E C a NEWS

NECA - LEADING THE WAY

The official publication of NECA Victoria



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Bright Young Minds rewarded

An IR wake-up call

Building Energy Efficiency





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On the cover: Wave Power



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PRESIDENT'S REPORT

ASKING WHY

I was chatting to Wes McKnight NECA board member and immediate past president early in the New year about a number of things and he commented;

"When Tiger Woods has a problem with his back swing, he gets in a coach to fix it".

This was made in the context of, we, as contractors engaging people external to our business to perform tasks such as "coaching".

If Tiger Woods cannot fix his own back swing, what makes us think we, as contractors, can deal with all the facets within our business.

The typical NECA contractor has a daily myriad of issues, tasks and challenges including, but certainly not limited to staffing issues, safety, technical matters, regulation, customer relations, tendering, accounts payable and receivable, communications (IT), and marketing...just to name a few....

You might engage staff with skill sets to deal with all, or some of the above, or there may be a partner or family who deal with sections, all with varying degrees of expertise. Ultimately though, the buck stops with the person overseeing or managing the organization, who in many cases, is the electrician who started the business.

So back to my starting point about coaching.

What makes us think we are clever enough to be getting the best out of our organization when the skills required are so diverse?

One possible solution is to bring a third party into your business to walk through how you operate, and give you recommendations on areas to improve.

Why Why Why ??

Some businesses are second, or even third generation.

We've all heard the answer to why -"Because that's the way we've always done it"

There is a very appropriate age-old expression that directly relates to this response; it's "not being able to see the wood for the trees".



I believe this is relevant in every business, and if it's not working to its optimum potential, you've got to ask yourself – why are we doing it this way – and what can we do better?

Nearing the end of his time as NECA Victoria President, Wes McKnight, was stimulating discussion about how members can support each other, especially if it means they can work smarter not harder!

One idea is that providing there is no competitive conflict, a contractor from the West could visit the workplace of a contractor from the East.

The walk through, discussion and challenges have the potential to stimulate a fresh way of thinking. Some people like to call this a "peer review".

There's been a suggestion that NECA could facilitate this type of peer review, and there are a few options for how the process could work.

It may be enlightening to have a contractor with 10 employees visit a business with 2, and prepare the smaller contractor for what's ahead should he be on the verge of expansion, or if he has ambitions for future business growth.

If the bigger contractor can offer some objective business tips on pitfalls and danger zones then surely this has to be good not only for the future of that business, but for the health of the industry.

There may even be some retired contractors who'd enjoy spending a day mentoring the next generation, passing on their knowledge and experience.

Another alternative is engage a professional person with appropriate skills to review your business and challenge the way you do things.

This requires courage and a willingness to invest both financially and emotionally in the process to ensure the best outcome.

Yes, you open yourself up for constructive criticism, so your ego might get a little bruised along the way, but I'm sure that your business will be better for it.

We at NECA appreciate feedback and thoughts on the value and effectiveness of what I've suggested above – after all, we're here to help and support our members.

John Cutler NECA Victoria President

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NECA VIC WELCOMES NEW MEMBERS

NECA Victoria continues to grow with the companies listed below now enjoying the many benefits that membership provides.

EVD Services Pty Ltd

Moonee Ponds

EVD Services Pty Ltd joined NECA in the last quarter of 2014 – apologies for the spelling error in the November/December edition of NECA News – a warm welcome to NECA to Michael Downey and the EVD Services team.

Coopelec Pty Ltd Durham Lead

AB McCormack Electrical Contractor Hawthorn

On Track Services	Invermay
Nero Electrical Solutions Pty Ltd	Oakleigh South
Country Victoria Electrical Inspections Pty	Ltd Tourello
Mattick Air (Australia) Pty Ltd	Newport
Omnivision Pty Ltd	Mulgrave
Gecko GRP	Frankston

LEGISLATION CAN MAKE SENSE



Kevin McCosh
NECA VIC Executive Director

Across State borders

Late last year, the New South Wales Government passed new Automatic Mutual Recognition (AMR) laws for the mutual recognition across state borders of certain trade licences, including electrical licences.

Paul Fearon from Energy Safe Victoria explains these AMR laws in further detail in his column in this edition of NECA News, however it is worth noting that the NSW Department of Fair Trading indicates the following:

Mutual recognition legislation applies only to individuals and occupations carried on by them. If you intend to contract or operate in NSW as a partnership or company, a Contractor Licence must be obtained by completing the application form for a Contractor Licence-Company/Partnership available from Fair Trading.

An application cannot be made under mutual recognition for issue of a Contractor Licence in the name of a company or partnership.

The Fight for Owed Monies

How many times have we seen Victorian contractors affected by their builders or principals going belly up and the imminent struggle to fight for owed monies via the administration process associated with the insolvency?

Well, the NSW government must be congratulated for its intended introduction of new and positive changes to its security of payment regulations.

New proposed changes that are currently in draft form are designed to better protect subcontractor retention monies and strengthen transparency in relation to payments to subcontractors while minimising red tape.

They will apply to contracts for non-residential building projects worth over \$20m and will include the following:

- The head contractor or principal will be required to deposit subcontractor retention monies into approved accounts
- These retention monies will be available to subcontractors under conditions specified in the contract
- Account holders will be required to provide annual auditing reports for each account they hold
- Up to \$22k in penalties for breaches of the regulation

So why does the NSW Government see a need to introduce such changes?

Well, it follows a government initiated independent inquiry that commenced in 2012 to investigate construction industry insolvency. It felt it was necessary to initiate this inquiry after a rising number of construction company

collapses that left subcontractors and suppliers more than \$1 billion out of pocket.

Over the next couple of months we will be discussing these NSW initiatives with Victorian members of NECA to gauge their suitability for application here.

Food for thought for our new Victorian state government!

In stark contrast, our industry is still awaiting the introduction of the Federal Building and Construction Industry (Fair and Lawful Building Sites) Code 2014.

This Code was introduced into the House of Representatives under the Building and Construction Industry (Improving Productivity) Bill 2013 in November 2013 and the Senate in February 2014 and when finally passed by the parliament will apply retrospectively from 24 April 2014.

Hence the necessity for ensuring all Enterprise Bargaining Agreements that are certified by the Fair Work Commission after the 24 April 2014 date to be compliant with the draft code if a business wishes to compete for government funded works after the legislation is enacted.

I cannot recall when such an important piece of legislation with broad reaching ramification for our industry has been lamenting for so long without being finalised. I can't help but think that 'yes some legislation does make sense', but only if and when it's dealt with expediently!

Kevin McCosh Executive Director NECA Victoria

FAREWELLS AND WELCOMES AT NECA VIC

After 18 years at NECA Victoria, Executive Assistant Catherine Davies made the decision to resign just before Christmas last year, leaving a huge legacy at NECA.

Former NECA Executive Director
Philip Green, now CEO of the 370 Degrees
Group says she will be missed by her
own team as well as the members with
whom she has nurtured valuable working
relationships and friendships.

Philip reflects on his time working with Catherine...

Many NECA Victoria members will have met Catherine Davies over the years. Many more members will have spoken to Catherine when they have called the office.

I was privileged to have Catherine work as my PA for 15 of those years.

Catherine was the chief driver, organiser and advocate of the NECA

Victoria Excellence Awards and Apprenticeship Awards. There is absolutely no doubt that under Catherine's stewardship the NECA Victoria Excellence Awards have become the premier event for the electrical industry anywhere in Australia.

Her planning and organisational skills are fantastic and always undertaken with the grace, good humour and courtesy for which Catherine was renowned.

Such events are of course only the public window on Catherine's contribution to NECA.

In addition to providing invaluable assistance to me as my PA,
Catherine was responsible for a considerable administrative workload which brought her into contact with many members on a daily basis.
No matter what the member enquiry was Catherine could always answer the query or direct them to someone who could,



and always ensured that matters were followed up.

One particular initiative and legacy which Catherine created, together with former NECA President Wes McKnight, is the NECA Business Women's Network. Under her guidance, the Women's Network has gone from strength to strength, culminating in the annual luncheon which has raised significant funds for charity.

I know all members join me in thanking Catherine for her contribution, wishing her and her husband David all the very best for the future.

Philip Green



Jody O'Brien

Meanwhile, NECA Victoria has added another member to the team!

Jody O'Brien joins the organisation in a newly created role of Marketing Communications Co-ordinator.

Jody has many years of experience in sponsorship, marketing, events and media

management in a range of industry sectors, including financial services, government and corporate.

She will be responsible for all NECA Victoria's marketing, communications and events activities, concentrating her efforts in these areas:

- Execution of marketing plans
- Sponsorship management
- Ensuring effective, branded marketing communications including the NECA Victoria website and all online activity along with print communication, and advertising.
- Reinvigorating and managing the events calendar, including the Excellence Awards and the Apprentice of the Year Awards
- Analysis of the effectiveness of all marketing efforts

Jody will work alongside NECA's industry specialists to build greater awareness of the services and expertise that is readily accessible to members to help them manage and grow their electrical contracting businesses.

With a practical, research driven handson approach, she is looking forward to a busy 2015 where, among a long list of plans, she aims to build on and enhance the existing calendar of NECA activities to maximise the learning and networking opportunities for members and sponsors.

"It's such a dynamic industry with so much diversity and there is so much to be gained through information sharing, effective communication and quality networking opportunities" Jody said.



NECA TECHNICAL NEWS

Termination of Cables

Believe it or not the term "termination" is not defined in the Wiring Rules.

The dictionary defines termination as "bring to an end", or to "put an end to", so one could argue that we are going to bring the cable to an end, to put an end to it being a cable, or even just end its employment.

Fortunately, the Wiring Rules are clear when a term is used within the Wiring Rules that is not specifically defined. In that situation, the commonly understood meaning shall apply as used in the electrical field.

We, in the electrical industry, have been guilty for years of using incorrect terminology, and this is just another case of such. The correct terminology is connection, and for our trade "electrical is connections". This is defined under clause 3.7 in AS/NZS3000: 2007 as the connection between conductors and other electrical equipment, or as per the dictionary, a joint between two electrical conductors.

Back in "the good old days" when the Wiring Rules were more prescriptive, there were a lot of rules in relation to connections of conductors to electrical equipment. These included but were not limited to:

- No more than four conductors in a fixed tunnel terminal at the rear of an electrical accessory.
- All earthing conductors 2.5mm² or smaller shall be twisted together prior to termination.
- All earthing conductors up to and including 16mm² shall be terminated by soldering.

These current Wiring Rules are not as prescriptive as they were, but no less, they in general still exist. The fundamental principle must be achieved.

The fundamental principle is the provision of electrical continuity, thus ensuring that the connection is not less in continuity than the original conductors, along with an appropriate level of insulation and adequate mechanical strength.

It is not my intention to repeat the Wiring Rules as you can go and read them at your leisure, however, I will point out some of the more interesting rules and also some of those that appear to be regularly breached.

There is no restriction on the number of conductors being connected together.
All that is required is that you take into account the number of conductors to be joined and select an appropriate method of connection for that number of conductors being joined, to ensure that the fundamental principle is complied with.

One connection requirement that I constantly see breached is in relation to the retention of stranded conductors. Many electricians simply strip the outer sheath and the insulation off the conductor, then push it into a tunnel type connector.

They do not consider that the screw pushes some of the strands to the side and that only 3–4 strands are retained

under the screw. This does not meet the requirement of a proper connection.

However if they considered twisting the conductors together, prior to connecting into the tunnel type connector, this should of itself ensure a proper connection.

Or, better still the use of bootlaces or ferrules that are crimped onto the conductor prior to connecting the conductor into the tunnel terminal provides a better option.

Following on from this example is the cutting down of crimp lugs, redrilling of the crimp lug or connecting a crimp lug to a terminal or bar that is smaller in surface area to that of the crimp lug.

Remember that one of the fundamental principles is to ensure that the conductivity and current carrying capacity of the joint or connection is not less than that of the conductor.

Therefore the modification of any crimp lug for any reason renders the connection as non-compliant.

The Wiring Rules require conductors joined or terminated by means of a crimp connection to be securely retained within a suitable crimping device. This connection shall be made using a tool designed for the purpose and techniques specified by the manufacturer. Please note that this does not include pliers.

There is no longer a requirement to use two screws to connect an earth conductor in either a fixed or floating connection, providing that the earth conductor is connected into a tunnel type connection with one screw with an outside diameter not less than 80% of the tunnel diameter into which the earthing conductor is to be installed.

Unsupported conductors that create stress on conductor terminals is another example that comes to mind. All cables

regardless of their size, from 1mm² up to 500mm², require supporting to remove the stress of the connection.

Distances of large cables in excess of 100mm between the cable support and the termination point may cause undue stress on the connection. Remember to always support cables prior to the termination point.

And finally, with the preparation of conductors, remember that the insulation on a conductor shall not be removed any further than is necessary to make the connection.

And when the connection is between insulated conductors, the connection shall be insulated to provide a degree

of insulation not inferior to that of the original conductors being joined.

Any damaged insulation shall be reinstated and remember the Energy Safe Victoria ruling that insulating tape is only acceptable if contained within an enclosure.

The acceptable enclosures are switchboards and J Boxes or similar.

For information guidance or clarification of the Wiring Rules, Regulations, Electricity Safety Act etc. or just to have a technical chat please call Roy at NECA Victoria on 03 9645 5533 or on the mobile 0422 769 326



AN INDUSTRIAL RELATIONS WAKE UP CALL



For some electrical contractors, their business is run like an extended family, based on trust, mutual respect, open communication and loyalty.

They've used this approach for years, adopting the "Aussie ism" of – it'll be right mate.

Until it's not.

Max* has run a successful electrical contracting business for the last 20 years in Melbourne.

He employs around 30 people, and proudly states that he's never hired a tradesman from outside his business – eager 18 year olds come to him as apprentices and very few want to, or ever do, leave. Over the years, Max and his wife created a professional environment where all their employees were a happy bunch who followed processes to the letter.

The first signs of trouble appeared in 2012 when one of his tradesmen, Jack*, was absent for a day, every fortnight, providing a doctor's certificate every time.

Concerned for Jack, as well as the rest of his men on this site, Max asked for reassurance the medical condition wasn't affecting work safety, however under the Fair Work Act, he was not in a position to question this any further.

With no tangible response to this request, the lack of engagement combined with the on-going

absences led Max to issue Jack a formal written warning, which Jack promptly disputed, and refused to sign

This was the first time in 20 years Max had to take this level of action with any employee.

The foreman then saw a significant shift in Jack's behaviour where he was completely isolating himself on site, a situation that festered into a widespread personality clash with his work mates

Whilst all this angst was stewing away on site, as the business owner, Max was naturally looking at the bottom line. And here's where and why he found himself in a quandary. Jack was one of his most efficient workers,

with impeccable standards, there were no complaints from the client, all of which was reassuring from a profitability perspective.

But the potential loss of other good tradesmen via the personality clashes and communication breakdown issues began to present a far greater risk.

With no formal procedures in place, he and the foreman struggled to find a solution – and he hoped it'd just fix itself somehow.

"Your NECA Membership is like an insurance policy."

The situation reached breaking point one day, with the foreman and Jack exchanging a volley of un-pleasantries toward each other resulting in Jack packing up his tools and going home. In an attempt to resolve the situation, Jack was called into the office the next day for a formal discussion.

The meeting didn't go well with no visible buy in from Jack, leading to the foreman snapping in frustration, and saying "ok then, we'll just make your position redundant". At this point, Jack's response was "fine" as he turned and walked out the door.

Initially wanting to resolve the problem swiftly, Max and his wife looked at the Award to understand what a redundancy could cost the business.

Max admits he'd have just written a cheque to have the problem "solved" that day. His wife, being the financial

controller, decided it was a much better idea to call NECA and get some advice.

From the first point of contact with NECA's IR team, led by Senior Employee Relations Adviser, Alexandra Van Den Brink, Max was impressed.

"When we asked about a few things in the Award, Alley was quick to probe further to find out why we needed to know and what had led us to call NECA—this consultative approach opened our eyes to the depth of service and the professional assistance we have access to as NECA members" he said.

"From that point, Alley managed everything. She looked at what had transpired to date, put some structure, process and formality around what'd happen next, and how it'd be ultimately resolved" said Max.

Max found himself at an impasse – he just wanted an attitude adjustment from Jack, but all Jack wanted was a redundancy, – so he engaged a lawyer and presented Max with an unfair dismissal claim. This unfair dismissal case, was, in his own words, a great warning for Max and his wife to get – and a situation that pointed out to him very clearly just how much he values his NECA membership.

"I've been a NECA member for years, and have always appreciated the position they take to represent the interests of the employer in discussions with the Union, but up until this problem, I had no idea what great support and expertise they offer, for free, to help employers like me through a maze of paperwork and legalities that something like an unfair dismissal claim generates!" he said.

This unfair dismissal claim never made it to the Commission, with Jack and his lawyer opting for a negotiated private settlement.

"I'm actually glad it happened – because it's made me implement things that I've always known I should've had, but didn't bother with them, because I never thought I'd need them" said Max.

But he did.

And, in his own words "thanks to NECA, we emerged relatively unscathed – I know the outcome would have far worse if my wife hadn't insisted we make that call".

He now says to his industry colleagues that their NECA membership is worth every cent.

"In some ways, your NECA membership is like an insurance policy – but it's a hell of a good policy to have when you need expert advice – I wouldn't be without it" he said.

 This is a true account of a series of events that occurred in a real workplace. For privacy reasons, the names have been changed.



Alexandra van den Brink

CONDUCTING FAIR DISMISSALS AND PERFORMANCE MANAGEMENT



While many contractors have hard working and high performing employees, we regularly receive enquiries from contractors who have issues with their staff.

Much of the time contractors are quite lenient and want to do the best for their staff and these issues can go on for some time, until metaphorically 'the straw breaks the camel's back' and they have reached their tolerance limit and are tempted to dismiss the employee.

A common myth we hear from some is the belief that small businesses are protected from unfair dismissal claims. The only special provision that the Fair Work Act 2009 offers for small business (defined as being under 15 employees) is an extended qualifying time for employees to be eligible to lodge an unfair dismissal claim. Employees have to work continuously with a small business for a minimum of 12 months before they can bring forward an application for an unfair dismissal. In a business with 15 or more employees, it is 6 months (however there are no time limits for general protections claims).

What is an Unfair Dismissal?

In summary, the Fair Work Act provides that a person has been unfairly dismissed if the Fair Work Commission finds that:

- (a) the person has been dismissed; and
- (b) the dismissal was harsh, unjust or unreasonable; and
- (c) the dismissal was not consistent with the Small Business Fair Dismissal Code; and
- (d) the dismissal was not a case of genuine redundancy.

Small Business Fair Dismissal Guide

This guide has been developed by the government as a tool to assist small businesses with conducting fair terminations and can be used as a 'checklist.'

While this guide can be helpful to contractors, members are encouraged to speak with NECA prior to making a decision about disciplining and/or terminating an employee.

Warning / Counselling Process

Generally, the Fair Work Commission looks at a number of different factors when determining whether a dismissal was in fact harsh, unjust or unreasonable. In summary these include:

- Whether there was a valid reason for the dismissal related to the person's capacity or conduct (including its effect on the safety and welfare of other employees); and
- Whether the person was notified of that reason; and
- Whether the person was given an opportunity to respond to any reason

- related to the capacity or conduct of the person; and
- Any unreasonable refusal by the employer to allow the person to have a support person present to assist at any discussions relating to dismissal; and
- If the dismissal related to unsatisfactory performance by the person — whether the person had been warned about that unsatisfactory performance before the dismissal; and
- The degree to which the size of the employer's enterprise would be likely to impact on the procedures followed in effecting the dismissal; and
- The degree to which the absence of dedicated human resource management specialists or expertise in the enterprise would be likely to impact on the procedures followed in effecting the dismissal

General Guide to the Warning/ Counselling Process

The process outlined below is a general guide only on performance management steps. It is always best to contact NECA for specific advice on your situation (as all situations are different). There is another myth about warnings namely the 'Three strikes and you're out' which is untrue. There are no set amount of warnings you should give, as each issue will be of a different level of seriousness and may require different treatment. Once an employee performance issue(s) has been identified the following steps can be applied.

 Have an informal verbal discussion with your employee about the issue, ensure they understand what is required of them, how they are not meeting performance expectations



and what you expect to see from them moving forward.

"Three Strikes and you're out is a myth."

- 2. Should step 1 not result in the required improvement, it might be time to have a formal verbal discussion (supported by a formal warning letter).
 - Advise the employee that you would like to have a discussion with them regarding their performance and provide them with some notice of the meeting (so they are able to bring a support person with them if desired).
 - Have a witness in the meeting and have them take notes if possible
 - In the meeting, address the concerns by providing specific examples of where they are not meeting required standards,

- confirming that they understand what the required standards are.
- Provide them with an opportunity to respond to the allegations and provide an explanation for their behaviour.
- Let them know that you will consider their response and will get back to them on the matter.
- After considering their response (if they do respond), and their response is not reasonable or satisfactory, provide them with a written warning letter outlining the details of the meeting. The warning letter should include all relevant details and should stipulate that the employee's performance will be monitored and should there be a repeat of the behaviour, further disciplinary action will follow (up to and including the termination of employment).
- Also discuss with them the steps required to improve their performance (including what they need to do to lift their performance to a satisfactory level), ensure

- they have a clear knowledge of Company expectations and the consequences they will face if performance does not improve.
- Monitor the Employee's performance, provide feedback and if needed, steps 1 and 2 may need to be repeated.

Implementing warnings can help to address problems early on, before issues become more difficult.

It can also assist employees in understanding and acknowledging company expectations and appropriate behaviours.

Please contact Alexandra Van Den Brink or Alana Costa at NECA on (03) 9645 5533 for any employee relations matters of interest or concern to your business.

THE ECOSMART ELECTRICIAN

TEMPERATURE GAUGE



Connecting you to a more sustainable future

O

In this article Ian Johnson from EcoSmart Electricians investigates market opportunities for electricians created by global warming.

Recent reports from Forbes and research published by Navigant Research from the United States suggests commercial building owners and managers will invest close to \$960 billion globally between now and 2023 to retrofit existing facilities with energy efficient technologies.

In the first weeks of the New Year, bushfires scorched the Adelaide Hills and southern Australia was the hottest region on the face of the planet. On 5 January 2015, the respected Japan Meteorological Agency announced that 2014 had been the warmest year the world has seen since reliable measurements began in 1890.

The following day, our own Bureau of Meteorology revealed that 2014 had been Australia's third-warmest year. All of the world's top 10 hottest years have now taken place since 1998.

Melbourne City matched 2007 as the warmest year by mean temperature in records going back 158 years, with conditions a full 2 degrees above average.

NSW had its hottest year for mean temperatures on record last year, while Tasmania and South Australia all posted their second warmest years. Only the Northern Territory missed out on a ranking among the four warmest years.



Sydney's average mean temperatures were 1.6 degrees above average, playing it behind only 2013.

Nationally, mean temperatures in 2014 came in 0.91 degrees above the 1961–1990 average, behind only 2013 and 2005 according to the bureau.

Only one month in the past two years – February 2014 – was cooler than the 1961–1990 average reference period. In Melbourne, the most recent month of below average mean temperatures was December 2008, meaning the past 72 months have all been warmer than normal.

A few degrees of difference might not mean a great deal to people who spend the heat of the day inside an air conditioned office and return to an air conditioned home. It just seems to be getting hotter – incredibly quickly in historical terms, but still slow enough so that we can say we don't really notice much of a change from year to year.

Clearly, things are escalating. In the next decade it will be hotter, the next hotter still. In a few decades, summer in Australia will be truly scorching.

By the end of this year, almost 200 nations will gather in Paris to negotiate a global treaty aimed at keeping the temperature increases to less than 2 degrees above pre-industrial times (versus about 1 degree increase so far).

In the push and shove of international negotiations about climate change actions and on-going commitments, what can be done now?

Building energy efficiency is the low hanging fruit.

Strategically timed to attract minimal exposure and comment, the government released the long awaited National Energy Efficient Building Project report commissioned by COAG on 20 December last year. The comprehensive Pitt & Sherry / Swinburne document was completed in June 2014.

The report details chronic and systematic national failure of all aspects of the building supply chain and regulatory process across all building types. The survey found 65 percent of stakeholders considered the building code energy efficiency provisions are not implemented. The report also cites a survey in Adelaide that found noncompliance rates of up to 70 percent.

In Victoria, it is expected that Lisa Neville, the Minister for Climate Change in the recently elected Labour government will take a much higher profile on this issue than her Liberal Coalition predecessor. Energy Minister,

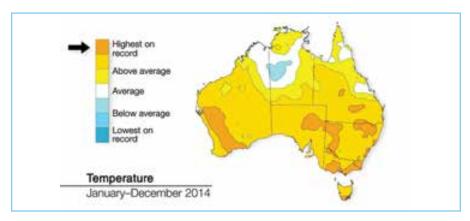
"Building energy efficiency is the low hanging fruit."

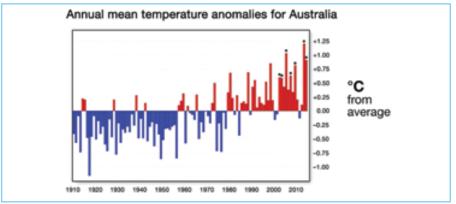
Lily D'Ambrosio has also signalled a keen interest in energy efficiency and renewable energy. The NSW Coalition government recently released high resolution mapping of how global warming is expected to shift the climate for NSW, Victoria and the ACT by 2070 backed with a statement that "we believe in climate change".

The research published by Navigant cites the world economy is becoming increasingly constrained by energy cost, energy availability, and energy-related environmental regulations. Because the existing building stock dwarfs the amount of building space that is added on an annual basis, retrofits are a

Maximum temperatures







critical pathway to greening the world's commercial buildings.

Regulations and policy measures, technological advances, and cost reductions are all driving increased investment in energy efficiency retrofits. Cumulative investment in commercial building energy efficiency retrofits will total \$959 billion from 2014 through 2023. "Led by the Asia Pacific region, the global market for energy efficiency commercial building retrofits is expected to grow at more than

7 percent a year through to 2023," says Eric Bloom, principal research analyst with Navigate Research.

While government mandates play an important part in driving growth, many retrofit projects are being undertaken on a voluntary basis as corporate sustainability initiatives spread.

The payback periods for energy efficiency retrofit projects are slowly decreasing, but they remain a critical factor for most building owners and managers according to the report.

FEATURE STORY

WAVE POWER



NECA's Technical Services Officer Roy Sands has been involved in the electrical inspection process for a new generation of renewable energy technology.

Here's more from Roy about his experiences to date with the bioWAVE.

Forget about Wind Power, Solar Power etc...We now have Wave Power.

Weighing in at 630 tonnes, settled on the ocean bed, this wave energy converter is set to create electricity from water.

The Victorian Government is assisting with this new technology through funding support to an Australian company designing and building the machine and infrastructure to generate electricity from the movement of ocean waves.

The concept for this wave energy converter, called bioWAVE, was developed by Sydney-based BioPower Systems Pty Ltd.

The bioWAVE is a promising ocean energy technology, with wide-ranging applicability for extracting clean energy from the coastal ocean.

The test location is off the Victorian coast, near Port Fairy.

The bioWAVE consists of a structure that sways back and forth beneath the waves, integrated with a self-contained module (0-Drive) that converts the resulting oscillating forces to electricity, thereby pressuring hydraulic fluid, which is used to spin a generator to produce electricity for delivery to the grid via a subsea cable.

In concept, it's very similar to a grid connected solar system. The technology is designed to operate in depths of 25 to 40 metres.

The critical 0-Drive module has been fully tested at its commercial scale of 250kW, at a purpose-built factory test facility in Sydney.

For greater capacity, the units have been designed so as to be easily arranged in parallel to give an output up to 1mvA.

The O-Drive unit is designed to be detached and easily retrieved for onshore servicing and fault rectification.

Design issues

When designing and installing a wave generator within 12Km off the coast of Victoria, it soon became apparent that technically, the wave generator is installed in the state of Victoria.

This means all of Victoria's Safety Acts, Electricity Safety Regulations and the Wiring Rules apply to the Wave Generator, as it is, by definition, an Electrical Installation.

Hence why the Project owner got me involved in my capacity as an Electrical Inspector and I have to admit that in all

my years in the industry, I've never seen anything quite like it.

Due to its uniqueness, the wave generator is by no means a standard everyday electrical installation and as such, can only be developed under a Part One (1) Solution.

Part One Solutions in Victoria are treated differently to all other states.

Energy Safe Victoria takes AS/NZS 3000 and further expands and develops the requirements, which are detailed in the Electricity Safety Installation Regulations 2009.

The Part One Solution was driven by the following factors:

- The 0-Drive is totally enclosed within a steel enclosure that is filled with nitrogen gas prior to lowering the main assembly onto the sea bed.
- Protection devices were kept to a minimum as there is no way to reset or replace defective parts.
 When selecting the protective devices that were considered absolutely essential, they are either motorized resettable breakers, eliminated, or the circuits have built-in redundancy.
- No electrical connections internal to the 0-Drive are accessible while the unit is operating, therefore a large number of the Wiring Rules fundamental principles do not apply.
- There is no actual switchboard located as part of the off-shore unit.
- The MEN system of earthing was not able to be used, however a system where the generator neutral and the generating earthing arrangement are intentionally joined together to form a Neutral Earth bond was acceptable and achievable.



"In concept, it's very similar to a grid connected solar system"

The main principle used for the Part One solution was the bonding of all metallic parts to earth by appropriately sized earthing conductors and encapsulating the whole kit and caboodle into an earthed metallic enclosure, thereby containing all faults within the enclosure.

Testing and Validation of the Electrical Installation

Just as the electrical installation required a Part One solution, so does the testing and verification as per section 8 of AS/NZS 3000 require a Part One solution.

This, after consultation with Energy Safe Victoria, was agreed to in the form of visual inspection and testing of all parts that will not normally be accessible as the electrical installation is assembled.

To date, two inspections have been completed with more to be carried out as the project continues.

It's a fascinating project to be involved in as an Electrical Inspector, and it's incredible to be exposed to such leading edge technology. My engagement in the project will continue until the infrastructure is commissioned to go into service – which, at this stage, is scheduled to be towards the end of 2015.

Roy Sands Technical Services Officer NECA VIC.

I would like to thank Tim Finnigan from BioPower Systems Pty Ltd for the information he has provided for this article.

Technical Specifications

The bioWave Ocean Wave energy pilot has the following dimensions:

Total weight (including 0-Drive generator module): 630 tonnes

Total height: 26 metres

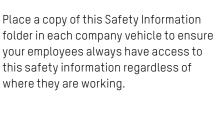
Max Width (at top): 18 metres

Footprint of Foundation: 18 metres × 21 metres





TAKING THE PROACTIVE APPROACH





The start of a new year is an ideal time to do a quick review of Occupational Health and Safety performance within your business and develop some goals for improvement in the coming year.

If you have been taking the reactive approach to safety and dealing with the issues as they arise, providing a Safety Plan and Safe Work Method Statements only because your client won't let you start on site without them, then it might be time to consider the proactive approach.

Safety Management System

Ensure you have a Safety Management System and make sure it is up to date.

If your Safety Management System is more than 18 months old then it's more than likely it needs updating.

If you don't have a Safety Management System or you think you don't have the most recent version of the NECA Safety Management System, call the NECA Safety Department for assistance.

Once you've got an up to date Safety Management System, it's important to ensure that it becomes an active part of your business. The policies

and procedures are of little value if they have not been implemented and communicated to the workforce.

Safety Induction

Conduct a Safety Induction with your employees to communicate your safety policies and expectations to them, and keep a record of the inductions. That record is your evidence that you have communicated your safety requirements to your employees.

Safe Work Method Statements

Safe Work Method Statements (SWMS) are of little value if they live in the office and never see the light of day out on site. The SWMS's are a crucial step in identifying the hazards associated with the task at hand and ensuring that adequate control measures have been put in place.

The pre-prepared Safe Work Method Statement is fine, but it is vital that they are reviewed on site and that any additional hazards are identified and appropriate additional control measures are documented and implemented.

NECA has a SWMS duplicate book that is designed for that purpose.

These can be purchased online through neca.asn.au or call NECA Victoria to arrange for some to be mailed to you.

Safety Information Folder

Develop a Safety folder with the relevant policies, procedures and Safe Work Method Statements that your employees may need on site.

If they are likely to use any hazardous substances, include the Material Safety Data Sheets in the safety folder.

Toolhox Talks

The Victorian Occupational Health & Safety Act places an obligation on employers to consult with their employees on matters that may affect the health & safety of those employees.

The OHS Act also places a duty on employers to provide employees with information, instruction supervision and training.

Take the time to consult with your employees on a regular basis. Listen to what they have to say.

The key to good safety performance is effective two way communication.

Toolbox Talks are a simple way to consult with your employees.

They are also a great format to assist you in providing your employees with information, instruction, supervision and training.

Should you require any further information or assistance please feel free to contact the NECA Safety Department on 03 9645 5533 or safety@neca.asn.au

PREVENTION STRATEGIES FOR WORKPLACE CANCERS

O

One third of all cancer deaths in Australia can be prevented through living a healthy lifestyle. Workplaces can play an important role in helping their employees cut their cancer risk, and in turn reduce the impact of cancer on their business.

Here are some practical ways workplaces can reduce the cancer risk for their employees:

Be SunSmart

Outdoor workers can receive up to 10 times more UV exposure than indoor workers, placing them at high risk of skin cancer. In Australia, it's estimated that 200 melanomas and 34,000 other skin cancers diagnosed each year are due to overexposure to UV radiation in the workplace.

Workplaces should:

- Protect workers from UV damage by providing long-sleeved clothing, broad-brimmed hats, SPF30 or higher, broad-spectrum, water-resistant sunscreen, shade and sunglasses.
- Consider booking a SunSmart
 Workplace Education session with a
 skin scanner to better educate your
 staff about UV risks at work. For more
 information on the program visit
 www.sunsmart.com.au.

Go smokefree

Smoking can cause a number of cancers including of the lung, larynx, mouth, pancreas and stomach.

It's never too late to quit smoking and the sooner a person quits, the more they cut their risk of cancer. It's also important to avoid second-hand tobacco smoke to further reduce the risk of cancer.

Workplaces should:

- Preferably ensure all areas of the workplace are smokefree.
- If a designated outdoor smoking area is provided, ensure that it's well away



from building entrances, walkways and areas where staff are required to work.

Encourage a healthy lifestyle

There is growing evidence that overweight and obesity are risk factors for many cancers including, breast, bowel, oesophageal, pancreas, uterine, kidney, gallbladder and thyroid.

Workplaces can support employees to live a healthy lifestyle by:

- Encouraging people to ride or walk to work and to use the stairs.
- Provide bike sheds and showers.
- Have walking or standing meetings where possible. Consider walking to meetings that are a short distance away.
- Include healthy options when catering.
- At social events and functions, make sure water is readily available and alcohol is served in moderation, or not at all.
- Remove vending machines full of unhealthy drinks and snacks.
- Organise workplace events that encourage physical activity.

For more information about how to live a healthier lifestyle, visit www.livelighter. com.au.

Manage occupational and environmental cancer risks

Occupational cancers and environmental cancers are those that can be causally

linked to exposures in the workplace. Industries more prone to carcinogenic exposure include forestry and logging, furniture and fixture manufacturing, petroleum and coal products manufacturing; fire-fighting, fishing, wood and wood products manufacture, construction and mining.

In Australia, exposure to certain chemicals or processes at workplaces or in the environment is estimated to account for between 2 and 5% of all cancer cases in Australia, although this figure is not definitive.

There are established causal links between:

- a high incidence of mesothelioma cases and asbestos exposure
- cadmium and lung cancer
- benzene exposure and leukemia
- diesel exposure and lung cancer
- and ultraviolet radiation (UV)

Occupational cancers are, to a large degree, avoidable provided that the risk of exposure is identified, and where possible removed and/or adequately managed.

To find out more or to access information and support services for both workplaces and employees visit www.cancervic.org.au. To talk directly to a cancer nurse, please call the Cancer Council 13 11 20.

SAFE EXCAVATION FIELD DAY



One of NECA Victoria's Platinum Sponsors, Dial Before you Dig, supporting the charity *beyondblue*, is holding a Contractors Safe Excavation Field Day, to be held at Top End Training in Werribee on the 18th of February.

Operating from 10am to 4pm, it will be a fun and informative day where you can talk to Dial Before You Dig, civil trainers and locating experts, as well as get a free health check while you're there!

Top End Training offer a range of qualifications and short courses in the civil industry, and can come to your site to conduct training sessions with your crew — minimising disruption to your business.

Through their support of the Kitten care and Just Car Insurance Australian V8 Ute Racing teams, Top End Training will have a Holden V8 Racing ute on site all day for field day visitors to check out, and the opportunity to meet one of the racing team drivers at 1pm.

Contractors can show off their excavating prowess in the Excavator Challenge* with the engines starting and the dirt moving from 11am.

*Places are strictly limited, so email Jo at jvarley@1100.com.au for a registration form.

Entrants need to be over 18, hold an excavator ticket, be wearing hi-vis clothing and enclosed footwear.

Vac Group will be on site, featuring a hydro truck display, and with their focus on the location, protection and safe excavation of underground assets, they're equipped with a wide range of technology and products designed to assess and mitigate the risks associated with the design and construction of civil infrastructure products.

VAC Group, together with damage prevention consultants, Staking U, will both have experts in the field of locating on hand all day for contractors to talk to.

While there'll be lots to look at and talk about, there's also an opportunity

to do something for yourself with a free health check available throughout the day.

This will include a non-fasting cholesterol and glucose check, a blood pressure check and a waist to hip ratio measurement – with all participants getting their results on the spot and a results booklet to take home.

In support of *beyondblue*, all proceeds from the all-day sausage sizzle and raffles will be donated to this very worthwhile cause.

What: Dial Before You Dig Contractors Safe Excavation Field Day

When: Wednesday 18 February, 2015

Where: Top End Training – 57 Riverside Avenue, Werribee

11am onwards: Excavator Challenge* starts

1pm: Meet a Holden V8 Ute Racing team driver





YOUR TIME TO SHINE – NECA EXCELLENCE AWARDS

Walt Disney once said the way to get started is to quit talking and begin doing.

So you've done the doing.

You and your team, or you as an individual contractor have really kicked some goals over the last 12 months and delivered some incredible projects to some very happy clients.

Here's your opportunity to start talking and tell your industry colleagues and

the wider community how efficient, effective and innovative you are.

The NECA Excellence Awards have launched for another year, and nominations will be open from mid February onwards.

These Awards provide our members with the only Australia-wide opportunity to showcase their best projects to their peers, industry, government and their local community. They are the ultimate recognition of being leaders in their field.

Winners will have shown technical innovation, adherence to safety, delivery on on-time and on-budget, amongst many other challenging criteria.

Details about how to nominate are available at neca.asn.au.

MENTAL HEALTH IN THE WORKPLACE

As many Australians return to work in the new year, beyondblue is encouraging business leaders to make mental health at work a priority in 2015.

Simple measures such as speaking openly about mental health in the workplace, making information about support available, and checking with workers who may be struggling, could make 2015 a better year for both employees and businesses.

PwC research commissioned by beyondblue as part of Heads Up, an Australian-first campaign about workplace mental health, last year found that every \$1 invested in effective mental health strategies in the workplace generates an average \$2.30 return.



beyondblue Chairman Jeff Kennett AC said employers should include mental health policies as part of their business model and see the benefits in their bottom line.

"We know untreated mental health conditions cost employers \$10.9 billion every year, so it is in a business' best interest to make changes this year that will improve the mental health of its workforce," he said.

beyondblue CEO Georgie Harman said more than six million working days are lost each year due to untreated depression and with one in five Australian workers likely to be experiencing a mental illness, it was important for businesses to engage workers as they return to work.

"It is natural to feel a bit down when returning to work but if you are experiencing those feelings for more than two weeks you should seek help," she said.



Jeff Kennett AC with NECA Member Warren Bradford and NECA Victoria's Kevin McGosh

Employers and workers can find simple actions to look after their mental health and create mentally healthy workplaces by visiting www.headsup. org.au and registering their interest for more information.

ROY'S CIRCUIT BREAKER



Tales from the technical guru - one of the best known and respected names in the industry.

No names disclosed. They know who they are. We just give you the inside scoop.

There was a time in my career that I was the Managing Director of an Electrical Inspection company, and our office was located in Melbourne's western suburbs.

One day, a guy comes bounding into the office, desperately needing an electrical inspector to inspect and arrange for the power to be connected a new supermarket complex across the road – ready for the opening that Saturday.

I was up to my ears in work, but the guy he was in a pickle, so I agreed to do the inspection.

Well, if he thought he was in a pickle before he came to see me, boy did his working week get worse from then on.

When I walked on site, I immediately saw the meter position did not comply with the service and installation rules – it was behind security doors and not accessible – which as we all know, is completely unacceptable.,

The supermarket brand decided to appeal my interpretation through Powercor, who advised them and the installing electrical contractor, to attend a meeting to resolve the issue.

It came as a great surprise and not much delight to all parties that the meeting was to be held in my office, with me, and with me making the decision on the interpretation.

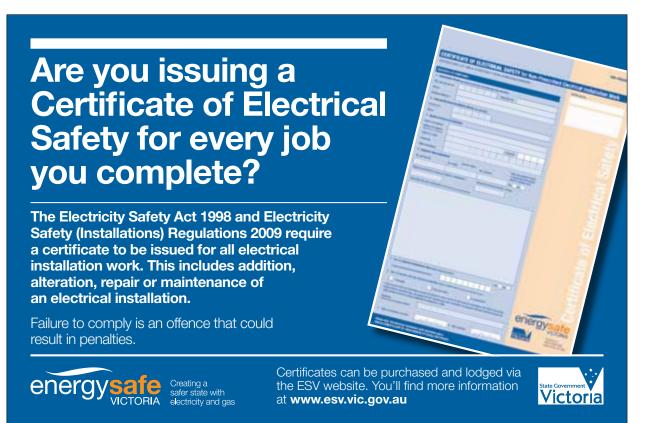
Coincidently, I had a contract with Powercor to administer the SIR's throughout their distribution areas across Victoria.

Funnily enough, the meeting didn't go ahead and the meters were promptly relocated to a compliant area.

Sometime later, I found out from an industry colleague that the fit-out that I had rejected, was actually the same in every store across the state.

And there was a very strong rumour that it cost the company a significant sum to rectify the issue and make every store compliant.

Bet that guy wished he'd never crossed the road that day.



REWARDS FOR SMART YOUNG CONTRACTORS

The brightest young electrical contractors were recognised at the Middy's NECA Scholarship Awards, held in Melbourne late last year.

In conjunction with NECA, Middy's Data & Electrical, the largest family owned and independent electrical wholesaler, awarded \$90,000 worth of scholarships to 12 of the most progressive and forward looking electrical industry professionals.

Created in 2009, the Scholarship program is now in its sixth year and offers and extensive range of training and skill enhancement courses, delivering the skill sets and competitive edge needed to succeed in today's challenging environment. In this last six years, Middy's has awarded close to half a million dollars in industry training.

The Scholarship Program awards six Gold packages worth \$10,000 each and six Silver packages worth \$5,000 each, allowing recipients to undertake tailored training in 2015 from a range of courses incorporating subjects such as Energy Efficiency, Project Management and Estimating, along with many other business related topics.

Judging of applications is conducted by an independent panel including representatives from NECA, ESV and *Electrical Connection* magazine with applications open to all Victorian, Tasmanian & South Australian based A Grade Electrical Contractors and Data Installers with CAT5e endorsement, as well as 4th year Electrical Apprentices. Middy's Sales Director Anton Middendorp believes the Scholarship Program is Middy's way of further supporting the industry that has supported his company since 1928.

"A Middy's NECA Scholarship builds credibility in the broader community and as a result of the excellent response, Middy's has committed to running the program again in 2015" he said.

For more information about the Scholarship Program – visit www.middys.com.au

Gold Scholarships

Matthew Bruce - Wasp Services

Tristian Grieve - A-Phase Electrical

Jackson Harris - DN Bishop & Co

Jamin Kenner - Kenner Electrics

Rod McEwan - Copper Connections Electrical

Andrew Smith - Murfett & Whiting P/L

Silver Scholarships

Mark Baker - Watter Electrical

Bradley Bosanko – R & J Bosanko

Jonathan Dissanyake – Downer

Shane Kean – Gordyn & Palmer

Craig Meanes - C & B Electrical

Nic Sim - Cobram Electrical and Data







In partnership with





370° ARTICLE

EXCITING TIMES AT NECA SKILLS CENTRE

2015 has gotten off to a solid start with Apprenticeship enrolments for day and block release both filling up fast.

Along with this steady stream of new faces eager to learn, there are changes afoot at the NECA Skills Centre, with the team working hard to ensure we continue to improve and stay at the forefront of industry training and employment needs.

NEW RESOURCES

In November last year, NECA Skills Centre commenced a project to invest in new training resources.

This investment includes practical equipment and student resources to be used across the Pre-Apprenticeship and Apprenticeship courses.

These new training resources will be progressively rolled out across the year.

NEW TEACHERS

We have recently employed a selection of new teachers to complement our existing team of highly experienced and passionate educators.

They are all from diverse professional backgrounds, including heavy industrial, power, domestic, commercial, telecommunications and air conditioning, as well as hazardous inspection and C-bus.

This broad spectrum of experience will be great for the young apprentices, giving them exposure and understanding of the variety of career paths and job scopes in the electrical and communications industry.

NEW NAME

370° group, incorporating NECA Skills Centre, NECA Apprenticeships and 370° traineeships will change names in 2015.

We are excited about this change, and look forward to sharing more information about what's happening as the year progresses.

The benefit for our members is that we will soon showcase our entire service offering under one brand, strengthening our position as the only GTO and RTO in Victoria owned by the Electrical Industry.

Watch this space for more exciting news next edition.







A simPRO Initiative



Be Inspired



Andrew and Prue of **Mr A Electrics** have achieved the kind of freedom many dream of. They spend 3 hours p/week on the business. The rest is spent doing what they want to do.

mraelectrics.com.au



See more at simpro.co/thejourney

A MESSAGE FROM ESV



Paul FearonDirector of Energy Safety

ESV has issued a mandatory recall notice to Ecables Pty Ltd for copper clad aluminium (CCA) power cable with RE110 insulation sold between January 2011 and June 2014.

The recall notice relates to all sizes and configurations of power cable with RE110 insulation, which includes all SDI sizes $10 \text{mm}^2 - 630 \text{mm}^2$ and multicore $6 \text{mm}^2 - 50 \text{mm}^2$ with about 189 km installed in Victoria.

Although ESV has had no reports of this type of cable causing a fire or electric shock, ESV wants to warn workers about the potential hazards of the cable. Electricians who have installed this product have been advised to return to the installation and attach warning labels to the cable and at the switchboard while the recall process takes place.

Testing showed that the cable was non-compliant due to a manufacturing fault that identified the cable's insulation sheath had not been cross-linked. The cable's mechanical properties are reduced with the increase of temperature. This can allow access to live parts if the cable is subject to

pressure like cable ties, the weight of other cables or accidental penetration from foreign objects.

Since the release of the safety alert and recall ESV has been advised that E Cables has entered voluntary liquidation. This may mean that electricians and property owners pay the cost of replacing the cables. This is a reminder to all contractors to ensure they purchase from reputable sellers that have the capacity to stand behind their product should something go wrong.

For further information contact E Cables representatives via email:

Ken Mciver kmciver@ecablesfire.com.au

Ryan King rking@ecablesfire.com.au

Alternatively you can contact the wholesaler that supplied the cable.

Any unused product should be returned to the supplier.

In other news, on 1 December 2014, New South Wales introduced Automatic Mutual Recognition (AMR) for east coast electricians and some contractors.

This means that a person holding a current Victorian electrician's licence that does not reside on NSW can carry out work within the scope of the NSW equivalent licence without applying to NSW.

If you are a Victorian Registered Electrical Contractor (REC) and licensed electrical worker you may contract in NSW.

While working in NSW, you are subject to the same laws as a NSW licence holder.

To meet compliance and enforcement requirements, state and territory regulators have agreed to share information about disciplinary actions with the home state licensing authority.

The Victorian Electricity Safety (Registration and Licensing)
Regulations 2010, under Regulation 30, allow a person with a current interstate electrical licence that is not residing in Victoria to carry out the work of an electrician (A Grade) in Victoria after notifying ESV.

While working in Victoria, the person is required to comply with the Victorian Electricity Safety Act and regulations, including certification of work and issuing of Certificates of Electrical Safety.

They are also subject to the Victorian disciplinary and enforcement regime.

There is currently not AMR in Victoria of RECs.

A person moving to Victoria must apply for a Victorian licence under mutual recognition.

A WORD FROM THE CEO



Suresh Manickam NECA CEO

As 2015 gets underway, I find myself wondering how my first year at NECA could have possibly passed so quickly. When I reflect on the issues we've been dealing with, I realise that a lot has happened in the last 12 months.

The Infinity cable issue took up a lot of time in my early months at NECA, and then just when it seemed we had weathered that storm we heard that there is another potential issue with Ecables. At the moment it's quite hard to see how this will evolve – especially with one of the entities going into liquidation, so please read your e-news updates to stay on top of this matter.

Overall it's been a good 12 months for NECA. We now have a well-developed set of policies to support our advocacy and industry representation and we're making headway with the government departments that are key to our industry.

Our Parliamentary lunches have been well received by both our members on the east coast and the ministers who have so far addressed us. We are

currently agreeing dates and topics for 2015. We also been involved in more submissions than ever before this year, which suggests that the government is now finally fully operational. There is a lot on their agenda and getting things through the Senate is certainly proving to be a major hurdle, but we're starting to see some interesting initiatives being rolled out.

Training, and anything supporting our apprentices, is always a priority for us and we are very pleased to see the ACCI productivity initiative progressing so well.

ACCI PRODUCTIVITY INITIATIVE

The ACCI's Productivity Leadership Program is examining the potential gains that can be achieved by electrical contractors through a better understanding of the performance of their apprentices including:

- ways to improve cost effectiveness of apprentices
- training options and alternatives
- impact of the quality of apprentice supervision
- impact of workplace relations arrangements ie, EBAs versus Fair Work Award rates

The first stage of the Project has been used to determine the factors that have the most significant impact on an apprentice's productivity and commitment to completion.

Information has been gathered through:

 Individual consultations with over 20 electrical contractors to confirm current employer views on the performance of their apprentices

- by way of one-on-one interviews of employers and their staff. This covered a range of those who employ directly, use only group training or a mix of both;
- Outcomes of focus group meetings held to identify current attitudes of employers in electrotechnology and to discuss possible strategic responses.

A range of factors have emerged from the consultations and focus groups and the findings have confirmed that electrical contractors are experiencing a number of barriers that underlie productivity and retention, including:

- Employer perception that it is at times difficult to invest in training because of economic and building industry cycles and the nature of contracting work;
- A perception that many entrants to training do not have prerequisite skills, knowledge and aptitude
- A lack of understanding of current and potential flexible apprenticeship arrangements
- A belief that although career and training pathways currently available in the industry are largely appropriate, there is a need to consider the requirements of an apprenticeship in light of increasing specialisation of work which is placing pressure on a broad based "whole of industry" skills learning pathway.
- Costs and understanding of workplace employment options including:
 - Increases to apprentices wages across the board resulting from recent Fair Work Commission decisions and higher wages and conditions for apprentices covered by Enterprise Based Agreements

- The increase and then large decline of intention to employ mature age apprentices who are eligible for significantly higher wages
- Introduction of Competency Based Progression which can lead to an apprentice completing early and provisions for competency based wage progression to fast track apprenticeships
- Conditions that support mentoring, training and effective supervision of apprentices

The information collected has been aggregated into a general response that will underpin the development and promotion of a range of tools, guides and manuals to equip business with the skills and knowledge to improve the workplace productivity of their apprentices. The Project will conduct validation workshops (or consultations) with electrical contractors to:

- examine the effectiveness of the identified tools in assisting business to improve business performance
- Identify assistance and support needed by employers to apply the tools in workplace settings

Based on the validation findings the Project will promote the strategies and enabling factors that can maximise the contributions of apprentices in the electrotechnology sector at all stages/or years across the duration of their indenture.

THE FEDERALLY-FUNDED "GREEN HOME PROJECT"

NECA is also working with Sustainable Business Australia, along with its business partners – Connection Research, Object Consulting and APEX Australia on "Our Green Home Project". This is a Federal Government-funded national study designed to improve the understanding of how households can reduce electricity consumption with better tools and support.

We will need electricians across Australia to install electricity monitors in the eligible peoples' homes. This is still in its early stages but for further information speak to your Victorian membership team. I'm sure 2015 will be an equally challenging year as 2014, but hopefully our industry is starting to see some signs off an improved economy and more building activity.

Best regards, Suresh Manickam

APPRENTICE OF THE YEAR AWARDS

The NECA awards are designed to recognise and reward apprentices and their employers for outstanding performance and commitment to the electrotechnology industry.

These awards present an excellent opportunity for employers who have dedicated time, effort and resources to the future of our industry by nurturing and supporting their workers to gain recognition from their peers and the community.

It is also an opportunity for those nominated and winning apprentices to stand out from the crowd and be recognised for their dedication, hard work and commitment in this challenging industry and to be able to demonstrate that commitment as their careers progress.

NECA has long had a commitment to the training and development of apprentices,

recognising that apprentices are the future of the industry in terms of both today's tradespeople and tomorrow's managers and business owners.

NECA owns Group Training Companies that employ over 2,000 apprentices and part own companies that employ a further 2,000.

Through this experience we have recognised the need to increase awareness of the vast range of opportunities within the electrotechnology industry, both for talented young people who are determining which path they will take as they leave school, and for older workers who may be considering a career change.

Applicants are initially assessed at a state level, with finalists being invited to an interview with a judging panel. The first, second and third place getters at state level receive a monetary prize

and are invited to collect their awards at a state awards event, along with their employers, who also receive a certificate of achievement.

State winners from each category will then be invited to submit a project relevant to the award category to be judged for the NECA National Apprentice Awards.

Nominations will open mid February. Go to the NECA Victoria website to download the nomination brochure, application form and the criteria. Make sure you stick to the criteria as a minimum because it forms the basis for the judging of the National Apprentice Awards, which are open to all State Apprentice Award Winners.





Call Cbus on **1300 361 784** or visit **www.cbussuper.com.au**





RECOMMENDED INDUSTRY CHARGE OUT RATES

(these rates are exclusive of GST)

These recommended rates replace those previously issued. Operative: 1 October 2014

TRADESPERSON		Ordinary time Per hour (\$)	Time & a half Per hour (\$)	Double time Per hour (\$)	Double time & a half Per hour (\$)	Composite or 6 day rate Per hour (\$)
CONSTRUCTION	Mechanics and fitters - EW5	126.38	154.18	181.98	209.78	134.84
EBA Part B	Electrician special class - EW7	137.47	167.71	197.96	228.20	146.67
Refer notes below	Electronic tradesperson:					
	- EW8	144.87	176.74	208.62	240.49	154.57
	- EW9	148.56	181.25	213.93	246.61	158.51
SERVICE & MAINTENANCE	Mechanics and fitters - EW5	137.71	168.01	198.31	228.60	N/A
EBA Part A	Electrician special class - EW7	145.21	177.15	209.10	241.05	N/A
Refer notes below	Electronic tradesperson:					
	- EW8	152.68	186.28	219.87	253.46	N/A
	- EW9	156.42	190.84	225.25	259.66	N/A

APPRENTICES	Ordinary time Per hour \$	Time and a half Per hour \$	Double time Per hour \$	Double time and a half Per hour \$	Composite or 6 day rate Per hour \$
1st year	48.90	59.66	70.41	81.17	52.17
2nd year	66.46	81.09	95.71	110.33	70.91
3rd year	83.71	102.13	120.54	138.96	89.32
4th year	86.77	105.86	124.95	144.04	92.58

NOTES: General

- 1. Materials: Supplier's trade price plus 20 per cent
- 2. Motor vehicle charge: \$1.15 cents per kilometre
- 3. The gazetted industry workers compensation average has decreased from 2.724% to 2.628%.

Construction / installation work

1. The actual cost of site allowances and other site-specific payments shall be additional to the above rates.

- It is recommended that this be at cost plus 20 percent.
- The actual cost of site supervision and re-drafting expenses shall be additional to the above rates.
- It is recommended that contractors include an adjustment factor for projects of duration in excess of six months eg. by anticipated CPI
- 4. The composite or 6 day rate is based on 46 hours, Monday to Saturday.

Service work

It is recommended that a service fee of 75 percent of the appropriate recommended hourly charge out rate be charged in addition to the charge for time worked. As an alternative, a minimum charge for labour of one hour should be charged with all travelling time to be charged as time worked.

Variations on contract

Refer to 'Recommended industry unit rates for variations on contracts' published by NECA.

BTB/TD00

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