

Conference 29th – 31st October 2019 Melbourne Victoria



australian **control room network** association

...in pursuit of control room operational best practice

*“Plus ça change,
plus c'est
la même chose”
“The more things
change,
the more they
remain the same.”*

Jean-Baptiste Alphonse Karr



Frenchman, Jean-Baptiste Alphonse Karr, wrote this French epigram in 1849, reflecting that turbulent changes do not affect reality on a deeper level other than to cement the status quo.

What is change?
Could it be that it is the status quo – the constant that remains the same – that change is pervasive and everlasting?

This idea is an hypothesis for exploration and discussion. It goes to the heart of **Change Management** – the theme of the ACRNA 2019 Conference.

ACRNA 2019 Conference Theme

The control room will always be subject to change:

- Technology challenges
- Integration of new and acquired assets
- Human factors

Change is a subject which captures a wide range of issues for control room design and operation, and for operator recruitment and training:

- Are stakeholders seeing effective change management?
- Are Users feeling engaged or fed solutions?
- Do all those involved understand what effective change management is?
- What planning tools are used, and how well?
- How much collaboration takes place – internally and externally?

A quick look at some of our members is all that is needed to recognise the amount of change that control rooms go through:

- New operating system.
- Evolution to integrated operations.
- New fitout, same building.
- New site, new control system, staged changeover over years of commissioning.
- Geographical relocation from small rural towns to capital city CBD offices.
- Geographical relocation from a CBD office building at a transport hub to unserved suburban sites.
- Staged insitu refurbishment while in operational mode.
- Offshore to onshore operations.
- Migration to new CR, repurpose old CR as DRC/back-up CR.
- Amalgamation and integration of divergent operating groups.
- Migration in operational mode.

ALL THREE DAYS
and Membership

\$700 + GST

Includes 12 months membership
subscription/renewal

All three days of the conference

Conference dinner and guest
speaker

Site visits

AGM attendance

DAY REGISTRATION

\$250 + GST

AGM ONLY

\$Free

CONFERENCE DINNER
and Guest Speaker

\$100 + GST

MEMBERSHIP ADD-ON

\$100 + GST

12 months membership add-on
to the Day, AGM, or Conference
Dinner rates



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Conference 2019 Programme



DAY 1 TUESDAY 29 OCTOBER

- 0800 Conference breakfast
- 0845 Welcome & Introduction
Geoff McKernan
ACRNA President
- 0900 **Dr Jennifer Long**
Visual Displays in Control Rooms
- 0930 **Dr Nickolas Duck**
Overview Wall Screens
- 1000 **Liz Hahunga**
Change Resistance
- 1030 Morning tea
- 1100 **Mark Holmes**
Human-Centric Lighting
- 1130 **Stephen Clements & Robert Greuter**
Settling In – Case Study
- 1200 **Fiona Dunk**
Emergency Management
- 1230 Buffet lunch
- 1330 **Mark Holmes**
Improving Sleep – Case Study
- 1400 **Darren Spoor**
New Build – Case Study
- 1430 **Paul Lewis**
Safer Control Rooms
- 1500 Afternoon tea
- 1530 **Ben Moran**
Integrating Change – Integrated Operations
- 1600 **Grant Andrews**
Three Evolving BCCRs
- 1630 **Dave Williams**
The Warrnambool Exchange Fire
- 1700 Day 1 Wrap-up
Geoff McKernan
ACRNA President
- 1730 Day 1 Close and Networking drinks
- 1900 Conference dinner
GUEST SPEAKER
Professor Mark Wiggins
Macquarie University

DAY 2 WEDNESDAY 30 OCTOBER

- 0800 Conference breakfast
- 0845 Welcome & Day 2 outline
Russell Ockendon
ACRNA Secretary Treasurer
- 0900 Leave for walking, trams and taxis to site visits
- 0930 **CONTROL ROOM SITE VISITS**
AGL Renewables
CitiPower Powercor
Emergency Management
Victoria
Jemena
Metro Trains
Transurban CityLink
Department of Transport TMC
V / Line
Yarra Trams
- 1215 All return
- 1230 Buffet lunch
- 1330 **CONTROL ROOM SITE VISIT DEBRIEFS, Q&A & PANEL DISCUSSIONS**
Welcome and introductions to the panellists
Mark Holmes
Session Chair
- 1500 Afternoon tea
- 1530 **WORKSHOP**
Fiona McDonald
New Ways of Working
- 1615 **WORKSHOP**
Paul Lewis & Stephen Walton
Virtual Reality as a Design Tool
- 1700 Day 2 Wrap-up
Mark Holmes
Session Chair
- 1730 Day 2 Close and Networking drinks
- 1900 Networking buffet dinner

DAY 3 THURSDAY 31 OCTOBER

- 0800 Conference breakfast
- 0845 Welcome & Day 3 outline
Russell Ockendon
ACRNA Secretary Treasurer
- 0900 **ANNUAL GENERAL MEETING**
Including election of the new management committee
- 0930 **ACRNA – ITS ONGOING ROLE**
Including an open discussion of members' expectations and contributions
- 1030 Morning tea
- 1100 **Ged Griffin**
International Critical Control Room Alliance (ICCR)
- 1115 **Anton Abrahams**
Australasian Critical Communications Forum (ACCF)
- 1130 **A REVIEW OF THE 2019 CONFERENCE**
An open discussion among the delegates, incoming committee and volunteer panellists, and a closing wrap up of all 3 days
- 1215 Conference Close
- 1230 Buffet lunch

We encourage delegates to take part in the whole three days, including breakfasts and networking drinks and dinners.

During the breakouts, a virtual reality model demonstration will be available for delegates to experience the value of this tool when they consider changes to their control room operational, functional, human, technical, visual and built environments.



Our conference programme includes speakers and presenters from a number of industries and disciplines associated with control room operations, design and construction. We also include case studies, panel sessions, workshops and hosted control room site visits, with persons who have first-hand experience in dealing with some of the challenges of change management in control rooms.

Presenters Conference 2019



Dr Jennifer Long

Director
Jennifer Long Visual Ergonomics

Visual displays in control rooms – Questions to ask before you make a purchase so that your new control room looks impressive AND works well

A dominant feature of many control rooms is the number and size of visual displays. Some display technology looks very impressive and has amazing capabilities – but it is easy to focus on the technology and forget its purpose: to facilitate comfortable and efficient work within the control room. In this presentation Jennifer will discuss why you should ask yourself two questions before you purchase visual displays: “Will the displays be visually comfortable and effective for operators?” and “Will the display arrangement meet the visual demands of the work?” She will also describe how, with planning, it is possible to have an impressive looking AND functional control room.

Dr Jennifer Long is an optometrist and Certified Professional Ergonomist. She is the founding director of Jennifer Long Visual Ergonomics, and since 2006 has provided visual ergonomics consultancy services related to vision and digital displays, lighting and glare. Control Room built environments is one of Jennifer’s particular areas of expertise, and she has provided consultancy advice for small, medium and large size control rooms, both at the design stage, as well as for post-occupancy visual ergonomics modifications. Jennifer also holds a visiting appointment (Conjoint Senior Lecturer) at the School of Optometry and Vision Science, UNSW, Sydney.



Dr Nicholas Duck

Director & Principal Consultant
The Opposite

Advanced Overview Wall Screens

Control room operators work in an environment that is completely reliant on timely, clear, and predictive data that provides oversight of operations. In the electrical maintenance industry, this oversight ensures customers have safe, uninterrupted supply of energy. A common challenge across control rooms in every industry is the presentation and interface with data so that it is useful and meaningful to users without being diluted, misleading or excessive.

The aim of this project was to examine how new, advanced overview wall screens could be optimised to improve oversight in electrical maintenance activities

Nick is a Doctor of Organisational Psychology and has specialised in the areas of user-centred design, process improvement, program design and Human Factors/systems thinking.

He has worked for 12+ years across industries in energy, rail, road, education, construction and not-for-profit. Nick is well recognised as a HF leader in Victoria, having worked for the Victorian Safety Regulator, VicRoads (Road User Behaviour), John Holland (HF Manager) and recently in running his own business, Opposite, which has rapidly grown in its four years of operation



Liz Hahunga

Head of Metrol | Operations
Metro Trains

Change Resistance – What’s the brain got to do with it?

Change has always been an intrinsic part of being human. However it wasn’t until late in my career that “managing change” in the workplace started to take hold. Managing change effectively is an essential commodity for organisations – understanding and managing change resistance is critical to that success. I have had a seemingly successful career in different industries – the last 19 years in the rail sector. This has now been invigorated nationwide with a significant change program.

So, how have I managed to navigate teams effectively through challenging disruptive change long before “change management” became standard fare? Here is my journey – how a begrudging acceptance to attend a conference uncovered the field of neuro-leadership and shone the light on how I had been using my two “brains” intuitively throughout my entire career.

In my 40-year career traversing many diverse industries, I’ve followed a traditional path and attained various positions in Rail Operations / Train Control, Product Development, Transformational Strategy, Project and Contract Management and People / Team Management. In keeping with that journey, tertiary qualifications, certifications and competencies were collected - in between managing the demands of full time work and family. Known for a probing, curious mind and “out-of-the-box” thinking, I’ve managed to get myself in and out of tricky situations many times and as a consequence, blazed new pathways unknowingly. You could say I’m an experiential learner – acknowledging “life’s” panel beating has and continues to shape my leadership style and mindset.

Presenters

Conference
2019



Mark Holmes

Chairman
Circadian Australia

Human-Centric Lighting in Control Rooms – How Light Impacts Employee Performance & Health

Scientific Research + Technology Innovation → Driving Change Management to create safer 24/7 control rooms enhancing Health, Performance & Productivity.

Workplace lighting is no longer just about visual appearance. Managers, Health and Safety leaders must also assess how light impacts the health, performance, and alertness of their workforce.

This case study presentation will review the latest lighting research, including policies addressing the risk of light at night, and share a Fortune 500 Company 24/7 Control Room 1-year lighting case study. This case study was presented to the 2019 American Gas Association 'AGA' Operations Conference in Nashville by CIRCADIANTM LIGHT

Mark is the co-founder of CIRCADIANTM AUSTRALIA, a 100% owned and operated Australian company and affiliate of CIRCADIANTM, a Boston based global research and consulting company that spun out of Harvard Medical School more than 35-years ago.

CIRCADIANTM AUSTRALIA designs and delivers holistic, scientifically validated, Health, Wellbeing, Safety and Sustainable Resilience Fatigue Risk Management Programmes to the 24/7 Control Room sector and a wide range of 24/7 shift work industries including Mining, Oil & Gas, Utilities, Aviation, Rail and Road Transport among others across Australia and Asia.

Mark's career spans more than 30-years of leadership experience in the Finance Industry and more recently 12-years in Fatigue Risk Management.



Stephen Clements

System Operator Ausgrid



Robert Greuter

Supervisory System Operator
Ausgrid

Control Room Relocation – Lessons Learnt & Challenges

Stephen and Robert will follow up from the presentation in Sydney 2018 where Stephen and Joo Ean Prasad (System Operations Manager) discussed the impending relocation out of the Sydney CBD. Since last year, a successful move has taken place, and the presentation will focus on the challenges that were faced and how they were overcome.

Stephen has been at Ausgrid for over 20 years, a member of the Ausgrid Control Room since 2010 and was part of the design committee for the relocation. Stephen is also the WHS representative for the Control Room and is focused on the challenges of 24/7 shift workers to health and lifestyle.

Robert has been at Ausgrid for 31 years and working in the Ausgrid Control Room since 2008. He is part of a team of six Supervisory System Operator who were appointed in November 2018 and currently manages seven Area Operator staff. He has been involved in various committees such as Black Start Training and Simulations, EE-Oz TAC (Standardised Training for Control Room Operators). He is a champion for various Ausgrid IT systems and will take on a trainer role with the future replacement of Ausgrid's SCADA system



Fiona Dunk

Crisis, Emergency & Security
Systems Manager
Asset Systems & Assurance
Jemena

From Control Room to Board Room

Fiona will be exploring the idea of a Common Operating Picture that takes the incident from the Control Room to the Board Room, when an incident escalates to an Emergency and then Crisis for an organisation. How well are your plans for assessing the Severity of an incident, the ability to form the right team and how can you get flow of information from Control Room to the Board Room and back.

Fiona Dunk has more than 30 years of experience in Emergency Management, Security and Resilience most recently as the Crisis, Emergency and Security System Manager for Jemena. Fiona holds a Masters Degree in Business Technology from the University of New South Wales and has held roles in the Royal Australian Navy, Marine Safety Management, Port Emergency & Security Management, Crisis/Emergency management and Project Management. In her current role, she is responsible ensuring Jemena have an effective Crisis, Emergency and Physical Security response across all sites in Australia.

Presenters Conference 2019



Mark Holmes

Chairman
Circadian Australia

**How Science + Technology Can Improve Control Room Shiftworkers Sleep
'Using Cold Therapy to Mitigate Thermogenesis During Sleep'**

'Thermogenesis, defined as heat production, is an important physiological variable as well as a normal by-product of metabolic processes.' *Source: 'Methods in Neurosciences'*

'Cold exposure and cold therapy are documented to affect recovery and health. By taking cold therapy into sleep and applying it to the current thermogenesis crisis happening nightly and preventing optimal sleep, research proves the role that temperature has on the sleep-wake cycles and proves that cold therapy can influence and improve sleep quality and quantity.'

Source: White paper - Using Cold Therapy to Mitigate Thermogenesis During Sleep

Author Tara Youngblood, co-founder of Kryo, Inc.; sleep researcher & scientist

This case study presentation will introduce the problem of thermogenesis preventing optimal sleep for control room shiftworkers, and the application of innovative technology to improve sleep, alertness, health, performance and productivity.



Darren Spoor

NEM Real Time Operations
AEMO

AEMO New Build Case study

The case study involves refurbishing the AEMO Norwest Control Room whilst maintaining a real-time Operational Presence.

Darren Spoor is a real-time operations specialist at the Australian Energy Market Operator. He has worked in a variety of positions within the power transmission and distribution, predominantly in Planning and Operational roles.

His main interests have focussed on probabilistic concepts in the operation of power systems, fault location and power system resilience



Paul Lewis

Control Improvement Program Manager – DCS Upgrade & Project reNew Owner
Viva Energy Refinery Geelong

Safer Control Rooms

Viva Energy run the former Shell oil refinery on the shores of Corio Bay near Geelong, one of four oil refineries that remain in Australia. As part of a significant project to upgrade the refinery's outdated Distributed Control System the opportunity is being taken to upgrade and relocate the Refinery Control Room to a safe location. The control room relocation is part of a wider strategy for the refinery site – a Major Hazard Facility - that will significantly reduce occupancy risk for the operator workforce.

Hi, I'm Paul Lewis, Control Improvement Program Manager at Viva Energy Geelong Refinery, responsible for delivering \$35M in control system upgrades and \$10M in operations occupancy risk reduction improvements by 2022. I have a background in controls and control systems at refining and chemicals sites, before a more recent stint in refinery operations management. My main aims are to ensure my colleagues return home safe to their families after each work day (and sometimes night!) and giving operators the tools to run the refinery safely and optimally

Presenters Conference 2019



Ben Moran

Barossa Project Operations Specialist
ConocoPhillips

New technologies & ways of working

The Barossa FPSO project provides the opportunity to adopt new technologies and ways of working for ConocoPhillips to lead the industry in Integrated Operations. To enable our vision for the future operation of our assets, ABUW will transition from an Integrated Operations Support centre to an Integrated Operations Centre (IOC) with an office-based Central Control Room. The IOC will be made up of a highly effective and specialised team working towards common objectives to ensure an optimum value chain is achieved. Extension of core facility networks to a centralised onshore location, true replication of control room features and an increased capacity for onshore integration will shape our remote operations capability.

Ben has been with ConocoPhillips Australia for 12 years in operations, maintenance and project support roles, both onshore and offshore with previous experience on chemical and petro-chemical facility commissioning and maintenance. With a technical background in Instrumentation, Control, Electrical and hydrocarbon operations. Presently supporting the Barossa FPSO project in an operations specialist capacity.



Grant Andrews

Brisbane Central Control Room (BCCR) - Telecommunications Specialist
Condabri, Talinga, Orana (CTO) - Telecommunications Specialist
Origin Energy

The Evolution of three Brisbane Central Control Rooms

This longitudinal case study looks at Origin Energy's installation and commissioning of three Brisbane Central Control Rooms, from the Early Works Deployment to the current deployed solution located in the Brisbane CBD. The BCCR operates 24/7 to provide remote control of the 2000+ wells, gas and water gathering network, 15 Gas Processing Facilities, 2 Pipeline Compression Facilities as well as gas flow into the gas transmission pipelines supplying the APLNG LNG Plant on Curtis Island and the East Coast domestic gas network. In addition, the BCCR maintains positive staff communications with the use of a DTVMR (Digital Trunk Voice Mobile Radio) network, which in turn supports a critical safety function for Man Down / Emergency Response

Grant has 24 years' experience within the Telecommunications Network Environment from HFC, GSM, Transmission, Network Maintenance and HSE. He has spent the last 7 years at Origin Energy working on the Design, Installation and Commissioning of the APLNG EoSDH Transmission Network with the Bowen Basin. Grant played key roles in the delivery of all three BCCRs.



David Williams

Senior Industry Advisor (Centre for Disaster Management and Public Safety)
University of Melbourne

The Warrnambool Exchange Fire – Lessons learnt and are you prepared?

This case study brings a different perspective in how to cope with a catastrophic failure beyond your control. On the 2nd of November 2012 at approximately 4.30am a fire damaged Telstra's Warrnambool telecommunications hub. There were serious implications for the communities, major businesses and emergency services. What were the potential implications and how did these businesses and service providers overcome their communications shortfalls. Have you prepared for the worst? What would your control centre do if faced with a similar situation? How would you cope with no handy tellers, no EFTPOS, no mobile phones, limited banking and no landlines? How does your business and how do you cope? These are just a few of the questions we hope to ponder and even possibly provide a few suggestions or answers.

David holds a Master of Education and a Graduate Certificate in Applied Management. He retired from Victoria Police in July 2014 at the rank of Inspector after 38 years of service. David during the course of his career received numerous formal awards including the disaster management medal for his significant role during the Black Saturday Bush Fires response. He was also involved in response and recovery management for both the significant floods and the Hazelwood fire events.

Presenters

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Fiona McDonald

Director
Absolute Ergonomics Solutions

New Ways of Working

Future ways of work need to ensure we are leveraging human abilities with the rapidly advancing technology changes. We will be challenged with new ways of working which may change many of our traditional systems of work.

Use of an Ergonomic Framework can provide Managers with principles and requirements to guide and assist in making good decisions for the development of new or improved systems whilst also maximizing human performance.

We will explore how to design our work systems to Foster the unique human skills that technology and machines are unable to provide and ensure that human strengths are supported by new technology. We will look at ensuring all human-machine interfaces are designed to support and match human capacities and the tasks they need to accomplish

Fiona McDonald is a Consultant Ergonomic and Human Factors Specialist with over 30 years' experience working with an extensive range of industries and work environments throughout Australia.

Her passion is to support both management and workers in exploring current work system design as a holistic source of worker health, safety and wellbeing. By using an Ergonomic framework, she assists business to achieve a workspace and work system design that supports the worker to achieve high levels of productivity and efficiency via good physical ergonomic and human-machine interface design. Fiona currently provides support to Control Centres Australia to facilitate user engagement and ensure ergonomic design to support ISO 11064 Ergonomic Design of Control Centres.



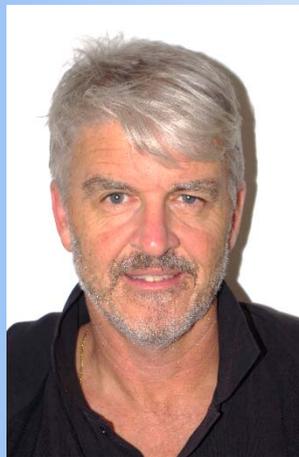
Stephen Walton

CTO
CADwalk Global

Virtual Reality as a Design Tool – How will Virtual Reality modelling enhance your requirements gathering and project definition?

CADwalk Global has brought customers closer to their conceptual projects and enabled immersion in the 3D model to focus attention on the physical and operational context. This workshop, co-presented with Paul Lewis, will use the Viva Energy experiences to demonstrate the capabilities of VR as a design tool.

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Paul Lewis

Control Improvement Program
Manager
DCS Upgrade & Project reNew
Owner
Viva Energy Refinery Geelong

Hands-on VR demonstrations will be available in the Breakout Atrium between conference sessions.

Presenters

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Ged Griffin

Centre for Disaster Management and Public Safety & Victoria Police
Representing the International Critical Control Room Alliance (ICCRA)

Critical control rooms are essential components of an organisation's or industry's operation. In some sense, critical control rooms are the actual heartbeat of an enterprise and they have to function 24 hours a day, 7 days a week. During this process humans and machines combine to provide operational functions that benefit a broad range of stakeholders. This presentation provides an overview of the International Critical Control Rooms Alliance and explains how it brings together critical control room professionals in order to help deliver excellent mission-critical services.

Ged has been a member of Victoria Police Force for approximately 32 years and is currently a Inspector at the Capability Department. He has performed duties in general operations, disaster management, marine policing, criminal investigations, intelligence and counter terrorism operations. Ged was the project manager responsible for replacing Victoria Police's metropolitan analogue radio network for a new state of the art digital radio network. Ged actively researches new and evolving technologies that impact on police operations and public safety and is regularly invited to conferences around the world to speak about his work. During 2015 Ged took leave from Victoria Police to establish and manage the Centre for Disaster Management and Public Safety at the University of Melbourne. In 2017 he established the International Critical Control Room Alliance with a number of colleagues involved in public safety communications



Anton Abrahams

Australasian Critical Communications Forum Ltd (ACCF)
Chapter of The Critical Communications Association (TCCA)

The ACCF is the local Forum of the international TCCA organisation. TCCA represents all standard mobile critical communications technologies and complementary applications. Our Members are drawn from end users, operators and industry across the globe. We believe in and promote the principle of open and competitive markets worldwide through the use of open standards and harmonised spectrum. We support, maintain and enhance Professional Mobile Radio (PMR) standards, and drive the development of common global mobile standards for critical broadband.

Anton is the chairman of the Australasian Critical Communications Forum chapter of the international TCCA representing Governments, Transport, Utilities, Oil & Gas, Operators, end users, and industry across the globe, He has more than 40 years' global experience in the mobile radio industry.



Professor Mark Wiggins

Professor of Organisational Psychology
Macquarie University

Guest Speaker

Mark has a strong interest in the design of control rooms and the assessment and support offered to system controllers. He has consulted to a number of organisations, including THALES, the Victorian Department of Infrastructure, SNP Security, Transport NSW, and the Australian Rail Track Corporation. His research interests lie primarily in the assessment of controller performance, and he has had a long association with both electricity transmission and distribution network service providers in developing and testing an industry-wide, cost-effective tool for controller assessment and selection.



Department of Transport Traffic Management Centre

The Traffic Management Centre (TMC) operates 24 hours per day, every day of the year, monitoring the State's arterial road network and coordinating the response to incidents and events that may affect traffic flow or road safety. These incidents and events include:

- Traffic light faults
- Collisions and vehicle breakdowns
- Debris and other hazards reported by the public
- Emergencies such as fires and floods
- Major sporting and social events
- Roadworks and other Big Build traffic disruptions

The TMC operates some of the latest intelligent transport systems such as managed motorways, variable speed limits, closed circuit traffic monitoring cameras and the SCATS traffic signal system.

Keith Weegberg, Manager Real Time Operations, Department of Transport. Keith has been in the traffic and traffic management industry for over 30 years. Keith has been part of the significant changes in the management of traffic during this period including system and technology developments associated with Intelligent Transport Systems



Yarra Trams Keolis Downer

Yarra Trams looks after the world's largest and one of the oldest Tram networks. The network of wires and cables are at nominally 600 volt direct current and there is over 500 Km of double track system throughout Melbourne.

On the YT control screen you will get to see a large number of coloured sections. Each colour is an 'in operation' section of the network. The area is staffed 24 /7 to ensure the systems integrity is always maintained and to provide a single point of contact for emergency services. On the day YT will go into further details of the network and systems employed to keep the trams running.



Benjamin Greig,

Team manager Power operations and substations Yarra Trams for the last 20 months.

TMAIE, MAIPM - CPPD - Reg PM, Experienced in multiple large scale projects to \$2.6B+ in Mining UG and surface - Gold, Diamonds, Iron ore & Nickel, Tunnelling 'Rail and fluid storage', Power generations - Turbines and reciprocating engines, Military Construction Applications - GOA and USG, Large Paper mills - start-up -handover & maintenance, nationally and internationally. China, Singapore, Hong Kong, Malaysia, UK, USA Australia



AGL Renewables

AGL is committed to helping shape a sustainable energy future for Australia and we operate the country's largest electricity generation portfolio of ~7700MW and have more than 3.6 million customer accounts. AGL Energy's Melbourne Dispatch Centre has a whole-of-portfolio view of dispatch management and is co-located with our wholesale markets trading team. The Melbourne Dispatch Centre remotely operates approximately 35% of AGL Energy's total generation portfolio representing ~2000MW of Renewable and fast-start generation assets comprising 13 Hydro Power Stations, 1 Gas fired Power Station, 9 Wind Farms and 2 Solar Farms.



Stuart Cariss

Operations Manager Renewables Stuart has over 29 years in the field of process control engineering, project management and technical operations, having worked in the chemical, petrochemical, water and power generation industries. Stuart has extensive experience in control room operations including the design, construction and integration of SCADA and control systems Stuart's current role is to lead centralized generation dispatch operations for AGL's diverse range of Renewable and fast-start generation assets.



Emergency Management Victoria

Emergency Management Victoria (EMV) was established in July 2014 and plays a key role in implementing the Victorian Government's emergency management reform agenda.

EMV supports the Emergency Management Commissioner, who has overall responsibility for coordination before, during and after major emergencies including management of consequences of an emergency.

EMV is an integral part of the emergency management sector and shares responsibility with a range of agencies, organisations and departments for ensuring the system of emergency management in Victoria is sustainable, effective and community focussed.

The State Control Centre (SCC) is Victoria's primary control centre for the management of emergencies. The SCC is the hub of a network of regional control (RCC) and incident control (ICC) centres across the state.

Emergency Management Victoria has the legislative responsibility for the management of the SCC.

The purpose of the SCC is to provide a facility to support the Emergency Management Commissioner to meet the State control priorities and objectives.



Jemena

Jemena's Control Room in Melbourne monitors a diverse portfolio of assets including the Jemena Electricity Network (JEN) across northern Melbourne, Victoria, and the company's Gas Transmission infrastructure across Australia.

The Control Room operates 24/7 responding to planned network outages, and unplanned faults. The room was purpose designed with items such as the knowledge wall boards to provide situational awareness for proactive response and preparation. It also enables us to see the status of our network at any time.

Jemena's Electricity Network covers the Northern Melbourne Metropolitan area with approximately 350,000 customer and 3,400km of distribution network assets.

Gas Transmission infrastructure comprises of four pipelines including the Northern Gas Pipeline (NGP), Eastern Gas Pipeline (EGP), Queensland Gas Pipeline (QGP), Darling Downs Pipeline (DDP) and Roma North Processing facility.

We look forward to welcoming delegates on the tour of the Jemena Control Room, Melbourne.



Ian McNeill is the Control & Dispatch Electricity Manager for Jemena with over 38 years industry experience. For the past 20 years Ian has been in Control Room management, covering both Electricity and Gas distribution across Victoria. Ian has been involved in various Control Room projects including Control Room re-locations and numerous SCADA, DMS, OMS system replacements

Metro Trains



Transurban CityLink

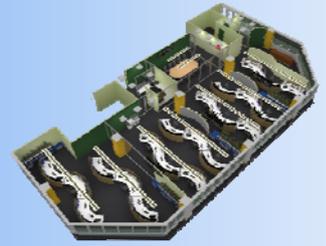
Transurban operates a number of Motorways in three eastern states of Australia, North America and Canada. Key to these operations are its thirteen control centres. Staff in these centre monitor and respond to incidents on our Motorways that include over 2,000 lane kilometres. CityLink Melbourne was the first motorway built and operated by Transurban. CityLink was the first electronic tollway to operate in Australia providing an efficient link between three of Melbourne's major freeway networks. The two tunnels resulted in a significant reduction in travel time between the West Gate and the Monash Freeways. Since opening CityLink has had a number of upgrades, with the last upgrade making CityLink a fully managed motorway.

The CityLink control room response to approximately 1,000 incidents a month on the CityLink network and another 400 on the VicRoads network. Operational staff will host the tour and will explain the operational requirements and challenged in managing road tunnels and managed motorways.



Managing a high performing team within the Operations space, **Brad Collis** focusses on challenging the status quo when extracting the best out of individuals. Modern strategies and a strong focus on culture and engagement are key to Brad's management of critical infrastructure and control rooms.

V / Line



CitiPower Powercor

CitiPower and Powercor are Victoria's largest electricity suppliers, delivering electricity to over 1.1 million residential households and commercial customers across Victoria.

CitiPower and Powercor own and operate two of Australia's largest electricity networks, supplying power to over 1.1 million Victorian households.

CitiPower owns and manages a 157 square kilometre electricity distribution network. It provides power for more than 330,000 customers in Melbourne's CBD and inner suburbs.

Powercor owns and operates Victoria's largest electricity distribution network, with more than half a million poles and over 88,000 kilometres of power lines. The network provides electricity for nearly 820,000 customers in central and western Victoria, as well as Melbourne's western suburbs. Both are closely monitored and millions of dollars are invested each year to make sure the networks are safe and reliable.

Corporates

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*ACRNA is grateful for the support
of all our Individual Members and
our Corporate Members*

Platinum Corporate Member



Gold Corporate Members



Silver Corporate Member

