

## A word from the CEO

As we head into winter and businesses start planning for the next financial year, we thought we would use this edition of NECA News to showcase two of our key member services: Industrial Relations (IR) and Work Health and Safety (WHS).

The three articles in this update focus on very topical issues in the IR and WHS space. And we hope you find them an informative, and possibly even provocative, read.

We are also just starting to look at the results from the 2015 Market Monitor.

Here are a few high-level initial findings:

- Competitive pricing and stock availability remain key supplier attributes.
- Quality sales staff and on-time delivery are close behind.



- Pricing and stock availability also drive the grey market.
- Contractors are looking for more and more options.
- Search engine 'shopping' is bigger than ever.

- In-store and online sources of product information are important.
- Brochures and sales reps still have an important role to play.
- A third of contractors use smartphones on the job to research new products and datasheets.
- 60% of respondents say their customers specify brand choices – particularly in lamps and lighting.
- Controlling cost, competition and cash flow is key to running a successful business.

Look out for the full presentation of the findings, which will appear on our website [www.neca.asn.au](http://www.neca.asn.au).

Best regards,  
Suresh Manickam

## Digging and working near underground assets

By Rory Sweeney – Safety, Environmental, Quality Manager, South Australia.

### Locate the underground assets

Before starting any excavation work all underground assets (e.g. electric cables, gas, water and sewage pipes) must be located. The following will assist with this process:

- Dial Before You Dig.
- Site plans.
- Cable or pipe detection.
- Carefully executed pilot or test holes.

### Dial Before You Dig and site plans

Dial Before You Dig is a free national community service that provides information about the location of underground pipes and cables belonging to the various utility companies around Australia, such as your local network provider.

Be aware that Dial Before You Dig alone may not identify all underground pipes or cables. Some may be part of a private installation and some of Australia's underground asset owners are not members of Dial Before You Dig.



**DIAL BEFORE  
YOU DIG**  
[www.1100.com.au](http://www.1100.com.au)

Never assume that the plans you receive from your enquiry contain exact location of the underground assets. Assets still need to be carefully and physically located for confirmation.

Cables are typically buried at between 450mm and 1,000mm, but soil may have been inadvertently removed from above the assets or more soil may have been deposited atop them. Never assume cables or pipes will be located at a consistent or required depth. Lodge your application for digging near underground assets with Dial Before You Dig by visiting the website [www.1100.com.au](http://www.1100.com.au). You can also call the

national call centre on 1100.

Dial Before You Dig will provide you with the contact details of the infrastructure owners on the Enquiry Confirmation Sheet. The owners may provide additional information or instructions on locating and working near their underground assets.

### Check location with cable and pipe detection

One way to take the worry out of locating buried underground assets is to use the services of an accredited underground asset

location company. If you are using your own locating equipment, it is important to ensure that the operators are trained in its use and are aware of its limitations. In addition, the equipment must be calibrated and capable of detecting all types of cables and pipes as necessary. Some locating equipment may not detect an electric cable unless there is current flowing and may not be able to detect non-metallic pipes or conduits. Note: It is common for gas assets to be laid in polyethylene (PE) pipe (yellow or black with yellow stripes). Generally PE pipe is laid with detectable (foil backed) marker tape or non-detectable marker tape and a tracer wire, but this is not always the case.

**Check location with a pilot or trial hole**

Once the asset location has been determined, a pilot or trial hole should be used to establish the exact location and depth of the asset. Using insulated hand tools is considered a safe method for excavation, but they can also be a common source of accidents and cause damage to the asset if used incorrectly. This is sometimes referred to as pot-holing.

Other safe methods of excavating include water jetting and high-velocity air jets incorporating vacuum removal of excavated soil to expose buried assets. Their use may be limited by the ground conditions and soil type. Precautions are also needed to prevent injury from ejected soil. Whichever method is chosen, you need to apply it with care. Before digging or water jetting near a high voltage electrical cable, check with your local network provider, if there are any special conditions that apply.

**Machinery – dig at a safe distance**

Once an asset location has been determined, excavation may proceed. Every effort should be made to excavate alongside the asset rather than directly above it. Extreme care should be taken when digging above or close to the determined asset location. Marker tape is commonly used as a location indicator for buried pipes and cables. If a marker tape is found, use extreme caution if you continue digging.

Hand-held power tools and mechanical excavators must be used with extreme



**Top: Trenching and laying of new pipes and cables. Left: Non-metallic gas pipe marker. Right: Cable at incorrect depth.**

care when working close to underground assets. A risk assessment should be used to determine the minimum safe working distance for powered tools and excavators from the underground assets. Final exposure of the asset by horizontal hand digging is recommended; as the force applied to hand tools can be controlled more effectively. Insulated tools (e.g. spades and shovels, preferably with curved edges) should be used when hand digging near electric cables. They should not be thrown or spiked into the ground,

but eased in with gentle foot pressure. Information sourced from:



For further information, contact Rory Sweeney, HSEQ Manager for NECA on 02 8272 2966, or email [rory.sweeney@necasa.asn.au](mailto:rory.sweeney@necasa.asn.au).

Alternatively a copy of the WHS Regulations can be downloaded from the SafeWork SA website at [www.safework.sa.gov.au](http://www.safework.sa.gov.au).

## How to keep an electrician employed

By Kevin McCosh - Executive Director & IR specialist, Victoria.

Conducting business in the electrical contracting industry is tough. Today's economic environment has resulted in massive numbers of electrical worker redundancies and businesses going to the wall, and there are no indicators pointing to a change anytime soon.

In Victoria, electrical contracting businesses who have union enterprise agreements are finding it particularly hard to win work. The high cost of labour associated with these companies is fast making them uncompetitive. A worker who is employed by such companies is paid \$45.66 per hour for a 36 hour week, receives double time for any overtime and shift work, receives 26 rostered days off a year, and on top of that also has over \$120 per week paid on their behalf into a redundancy and income protection fund. These conditions are great for workers but are

costing jobs on a daily basis.

There has been three other significant developments in the Victorian electrical contracting industry over the past two years. The first is the growing influx of interstate contractors competing directly with Victorian contractors for the little work that is available. These interstate contractors operate from a far lower cost base as they are not weighed down by the high costs associated with union enterprise agreements. More and more we are seeing interstate contractors winning work from Victorian contractors as they are cheaper by far. Builders these days are displaying a preference for contractors tendering on a lower price, rather than by the type of enterprise agreement they have.

The second major development in the industry has been the growing trend for contractors to deal directly with their employees to negotiate enterprise agreements. These companies tend to position themselves on a more competitive footing in the part of the industry in which they operate in. They manage to do this while at the same time maintaining wages and conditions that keep their employees happy. Due to their competitiveness, these companies are also winning a sizable slice of available work in the Victorian market. They tend not to have redundancies, in fact in many cases they are growing in their size and capability.

A further trend which is enormously concerning is the drop off in employing apprentices. The main reason again for this dilemma is again due to cost! While a junior apprentice in a union enterprise agreement starts their career at \$14.55 an hour for a 36 hour week in their first year, they quickly rise to \$33.02 an hour in their final year. The repercussions of apprentice redundancies and lower employment levels will be realised in a few years' time when the industry will face a massive shortage in qualified electricians.

In the face of these concerning trends, the Electrical Trades Union has launched its *Follow the Leaders Contracting EBA Campaign 2014*. What the union believe is reasonable

in these hard economic times is a 20% increase to wages and allowances over a three year period, an immediate increase in superannuation guarantee contributions to 12%, and an additional 18% increase to the employer contributions into the severance and income protection fund in addition to the establishment of portable annual leave and sick leave schemes. These unreasonable demands will result in the devastation of the electrical contracting industry. The result will be more massive job cuts, Victorian electrical companies closing their doors and greater opportunity for interstate contractors to move in and capture Victorian electrical work.

Further to these problems is the pending introduction of a new federal *Building and Construction Code*. When passed into law, all building and construction companies, including electrical contractors will have to be fully compliant with the Code in order to be allowed to tender for government funded work. Government funded work currently constitutes 42% of all work performed in the industry. Companies who have enterprise agreements certified by the Fair Work Commission on or after 24 April 2014 will be required to have content of such EBA's fully compliant with the code otherwise they risk not being allowed to tender for government funded work. If the current union enterprise agreement was recertified in its current form it would not be code compliant. Should new claims made by the union in the 'Follow the Leaders Contracting EBA Campaign 2014' be agreed to for a new enterprise agreement, then that EBA would also not be compliant with the new code.

For all of the above reasons, the IR Committee of NECA recently unanimously formed a view to recommend to the entire electrical contracting industry that employers should pursue enterprise agreements directly with their employees. This is the only viable option that can provide Victorian electrical contracting businesses with the ability to compete in today's market and to offer some degree of job security for Victorian electrical workers.



## Electrical Testing and Safety Observers

By Rory Sweeney – Safety, Environmental, Quality Manager, South Australia.

### Work health and safety requirements

South Australia and Tasmania's work health and safety laws, effective 1 January 2013, introduced a new approach to a number of key areas, including high risk construction work, working on energised electrical equipment, safety observers and testing.

These exact and harmonised WHS laws came into effect one year earlier in NT, QLD, NSW and the ACT.

To understand how these changes affect your business, you should read the relevant sections of the *Work Health and Safety Regulations 2012 (SA)* [the WHS Regulations in each of the States and Territories discussed above], that relate to working on energised electrical equipment. This fact sheet provides guidance on those requirements and please note that the Regulation numbers shown are applicable across the country.

### High risk construction work

WHS Regulation 291 defines high risk construction work, which includes construction work that is carried out on or near energised (live) electrical installations or services.

Regulations 299-303 discuss the requirement for a Safe Work Method Statement (SWMS) for any work identified as high risk construction work.

Given that working on or near energised (live) installations, services or equipment is defined as high risk construction work, an SWMS is required.

### Working on energised electrical equipment

Regulation 154 prohibits work on energised electrical equipment in all cases, unless (as permitted under Regulation 157):

- it is necessary in the interests of health and safety e.g. life saving equipment, or
- it is necessary for the work to be carried out properly, or

- it is necessary for the purposes of testing, or
- there is no reasonable alternative means of carrying out the work.

Regulation 158(1) requires a documented risk assessment with control measures in place prior to any work on energised equipment.

Regulation 161 describes how any work on energised electrical equipment is to be carried out, and requires:

- a competent person who has tools, testing equipment and personal protective equipment (PPE) that are appropriate, tested and maintained, and
- an SWMS prepared for the work, and
- a competent and qualified safety observer present (if this has been determined as necessary by your risk assessment).

### Electrical testing

Testing can include fault finding and troubleshooting, which can be conducted without a safety observer where the risks are negligible. However, a risk assessment must always be undertaken prior to testing to formally determine the level of risk.

The risk assessment can be outlined in an SWMS or other document. The risk assessment should consider:

- The complexity of the test.
- The likelihood of the electrician coming into contact with live parts.
- Exposed equipment issues.
- Fault levels and electrical fault protection systems.

Note for consideration: the provision of an electrical fault protection system must not be relied upon to replace a risk assessment or an SWMS. Where serious risks are identified and assessed for testing work, a safety observer must be considered within the control measures of the SWMS or risk assessment document.

For typical and repetitive testing activities, an SWMS covering the repeated test or fault finding work can be used as a template and modified for different

locations, site specific hazards and associated risks.

### Safety observer

Regulation 161 requires the safety observer to be competent:

- To implement control measures in an emergency; and,
- To rescue and resuscitate the worker who is carrying out the work.

In South Australia, it is a requirement that rescue and resuscitation assessment (Low Voltage Rescue) is undertaken annually in accordance with Subregulation 161(4) and Regulation 68 of the South Australian Electricity (General) Regulations 2012. This requires persons who carry out, or help in carrying out, electrical work to be suitably trained in rescue and resuscitation in accordance with the requirements of the Technical Regulator in South Australia. You should check for similar training and competency requirements within your particular State or Territory.

Under Subregulation 161(5), a safety observer is not required if:

- The work consists only of testing; and,
- The person conducting the business or undertaking has conducted a risk assessment that shows there is no serious risk associated with the proposed testing work.

### Residential construction – BCA Class 1 dwellings

There should not be any work on live installations in residential construction of Class 1 dwellings under the Building Code of Australia (BCA).

All electrical power should be isolated before workers enter high risk areas such as roof and underfloor spaces.

For further information, contact Rory Sweeney, HSEQ Manager for NECA on 02 8272 2966, or email [rory.sweeney@necasa.asn.au](mailto:rory.sweeney@necasa.asn.au).

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