power grid training and analysis. Robin has dedicated his career to the development of computer applications for Power System Operations with a strong focus on Operator Training Simulators. He is an IEEE Life Fellow and a member of the US National Academy of Engineering.

More on Our Team



Artwork piece by 14 year old Tomoki Harvey July 2021

Take a look at our Art Space on our website:

<u>Click Here</u>

Thomson Bridge Pty Ltd

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