

Supervision of Electrical Apprentices

No justification for further restricting supervisor-to-apprentice ratios.

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15 April 2024

Master Electricians Australia (MEA) is the trade association representing electrical contractors recognised by industry, government and the community as the electrical industry’s leading business partner, knowledge source and advocate. You can visit our website at www.masterelectricians.com.au

At MEA, safety is a top priority, however, we believe in a balanced approach to regulation. While we expect all MEA members to adhere to the highest safety standards, we also recognise the importance of efficiency and minimising undue financial burdens. The proposed supervisor-to-apprentice ratio may hinder skill development and impose significant costs without proportional safety benefits. We advocate for thorough cost-benefit analysis to ensure regulations enhance safety while supporting industry growth and job skills development.

While any workplace fatality is undeniably tragic, our investigation has revealed that the three deaths under scrutiny involving electrical apprentices in the past 12 months actually occurred almost a decade ago. We have been advised of two further fatalities that have occurred since then, but have been denied access to any material facts. MEA appreciates there may be other significant safety issues stemming directly from the current supervision ratios driving the proposed changes, however, such facts appear unavailable for the electrical industry’s assessment. Consequently, we contend it is unjust to validate the proposed restricted supervision ratios without providing greater access to material facts of related safety incidents, particularly amidst a skills shortage crisis.

MEA generally supports the remaining draft implementations but advocates for some changes throughout.

Supervision Ratios

A recent report published by Jobs and Skills Australia (JSA) has identified Electricians (both general and special class) as facing a shortage below the economy-wide average. MEA has 3,170 members, majority of which consist largely of small and medium enterprises (SMEs). This means that our members typically fulfil the role of both employer and supervisor.

The proposed draft requirements for more restricted supervisor-to-apprentice ratios are worrying for Small-to-Medium Enterprise (SME) electrical contractors, as they are burdened with tighter personnel resource capacity constraints.

Table of current -vs- proposed supervision ratios

Current -vs- Draft Ratios		
Supervision Level	Current	Draft
Per Individual Supervision Levels		
Direct	1:2	1:1
General	1:4	1:3
Broad	-	1:5
Combination of Different Supervision Levels		
	-	1 Supervisor = 1 direct + 1 general



		1 Supervisor = 1 direct + 3 broad
		1 Supervisor = 1 general + 3 broad

MEA argues this will have the following detrimental impacts:

1. Our members will face increasing limitations on the size of their businesses. Each new apprentice hired necessitates the employment of a qualified electrical worker as well, adding a cost that may render operations unfeasible for many contractors. Enforcing a 1:1 ratio for supervisors, is inefficient and seemingly unnecessary based on readily accessible information.
2. We contend that these changes will hinder any efforts to address the skills shortage crisis in the electrical industry. By reducing the number of apprentices licensed electrical contractors are allowed to train, the capacity for skill development theoretically halves, given the supervision ratios have reduced from 1:2 to 1:1, especially considering that the majority of electrical contractors are SMEs. All other initiatives to improve the skills shortage will be hindered by these ratio changes.

We would additionally like to highlight that the introduction to this consultation justifies the restrictions as follows:

“In a recent 12 month period, ESV has investigated the death of three apprentice electricians. This is an unacceptable statistic for Victoria and it is incumbent on all stakeholders in the electrical trade to be vigilant in regard to the safe and effective supervision of electrical apprentices.”¹

Our recent communication with the Customer and Stakeholder Engagement Department (the Department) has revealed this inaccurate, and the three deaths referred to occurred “around 2015-2016”². It was disclosed that since then, “there have been two further fatalities of recent times. The circumstances [of which] cannot be discussed while the legal processes are underway”³.

The referenced fatalities are an invalid justification with the information provided, particularly amidst a skills shortage crisis, for imposing tighter supervisor-to-apprentice supervision ratios. MEA acknowledges there may be other safety implications such as LTIs, notifiable incidents and/or other safety issues which may have spurred these changes, however, it is unjust to demand industry adhere to stricter supervision guidelines without concrete and publicly available evidence of safety issues stemming from existing requirements.

We cannot reasonably be expected to endorse changes without a clear understanding of material facts. While we have been informed of two additional fatalities, it is essential to note that we have not been provided specific details regarding whether these incidents involved apprentices. Even if both fatalities did involve apprentices, we have been restricted from knowledge of material facts to assess whether they warrant the proposed restrictions.

¹ “Requirements for the effective supervision of apprentice electricians” *EnergySafe Victoria* (01 February 2023) < [Requirements for the effective supervision of apprentice electricians | Energy Safe Victoria \(esv.vic.gov.au\)](#) >

² G. Brennan (personal communication, 11 April 2024)

³ *Ibid.*



Moreover, the timeframe described as "recent times" lacks clarity, leaving us uncertain if these fatalities occurred within the past 12 months, as implied by the context of the inquiry and response, and therefore whether these are timely concerns to justify the ratio changes. MEA emphasises our acknowledgement that fatalities are not the only measurement of safety standards necessitating change, however, without greater access to material facts of any safety problems related to supervisor ratios, it is fanciful to expect industry to support these changes.

At the very least we insist the current supervision ratios remain. We further advocate for their complete removal, aligning with comparable Australian jurisdictions where no ratios are imposed. For example, in Queensland, "there are no prescribed ratios of apprentices to supervisors". Our position is justified by the lack of material information exposed to the electrical industry regarding the electrical apprentice fatalities and other such safety implications. We suggest that Victoria (VIC) follows suit.

Supervisors Competency Assessment in Consultation with Apprentice

The draft requirements have proposed the following at 7.3 –

"The supervisor must undertake a competency assessment in consultation with the apprentice to determine the level of supervision to be applied for a given work task, taking into account the matters outlined in paragraph 7.4. However, the level of supervision to be applied is always subject to the conditions and limitations outlined in sections 8, 9, 10 and 11 of this document"⁴.

Note. We discuss any issues raised under ss 8-11 separately.

MEA supports the principle of a competency assessment; however, we hold that sn 7.3 provides insufficient levels of guidance. MEA advocate for a clear template (whether it be absolute or designed for customisation) to ensure there is a consistency across VIC in assessment of competency standards.

While we respect consultation is an important element of assessing individuals' competency, we assert this should be limited to determining whether the individual feels confident in advancing up the levels of supervision. The safety of employees, consumers and wider public is the first and foremost priority of our members. We urge ESV to advance s 7.3 by disseminating a base level template for all employers to use.

Direct Supervision: Visual Contact Requirement

The current requirements currently require supervisors to –

"remain within audible range (earshot) of the apprentice".

The draft requirements have extended the supervisors obligations to –

"remain within visual contact and audible range (within sight and earshot) of the apprentice."

MEA support this extended requirement.

Broad Supervision: Supervisor Does Not Need to be Physically on Site.

The current requirements currently command –

⁴ Supervising electrical apprentices" *Worksafe Queensland* [PN12535 Version 2.] (December 2023).

“The supervisor shall provide periodic face-to-face contact throughout the day, or work cycle, to check that apprentice’s work complies with technical and safety requirements.”

The draft requirements have explicitly stated that –

“... the supervisor does not need to be physically on the same work site as the apprentice at all times”.

We support the drafting as it removes any ambiguity. Apprentices working under a broad level of supervision should be of a competent level preparing to phase into working as an independent licenced electrical contractor without supervision. To restrict this would be detrimental to the safety of employees, clients and the wider public.

We note the current ongoing *Nordic* industrial manslaughter case is the result of the fatality of a fourth-year apprentice who died performing maintenance work without proper supervision. Whilst we cannot obtain information regarding the supervision level this apprentice was working under, we assume given the length of his apprenticeship, he was working under ‘broad’ level. Firstly, restricting the ratio of direct and general supervision levels would not have changed this outcome as there is not currently, and will not be under the draft requirements, the demand for supervisors to be physically on site. We fail to see how these changes address the outcome of that tragedy without knowing further facts which are publicly unavailable

Conditions for Carrying Out Fault Finding

The current requirements state:

“A 4th stage apprentice may carry out basic (not live) fault finding under general supervision only if they have been deemed competent to do so. A 4th stage apprentice may carry out advanced fault finding and confirmation of isolation under direct supervision.”

The draft requirements are silent on the eligibility of fourth-year apprentices to perform confirmation of isolation works under direct supervision. We suggest that this omission is an oversight in drafting and urge the ESV to include this point under 10.2 in the second bullet point. It is crucial that our electrical apprentices are trained, competent, and prepared in all functions, including confirmation of isolation. If this aspect remains absent from the drafting, employees, clients, and the wider public are exposed to a fatal level of risk.

Employers’ Responsibilities

Section 4.1 has explicitly extended the employers’ responsibilities by stating –

“An employer of an apprentice is also responsible for continuously monitoring and assessing the effectiveness of those arrangements as necessary to deliver those intended outcomes”.

We note this majority of our members will not be impacted by the explicitly stated addition as our members typically fulfil the role of both employer and supervisor.

Conclusion

Safety must be paramount in all aspects of the electrical industry. Apprentices often lack the skills to practice safely without adequate supervision, ensuring the safety of themselves, colleagues, and the public. However, it is crucial to maintain a balanced approach to safety regulations, ensuring that the benefits outweigh the regulatory burden imposed.

Despite the regrettable nature of any workplace fatality, our examination has unveiled that the incidents under investigation involving electrical apprentices referred to in the consultation paper, occurred almost a decade ago. Despite being advised of two additional fatalities since then, we have not been provided any material facts to further evidence safety incidents spurring these changes. MEA acknowledges there are an array of safety incidents which may have occurred dictating the need for change, however, without presenting such facts to industry, it seems inexplicable to expect applause and support. MEA recommends that ESV release more information of safety implications directly relating to supervision ratios justifying the changes if it is determined to go ahead with the changes.

MEA insists the current supervisor-to-apprentice ratios are not further restricted, as this could worsen the skills shortage crisis in the electrical industry, impose unfeasible financial burdens on contractors, and unlikely to have any impact on safety given the lack of available information to support there is currently a significant risk. We urge ESV to at least maintain the status quo, if not remove any ratios, aligning with comparable Australian jurisdictions.

While the addition of a competency assessment for determining appropriate levels of apprentice supervision is a positive step, given the potentially fatal risks associated with inadequate skills, it is crucial to limit the extent of apprentice consultation to their confidence in advancing only if proposed by the supervisor. The assessment should not provide an opportunity for apprentices to negotiate for advancement if the supervisor does not support it. Additionally, we propose enhancing the competency assessment by introducing a customisable template to ensure consistency across the electrical industry in VIC.

We strongly urge ESV to retain fourth-year confirmation of isolation testing under direct supervision, a fundamental skill that has been omitted from the draft requirements. This skill should not be practiced without initial direct supervision due to its high level of risk. We expect all apprentices to be competent in performing isolation testing when working independently as qualified licensed electrical contractors.

All remaining proposed amendments proposed in the draft requirements either do not impose any additional burden on our members, as they typically fulfill both the roles of employer and supervisor in small to medium-sized enterprises (SMEs), or we support the amendments proposed.

We look forward to the outcome of the *Requirements for the Effective Supervision of Apprentice Electricians* and are eager to participate in any further discussions.