

ELECTRICAL SAFETY LEGISLATION REVIEW

Master Electricians Australia

J O'Dwyer March 2020



INTRODUCTION

Master Electricians Australia (MEA) is a trade association representing electrical contractors, recognised by industry, government and the community as the electrical industry’s leading business partner, knowledge source and advocate. MEA currently has a membership base of approximately 3000 electrical contractors in Australia. MEA understands the current and potential issues facing electrical contractors today.

Master Electricians Australia has a dedicated team that provides comprehensive technical advice to electrical contractors.

MEA appreciates the opportunity to provide feedback to the Department and we are available if required to discuss or present further information if required.

MEA review of the Draft Bill will proceed by raising issues as they are presented in the draft Bill.

Contents

- INTERPRETATION..... 2
 - PENALTY UNITS..... 3
- Part 3 Safety of Infrastructure, Installations and Electrical Equipment 3
 - Section 32 . Inspection of aerial wiring systems and supporting structures..... 3
 - Section 41. Inspection and maintenance of installation generation assets..... 4
 - Section 44 Unconnected electrical installations 4
- Part 4 Safety of Electrical Equipment..... 4
 - Section 47 Minister may determine corresponding law 4
 - Section 51 Determination of electrical equipment to be controlled electrical equipment..... 5
 - Section 84. Recall of electrical equipment 5
- Part 5 Electricity Safety Management..... 6
 - Section 86 Safety Management System..... 6
 - Section 88 Safety Manager..... 7
 - Section 92 and 93 Safety Management System..... 8
- Part 6 Serious Electrical Accident..... 8
 - Section 102 Notification and reporting of serious electrical events..... 8
 - Section 104 Investigation of serious electrical accidents..... 8
 - Section 105 Publication of details of serious electrical events 9
- Part 7 Electricity Entities Powers and Duties 9
 - Section 114 Entry to inspect electrical installation 9



Section 117 Emergency powers of electricity safety officers.....	9
Part 8 Enforcement	9
Section 126 Power of authorised officers	9
Section 127 Powers of entry	10
Section 131 Disconnection of electricity supply.....	10
Part 10 Offences	10
Section 163 Offences by bodies corporate	10
Part 11 Miscellaneous	10
Section 172 Services of notices	10
ADDITIONAL COMMENTS.....	10
Residual Current Devices (RCD's / Safety Switches).....	10

INTERPRETATION

1. **electricity storage system** means a system or method, or a number of systems or methods, used to safely store electrical energy for later use on demand;

The above definition has a significant impact and breadth. MEA would ask does the definition cause any confusion with Hydro-Electric Dam operation and Management and does this definition cause any concern for other legislation within the Tasmanian legislature?

2. **serious electrical accident** means an accident involving –
 - (c) electricity that produces a burn serious enough to cause temporary or permanent disability or to require medical treatment

Clarity may be achieved in the above definition whereby “temporary disability” and “medical treatment” is defined elsewhere within the interpretation section.

3. **defective**, in respect of any premises, electrical infrastructure or electrical installations, means –...

(d) premises, electrical infrastructure or electrical installations that is determined to be defective under a code of practice or in accordance with the regulations;

The definition defective refers in (d) to be “defective” under a code of practice. In defining a word for interpretation, it would be appropriate to avoid using the same word in the definition as it may cause issues for regulators and courts.

4. **in-scope electrical equipment means electrical equipment that –**
 - a. operates at or within a prescribed voltage range; and
 - b. is designed or marketed as suitable for household, personal or similar use

– but does not include electrical equipment of a type determined by the Director not to be in-scope electrical equipment;

The definition should come from the EESS definition and not exclude Tasmanian alterations at the discretion of the Director.

PENALTY UNITS

Currently under the proposed bill the regulator has suggested a number of penalty unity for different offences. Currently under the Tasmanian legislation a Penalty unit is valued at \$168 per penalty unity. MEA general observation particularly for large corporates and company structures many of these fines are under what we would expect body corporates and in some cases individuals to receive. We strongly recommend that the Bill be amended to reflect community expectation and impose fines that will act as a true deterrent and not simple seen as a “cost of doing business” if they are prosecuted.

As an example, clause 28 states the penalties for a body corporate and an individual for energising an installation without verifying that it does not pose a risk or hazard are

Body Corporate	\$25,200
Individual	\$3,360

MEA would highlight other section that we consider to be inadequate penalties as follows

- Section 28
- Section 44
- Section 86
- Section 119
- Section 133(4)

Part 3 Safety of Infrastructure, Installations and Electrical Equipment

Section 32 . Inspection of aerial wiring systems and supporting structures

(1) The owner of an aerial wiring system and any supporting structures must periodically inspect the aerial wiring system and structures to ensure they are safe to remain energised.

A person must maintain a record of the inspections carried out in accordance with subsection (2).

MEA is wanting to clarify that homeowners who do own aerial wiring systems and supports, for example on rural properties are required to do this. This would infer that a home owner would need some form of documented inspection method where the Director issues these outside of this document. MEA also want to ensure that this will have the same application whereby that the point of connection between transmission supplier and owner may not be in the usual place attached to a normal residential home.

Section 41. Inspection and maintenance of installation generation assets

The owner or operator of any installation generation assets must ensure that the assets are regularly inspected, tested and maintained so as to ensure that the installation generation assets –

(a) comply with –

(i) any relevant design standards in force at the time of installation; or

(ii) any other relevant standard or code of practice that the Director determines;

and

(b) are safe.

Section 41, in our view, places a positive obligation on all households to undertake regular inspection where they have a Solar / PV System or other generating equipment. MEA would seek clarification as to if this is the intent of the bill?

MEA would also seek clarification if this been communicated to relevant homeowner and other property owners for consultation? Our view this will lead to significant changes in the industry and homeowners' responsibilities and costs for maintenance of PV systems. We suggest a detailed regulatory impact statement (RIS) is needed if our interpretation of this issue is correct.

Section 44 Unconnected electrical installations

Section 44 places a positive obligation on all owners of electrical installation of all sizes to inspect, test and maintain. Is it the intent to require owners to instigate regular checks? How would this be policed and prosecuted. MEA would ask what regulation or guidance will accompany this requirement. MEA would also ask how does this comply with possible construction projects whereby is it considered that the Builder is responsible until practical completion and then the owner.

Are there examples of what may constitute an unconnected electrical installation that may be used as examples? Is there an intention to undertake a RIS to evaluate the cost benefit analysis?

Part 4 Safety of Electrical Equipment

Section 47 Minister may determine corresponding law

Section 47 states the following

The Minister may, by notice in the Gazette, determine a law of another State or a Territory or of New Zealand to be a corresponding law.

Master Electricians is concerned over the circumstances in which a Minister may have to unilaterally and without consultation determine that a law in a different jurisdiction, particularly one of a foreign country could be enacted without any of our current legal and legislative system reviews and safeguards. In our view this is highly irregular and a power that should not sit with one position within the executive of any government.

Section 51 Determination of electrical equipment to be controlled electrical equipment

Section 51 allows the Director, with limited controls or industry reference, to alter the effect of relevant Australian standards. This is concerning if a single position within a state government may then impose higher or possibly lower standard than what is accepted in other states and territories.

Section 84. Recall of electrical equipment

Subclause (5) of section 84 states

An advertisement referred to in subsection (3)(b) must be –

(a) in a form approved by the Director; and

(b) placed in a newspaper or newspapers –

(i) specified by the Director; and

(ii) for a period or periods specified by the Director.

According to the Roy Morgan website on newspaper circulation the current trend and reducing propensity for consumers to read Newspapers is prevalent when compared to Tasmanian population of 531,000, a peak combined circulation of only 109,000 in 2019 a reduction of 11,000 people in one year.

Newspapers	M-F	M-F	Sat	Sat	Sun	Sun
	Dec-18	Dec-19	Dec-18	Dec-19	Dec-18	Dec-19
	R'ship ('000s)					
Tasmania						
The Mercury	53	47	63	52	-	-
The Examiner	27	34	32	31	-	-
The Advocate	29	17	30	16	-	-
Sunday Tasmanian (Tas)	-	-	-	-	60	48
Sunday Examiner	-	-	-	-	25	23

<http://www.roymorgan.com/industries/media/readership/newspaper-readership>

MEA would strongly support that alternatives be included to ensure as far as reasonable practicably that consumers are informed as to the potential dangers of recalled products.

Part 5 Electricity Safety Management

Section 86 Safety Management System

Section 86 refers to an electricity entity and then refers to owner or operator. MEA's concern is having multiple people responsible for an action such as the production of the required safety system. Under national harmonisation of safety legislation, a single position of PCBU or Person Conducting the Business or Undertaking is used. Whilst we are not suggesting the Bill should be the same, consistency of using the term entity as the single point of accountability would achieve a clearer definition. The definition section, when examined also shows a repetition of this inconsistency and confusion whereby the term owner is much broader than what we believe the Bill is trying to achieve.

Sub section (9) of section 86 states

A safety management system must be submitted to the Director for acceptance –
(a) in accordance with any review schedule contained in the scheme; or
(b) every 5 years –
whichever is more frequent.

Safety systems require constant monitoring to identify new hazards new equipment and new operating procedures. It is not conceivable that a safety system could remain unreviewed for as long as 5 years without monitoring. To improve the effect and implementation of a better safety culture the regulator should be able to evaluate the plan and its evolution over the previous period even if it is once every 5 years. Electricity entities must be able to demonstrate

continuous improvement and assessment during the relevant period of every 5 years, or, in shorter periods as subclause 9 currently suggests.

Section 88 Safety Manager

The bill at section 88 details that an entity, owner or operator must appoint a system manager who has been accepted by the Director. MEA assumes that the Director would set a level of education experience knowledge and skill that would be used as a minimum for such appointment however this has not been detailed and we presume this would be for any future regulation change.

Subsection (5) of this clause also puts a positive responsibility on the Safety Manager to advise the Director of their resignation. We believe this should be the responsibility of the Entity to have a positive obligation to report staffing changes and should result in a faster notification as the entity should upon the Safety Manager handing in their resignation, most likely with 4-week notice, will be advised faster than waiting for the 10 days after the resignation takes effect.

The legislation also does not detail any interim appointments or how long an entity may operate without a Safety Manager in the event of a resignation or unforeseen circumstance such as the unexpected death or long-term injury or illness of an employee.

Subsection (6) causes serious concerns for MEA.

Subsection (a) reads

*The electricity entity, owner or operator must –
(a) not interfere with the system manager’s management of the accepted safety management system; and*

MEA has concerns that having a single point of accountability also causes a single point of failure in systems. It also requires that this position needs to have an exceptional level of engineering, safety, and management knowledge that would be very difficult to recruit for. As we referred to earlier with regulation we do not know what level of experience skill education and knowledge this position will need.

Subsection b also reads

(b) provide the system manager with the resources necessary to manage the accepted safety management system:

The combination of subsection (a) and (b) also significantly reduces the ability for the owner / operator to manage their business. If we draw comparisons with harmonised regulation from around the country, there are no examples of where an employer is not allowed to manage their business including the allocation of resources and systems. The onus on owner operators is to be responsible and held accountable for the outcomes. Regulators have been loathed to be prescriptive on safety in many cases because it introduces a level of culpability and ownership of regulators on the systems that they put in place and deem to be safe. Combined with a 5-year time frame of safety system review we anticipate that safety would not advance and become bureaucratic with a lack of innovation which will lead to increased risks and hazards.

Section 92 and 93 Safety Management System

MEA would like to raise concerns in relation to section 93. The term “any electrical installation” is used. This term seems out of context given the preceding section and the focus of Part 5 on Electricity Entity’s. MEA would seek clarity that this section does not broaden the definition of safety systems past electricity entities as defined in the act. If the intent of the regulator is to broaden this definition, then serious concerns are held over the ability for small business and consumers to comply and that if they do serious levels of red tape and cost would be incurred.

Section 92 also raises concerns that the time frame for response or correction of a failed safety system is very short and associated appeals processes are left to be determined by the Tasmanian administrative appeal process which is length and possibly costly. There are also no safe guards as to what happens in the event of an objection of a decision by the Director.

Section 93 goes on to assign the risk and responsibility for safety to the regulator. This seems out of alignment with modern safety regulation. MEA asks that what happens in the event of a safety incident under a system that has been determined by the Director. Does this mean the Directors own staff will be investigating themselves for the breach? This also seems to fly in the face of accountability of owners and operators and may cause significant barriers to the selling and buying of electricity entities with these significant external powers imposed on an entity regardless of being publicly owned or privately owned.

Part 6 Serious Electrical Accident

Section 102 Notification and reporting of serious electrical events

Subsection (2) of section 102 states that a responsible person is required to submit a full report within 21 days of the electrical incident, or a longer period approved by the Director. We say that the 21-day period is too short for serious events to do a sufficient investigation and root cause analysis, we believe that this should be altered to reflect initial reporting of the incident within 24 hours and that progress report concerning the investigation are required every 28 days until the investigation is completed.

Subsection (3) also provides an obligation on the responsible person to provide details to WHS Act 2012. MEA would say that inter departmental communication should determine who the lead agency is and that responsible officers only report to one agency in relation to one incident. It has been the experience and learnings in other states that this reduction in red tape also reduces time and confusion for all parties where communication is through a single agency.

Section 104 Investigation of serious electrical accidents

MEA would suggest that an investigation of serious electrical accident by the Regulator should not be one that “may” or “may not” be undertaken. The Regulator has an obligation that all serious electrical events are investigated by the Regulator.

Section 105 Publication of details of serious electrical events

MEA suggests that it is in the public interest that the details of serious electrical accident by the Regulator must be published. It is imperative that enough information should be reported to allow the industry and consumers to understand the hazards, risks and circumstances that lead to the incident, the corrective action and the penalties and other outcomes if any that arise out of the incident. The parties may remain deidentified for privacy reasons.

Part 7 Electricity Entities Powers and Duties

Section 114 Entry to inspect electrical installation

MEA is concerned with section 114(2) whereby it states that an Electricity safety officer may enter premises “*at any time and if necessary in the circumstances, by the use of reasonable force.*” Subsection (4) and (5) then raise the issue of receiving assistance from Police and if there is no other alternative disconnect supply to the land or premises.

MEA suggests that the drafting of this clause could be better arranged. The use of physical force against a person to gain entry must be last resort. We suggest a process whereby

- a safety officer has cause to believe an installation to be “unsafe” or requires inspection upon being refused entry by the owner or occupier the safety officer may assume said installation is unsafe and utilise powers to disconnect supply to premises or land.
- The use of force should only refer to entry to premises and land that are unoccupied or non-contactable and only refer to force of entry into a building or land not the physical altercation with an occupier or owner of the property.
- Should supply not be able to be disconnect to land or premises then Police presence must be present to forcibly enter premises or land to disconnect the installation. Person to Person physical altercation should be avoided at all costs.

Section 117 Emergency powers of electricity safety officers

Again, MEA is concerned regarding the term in subclause (c) “*use reasonable force if it is necessary in the circumstances*”. Compared to section 144 there is no reference to police in these circumstances which raises concerns that this power may be open to misinterpretation and abuse.

Part 8 Enforcement

Section 126 Power of authorised officers

Section 126 (c) “*in effect requires any person who appears to be able to do so to answer any questions relating to any electrical work, inspection, testing or maintenance under this Act*”. MEA is concerned that this clause gives the power for Authorised Officers to compel answers. MEA also has concerns that this power also raises concerns regarding

- The right to silence
- The lack of controls over where and how long questioning can be maintained
- A lack of information or clarity for the person to receive support during the interview which includes representations

- Does not detail the obligations of the interviewer when conducting an interview to justify why the person is being interviewed and appears to be able to help the inquiry
- Does not detail how the authorised person will deal with people who are under 18, or otherwise considered impaired
- Does not detail what record is provided back to the witness / person regarding the interview
- Does not provide for the authorised person to obtain confirmation that information is true and accurate and that copies will be provided for the person / witness's own records.

Section 127 Powers of entry

Use of force again is used in clause 127. Again, we raise the concern that reasonable force by Authorised officers can result in adverse interaction. Again, there is no reference here to police presence however in this case a warrant is referred to as well as emergency situations.

Section 131 Disconnection of electricity supply

If an Authorised Officer deems an installation to be unsafe MEA would question as to why the Officer obligation is described as “may disconnect”. If in the opinion of the authorised officer the installation is unsafe the officer is authorised to make safe which may include disconnection based on the circumstances.

Part 10 Offences

Section 163 Offences by bodies corporate

Section 163 refers to “each person concerned in the management of the body corporate”. MEA believes that this reference needs further clarification as to who “a person concerned with management” refers to. This will help with the interpretation and explanation of the act to industry participants.

Part 11 Miscellaneous

Section 172 Services of notices

Section 172 (a)(iv) and (b)(iii) states “*emailed to the persons email address;*”. MEA experience is that many companies due to turn over of staff, receive official correspondence and invoices to generic email addresses (e.g. “info@mea.asn.au”). Will these addresses etc count as service for the purposes of the act?

ADDITIONAL COMMENTS

Residual Current Devices (RCD's / Safety Switches)

In the original consultation for the bill the issue of Residual Current Devices or RCD's was discussed.

Australian Standard AS/NZS 3000:2018 the Wiring Rules requires residual current devices (RCDs or commonly known as “safety switches”) to be fitted to all electrical “final sub-circuits” in domestic and residential electrical installations. Currently AS/NZS 3000 only applies when new electrical work is performed and does not apply retrospectively to existing installations.

MEA submission agreed that the solution of mandating RCD's on all domestic final sub circuits be completed during the sale of a home. Our view is that this is a sensible and economically responsible way of introducing this valuable lifesaving technology into homes over a period. Responsibility for ensuring this occurs could be either the sellers or buyer's responsibility. MEA believes that a buyer is in a better position to take responsibility for this work however this would need further consultation with relevant stakeholders.

We believe the bill is a missed opportunity to have this implemented and made as package of safety that will place Tasmania at the forefront of electrical safety in Australia and markedly reduce serious electrical incidents and deaths to the lowest in the country. We highly recommend that the Government review this topic and take the opportunity to save Tasmanian lives.



Jason O'Dwyer
Manager Advocacy and Policy