

Dear Electrical Safety Office,

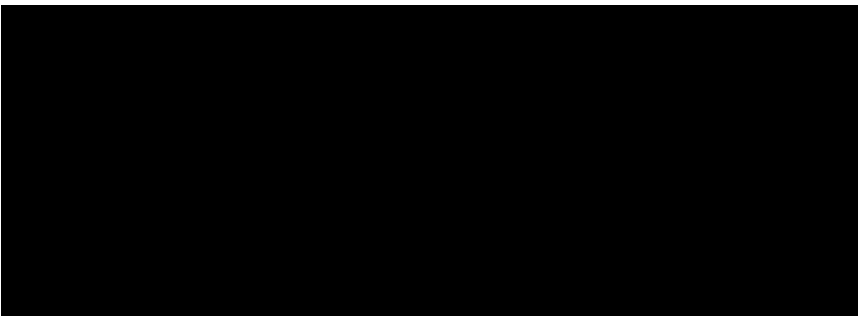
**Feedback on the Review Report recommendations regarding the Electrical Safety Act 2002**

Thank you for the opportunity to provide feedback on the review of the Electrical Safety Act 2002 Review Report dated 7 December 2021. [REDACTED] has consulted internally to provide feedback to the public consultation process.

The following comments are raised about the recommendations in the Review Report:

- a. [REDACTED] acknowledges the importance of revising and improving safety legislation to address technological change and relevant trends in industry.
- b. The recommendations made about licensing appear to be substantial in nature and should be consulted broadly with industry to ensure effective and proportional safety regulatory outcomes are achieved. A staged approach to introducing new requirements should be considered.
- c. Amendments to licensing should consider harmonizing requirements across states and territories whenever practical.
- d. Amendments regarding risk controls should leverage of existing Australian standards including:
  - AS/NZS 4836:2023 Safe working on or near low-voltage and extra-low voltage electrical installations and equipment);
  - AS AS/NZS 5139:2019 Electrical installations - Safety of battery systems;
  - AS/CA S009:2020 Installation requirements for customer cabling (Wiring Rules- for Telecommunication networks).
- e. Please consider amending the requirements for direct supervision for electrical work and substituting it with requirements for relevant levels of supervision, first line assurance and a proportional risk-based approach to assure the overall safety and integrity of electrical work.
- f. Recommendations to amend requirements for electricity entity safety management systems (including provision of risk management plans) should consider adopting or referencing the requirements of AS5577 (Electricity network safety management systems) to move towards a common risk-based approach across states and territories.

Further feedback about the recommendations in the Final Report is provided in the comments register attached. [REDACTED]



does not have feedback about recommendations not referenced in the table below at this time.

Recommendation reference	Recommendation detail	
<p><b>Recommendation 4:</b></p>	<p>To ensure the Act keeps pace with technological change, consider creating a general category of exception to the “extra low voltage” threshold for the definition of “electrical equipment”, to reflect risk to life and property by ELV electrical equipment.</p>	<p>Relevant risks and controls for ELV must be addressed by relevant parties. This content could be covered by a CoP (without necessarily requiring a more complex licensing framework).</p> <p>Licensing requirements for ELV work would need to be developed considering that the current (electrical mechanical) license does not cover ELV installations in detail.</p> <p>The amendment should consider adopting text similar to: Where an electrical installation operates at extra-low voltage but does not comply with the SELV or PELV requirements of the wiring rules (AS/NZS 3000) it shall be deemed to be operating at low voltage and shall be subject to the relevant requirements of LV work.</p> <p>This element of legislation review should aim to align with content/requirements (or point to):</p> <ul style="list-style-type: none"> <li>- AS/NZS 4836:2023 Safe working on or near low-voltage and extra-low voltage electrical installations and equipment.</li> <li>- AS AS/NZS 5139:2019 Electrical installations - Safety of battery systems for use with power conversion equipment</li> <li>- AS/CA S009:2020 Installation requirements for customer cabling (Wiring Rules- for Telecommunication networks)</li> </ul> <p>These recently reviewed Australian standards cover topics about ELV installations and arc flash hazards (on LV and ELV installations).</p>
<p><b>Recommendation 5:</b></p>	<p>For solar PV panels falling within the definition of electrical equipment (see Recommendation 1), consider ensuring that the resultant “electrical work” definition is amended as needed to require:</p> <p>(a) all connections and testing of PV module cabling as well as earthing and bonding work be performed by competent licensed electrical worker/s; and</p> <p>(b) installation of cabling to be carried out by a licensed electrical worker or an unlicensed person assisting a licensed electrical worker and working under their direct supervision; and</p> <p>(c) the mounting, fixing, and locating of solar PV modules and arrays to be carried out by competent persons under the direct supervision (Recommendation 16) of a licensed electrical worker (Act s 18(2)(f)).</p>	<p>As per recommendation 4.</p>
<p><b>Recommendation 6:</b></p>	<p>Consider including within the definition for Electrical Work that the electrical aspects of air conditioning / mechanical services work is electrical work and the tasks of fixing, installation of brackets/mounting of equipment and mechanical cable protection is ancillary to the complete installation.</p>	<p>As per recommendation 4.</p>
<p><b>Recommendation 7:</b></p>	<p>Ensure the installation of mechanical protection for cables, including but not limited to conduit (both plastic and metal), cable racks and trays, skirting, troughs etc., and the installation of cabling into these protection components is the work of licensed electrical workers or to be performed under the direct supervision of a licensed electrical worker. Associated with this work is earthing and bonding work, to be defined as electrical work (Recommendation 5) and must only be performed by competent licensed electrical worker/s.</p>	<p>This recommendation should consider broad industry comments. Non-electrical worker induction and first line assurance by electrical workers (and relevant QTPs) could address the intent of the recommendation.</p> <p>Industry may experience difficulty resourcing this requirement in a constrained skills market.</p> <p>Refer also to comments on recommendation 4.</p>

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<b>Recommendation 9:</b>	It is recommended that the electrical aspects of fire protection work are recognised as “electrical work”, notwithstanding equipment being “extra low voltage”, either via the implementation of Recommendation 3 or a specific amendment to the definition of “electrical work”.	As per recommendation 7.
<b>Recommendation 14</b>	Clarify the definitions of “serious electrical incident” and “dangerous electrical event” by adding examples for different levels of voltage, including ELV (considering Recommendation 4) , and clarifying terminology used in those definitions such as: (a) Considering the term :doctor: with standard national law terminology - “medical practitioner” (s 11(b)-(c)). (b) Specifying what it means to be “treated” by a doctor/medical practitioner, including what is not deemed “treatment”, as well as what is meant by “supervision” (s 11(b)-(c)). (c) Specifying a threshold for “significant property damage (s 12(c)).	Non material change that may lead to more notifiable events under electrical safety legislation.
<b>Recommendation 16</b>	It is recommended that the three levels of supervision be defined in the legislation by explicitly including the three recognised levels of supervision – direct, general and broad, as follows: Direct means constant in person monitoring by the licensed electrical worker, who remains within sight and/or earshot of the work being carried out by a person directly assisting the licensed electrical worker in conducting electrical work. General means for a person directly assisting the licensed electrical worker in conducting electrical, the licensed electrical worker is available in the same work location for in person assistance or instruction as needed. Broad means occasional in person contact at intervals during the day determined by the licensed electrical worker, for a person assisting the licensed electrical worker.	The application of direct supervision for a broad range of tasks is likely to require changes to resourcing across industries in a constrained labor market.
<b>Recommendation 17(a)&amp;(c):</b>	Consider clarifying miscellaneous requirements related to supervision, by: (a) inserting the word “direct” before “supervision” in section 18(2)(e)(iii); and, (c) requiring direct supervision for a person directly assisting the licensed electrical worker in the laying, cutting or sealing underground cables that are part of the works of an electricity entity before the initial connection of the cables to an electricity source (s 18(2)(j)).	Impact would depend on the definition of “direct supervision” specially for long cable runs, contact lines, powerlines, et cetera. Direct supervision requirements should be replaced with provisions for broad supervision, general supervision, first line assurance and a proportional risk-based approach to assure the overall safety and integrity of electrical work.
<b>Recommendation 19</b>	Consider amending the definition of safety observer to require a safety observer maintains currency of competence in rescue and resuscitation and the non-accredited course - “provide support to an electrical tradesperson” (RIISAM214A) or equivalent as determined by the Regulator (Schedule 9). (a) That training should be undertaken prior to acting as a safety observer and refreshed every 12 months.	RIISAM214A appears to be superseded (in March 2021) and not replaced by a current package.
<b>Recommendation 24</b>	Consider including explicit duties of Qualified Technical Persons (QTP) in electrical safety legislation, as set out in current ESO guidance on the role of a QTP (as published on the WorkSafe website The role of the qualified technical person (QTP)   WorkSafe.qld.gov.au), requiring QTPs to: (a) develop and implement a safe system of work, and review and update procedures; and; (b) ensure currency of worker competence and that scope of work is within a worker’s current license scope and competence level; and (c) ensure appropriate levels of supervision for all workers, including apprentices and trainees (recommendation 13); and (d) annually arranging training and skills programs for workers, and regularly consult with workers on training needs; and (e) advise the PCBU and workers on compliance matters, including Australian Standards, legislation, and codes of practice.	The QTP guideline should be revised and consulted broadly with relevant stakeholders to ensure to ensure effective and proportional safety regulatory outcomes are achieved. Current QTP training available in the market focuses on domestic and industrial installations and does not cover a broad and expanding range of work undertaken by licensed electrical workers.

Recommendation reference	Recommendation detail	
<b>Recommendation 25</b>	Consider introducing a requirement that all businesses that employ (non-contract) electrical workers also must directly employ a QTP.	<p>One single QTP may not be able to cover a medium or large electrical contractor (or PCBU who employs electrical workers). The QTP framework should be clarified to describe the role (or function) and guide the resourcing and implementation of this controls.</p> <p>The existing QTP assessment is only applicable to domestic and commercial switchboards and subcircuits. Many electrical workers do not undertake the work covered by the QTP qualification (e.g. work on vertical transport, marine/aviation). Consideration should be given to making the QTP assessment applicable to a broader sector of the electricity industry (e.g. specialised licenses).</p>
<b>Recommendation 26</b>	Consider introducing administrative means to ensure QTPs working across several organisations can fulfill the duties of the position effectively	As per recommendation 24 and 25.
<b>Recommendation 29</b>	Consider including within the Act, provisions equivalent to Health and Safety Representatives (HSR) and Work Health and Safety Officers (WHSO) found in the Work Health and Safety Act 2011.	This element of legislation should point to the WHS when appropriate instead of replicating requirements.
<b>Recommendation 34</b>	<p>Consider the introduction of CPD requirements for all license holders, phasing in a requirement at initially low points attainment threshold (recommended at 6 hours/year equivalent or similar), to be increased over a suitable period of time until full implementation is achieved over no more than two contractor license periods (six years).</p> <p>(a) It is considered that a full CPD program would not exceed a total of 20 hours CPD per year, or 60 hours each three-year licensing period upon full implementation. It is further recommended that for electrical contractors, professional development activities may include four areas of competence being technical, safety, business and leadership to ensure maintenance of competency across the scope of the license; and</p> <p>(b) For licensed electrical workers who hold a supervisory or management role, a maximum of 15 hours CPD per year across technical, safety leadership; and</p> <p>(c) And for electrical worker license holders, a maximum of 12 hours CPD per year across technical and safety in accordance with the maintenance of competency across the scope of the license.</p>	<p>CPD available within the industry may only be applicable to domestic and commercial switchboards and subcircuits. The majority of the electrical workers in specialist areas only perform specialized electrical work and may require specialized CPD.</p> <p>The requirement for CPD should allow for enterprise training packages to address the (electrical) hazards and environments where specialised electrical workers operate. Training needs analysis should underpin this CPD to ensure adequate coverage of hazards and quality assurance requirements, instead of referring to CPD that may not be relevant to the work undertaken by specialized workers (e.g. lines workers, substation specialists, signaling electricians).</p>
<b>Recommendation 35</b>	<p>Consider reforming license renewals to include testing to ensure licensee competency has been maintained through the licensed period, including by considering the following amendments:</p> <p>(a) Empowering the Commissioner to conduct an initial review of licensing renewal assessments, supported by the Electrical Licensing Committee (ELC); and</p> <p>(b) Informed by review outcomes, the Commissioner and ELC to develop and recommend a skilling/training program inclusive of an overview of legislative requirements, relevant changes in legislation, codes of practice and standards, requirements when working with apprentices and trainees and young people and other testing requirements as appropriate; and</p> <p>(c) Empower the Electrical Safety Office to develop a license renewal assessment informed by these outcomes.</p>	As per recommendation 34.
<b>Recommendation 36</b>	Consider introducing license renewal assessment every five years for electrical workers and every three years for electrical contractors.	As per recommendations 25 and 35.
<b>Recommendation 43</b>	Consider implementing a requirement for QBPs or the PCBU to accept the reasonable advice, suggestions and solutions provided by a QTP with respect to electrical safety. Further, consider implementing a penalty infringement should the QBP or PCBU fail to act on the reasonably practicable electrical safety advice provided by a QTP.	No major comment to be raised, noting that the reasonable advice from QTPs may require review by competent workers (such as registered professional engineers) in many instances.

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<b>Recommendation 45</b>	<p>Explore the development and implementation of an electronic reporting portal to enable electrical contractors and their workers to submit reports for inspection and testing results, including evidence of tests to be administered by the Electrical Safety Office.</p> <p>(a) It is further recommended the reports should include a list of the in-scope electrical equipment/devices installed to assist the Electrical Safety Office to regulate compliance with legislation and wiring rules as well as to assist in the event of a product recall.</p>	<p>It is unclear how this recommendation could be implemented and the extent of installations considered in-scope for this requirement.</p> <p>Lodging test results and certificates will result in additional workload for electrical workers.</p> <p>This requirement should be clarified and consulted broadly with industry to ensure a practical solution is adopted.</p>
<b>Recommendation 49</b>	<p>Consider enhancing the Regulator’s powers to obtain and provide information regarding electrical safety (Act s 122C), to better fulfill the Regulator’s function to “provide advice and information on electrical safety to duty holders under this Act and to the community” (Act s 122(1)(c))</p>	<p>The review of this proposed amendment should consider other relevant elements of legislation.</p>
<b>Recommendation 54</b>	<p>Consider enhancing the Electrical Licensing Committee (ELC) functions to include appropriate oversight of electrical contractor license holders inclusive of Qualified Business Persons (QBP) and Qualified Technical Persons (QTP) by:</p> <p>(a) Providing the ability to have an electrical contractor license holder referred to the ELC whenever an electrical worker employed by the electrical contractor is referred under s 106; and</p> <p>(b) Providing the ability of the ELC to have the QBP and/or QTP on an electrical contractor license referred to the ELC where an electrical worker employed by an electrical contractor is referred under s 106; and</p> <p>(c) Providing the ability to have the QBP and/or QTP for a Person Conducting a Business or Undertaking (PCBU) to be able to be referred to the ELC where an electrical worker employed by the PCBU is referred to the ELC under a s 106.</p>	<p>This change could have a considerable impact on the QTP role. Refer to Recommendation 25.</p>
<b>Recommendation 60</b>	<p>Consider implementing similar provisions from the Queensland Coal Mining Safety and Health Act 1999 (s 109 &amp; s 118) for industry safety and health representatives. The union after a ballot of its members may appoint up to three industry safety and health representatives for a term of up to four years. The role is conducted on a full-time basis and ensures an acceptable level of electrical safety, reviews electrical safety procedures, takes action to ‘make safe’ in the event of an electrically unsafe installation and assists in the onsite investigation of unsafe practices.</p>	<p>This change should be subject to broad industry consultation. The extent and benefits of the proposed amendment should be clarified and consulted further.</p>
<b>Recommendation 61</b>	<p>Consider conducting a review of the financial contributions that support electrical safety in Queensland with a view to require proportionately determined financial contributions from all relevant Government Owned Corporations and industry sectors including electrical contracting and renewable generators, in addition to existing “electrical safety contributions” for distribution entities (Act, Part 14A, Division 1). This recommendation is to ensure these financial contributions keep pace with the rapidly expanding volume of electricity market participants.</p>	<p>The extent and benefits of the proposed amendment should be clarified. It is assumed that the approach will be risk based, however, information on the specific changes should be consulted further with relevant stakeholders.</p>
<b>Recommendation 62</b>	<p>Consider undertaking a review of licensing fees to ensure that the costs of compliance are taken into account in determining license costs, in line with the fees and charges principles in consultation with Queensland Treasury.</p>	<p>This change should be subject to broad industry consultation. The extent and benefits of the proposed amendment should be clarified further.</p>

Recommendation reference	Recommendation detail	
<p><b>Recommendation 63</b></p>	<p>Consider clarifying and enhancing miscellaneous requirements and definitions related to licensing and training, including</p> <p>Under the Act, consider the following recommended amendments:</p> <p>(a) replacing the definition of “relative” of a person, with the following list found in Queensland’s industrial relations framework:</p> <ul style="list-style-type: none"> <li>(i) spouse; former spouse, de-facto spouse, former de-facto spouse; or</li> <li>(ii) child, ex-nuptial child, step-child, adopted child, ex-foster child; or</li> <li>(iii) parent, grandparent, grandchild, sister or brother of the person or spouse of the person; and</li> </ul> <p>(b) requiring a person conducting a business or undertaking to keep, in its register of licensed workers, the following details for workers presenting interstate licenses:</p> <ul style="list-style-type: none"> <li>(i) license jurisdiction,</li> <li>(ii) any conditions on the license, and iii) the expiry date of license. Under the Regulations, consider the following recommended amendments; and</li> </ul> <p>(c) clarifying the meaning of “recognised industry practice” for CPR training required in relation to electrical work (s 28); and</p> <p>(d) requiring licensed electrical contractors to inform the Electrical Safety Office of a QBP or QTP ceasing to work with the contractor:</p> <ul style="list-style-type: none"> <li>(i) within 72 hours for the QBP or QTP on that contractor’s license, and</li> <li>(ii) within 7 days for additional QTPs (ss 49-50); and</li> </ul> <p>(e) reviewing and instating contemporary levels of insurance cover for electrical contractor licenses (s 51); and</p> <p>(f) removing the refundable component of fees for refused or withdrawn applications (ss 63, 236, 256 and Schedule 8).</p>	<p>Item (c)</p> <p>This change would have a moderate impact on the industry.</p> <p>All electrical workers and competent assistants would be required to renew their CPR/LVR qualifications 6 monthly instead of 12 monthly.</p> <p>This change should be subject to broad industry consultation. The extent and benefits of the proposed amendment should be clarified further.</p>
<p><b>Recommendation 66</b></p>	<p>Consider phasing in a requirement for safety switches on all sub-circuits in all domestic, commercial and industrial settings, both on and off-grid. In addition, propose that Government work collaboratively to address potential cost impacts that may disproportionately affect vulnerable consumers.</p>	<p>The extent and benefits of the proposed amendment should be clarified further.</p>
<p><b>Recommendation 67</b></p>	<p>Consider introducing a requirement for de-energisation prior to work near energised parts of an electrical installation, subject to necessary exemptions for energised work, such as testing for defects or faults in accordance with a risk assessment, safe work method and with appropriate Personal Protective Equipment (PPE).</p> <p>(a) further consider the introduction of requiring specific PPE when this work is undertaken including the required standard for working near exposed live parts (in accordance with Energy Safe Victoria’s Arc Flash Hazard Management fact sheet); and</p> <p>(b) consideration is also to be given to requiring the PPE to be maintained and calibrated and tested to ensure it has the required integrity as per Australian Standards and is fit for purpose for use; and</p> <p>(c) consider implementing in the Regulations minimum standards for specific technologies such as thermography and airborne ultrasound sensors to ensure the safety of persons conducting electrical safety inspections on electrical installations.</p>	<p>Refer to comments on recommendation 4.</p>

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<b>Recommendation 70</b>	<p>Consider a phased introduction of a requirement for a licensed electrical worker to perform an electrical safety inspection on all properties within five years of commencement of this requirement, and thereafter within five years of the last electrical safety inspection or receipt of an electrical safety certificate [see Recommendation 69, directly above], whichever is later.</p> <p>(a) it is further recommended for consideration that where an inspection identifies asbestos panels and boards within electrical switchboards, the homeowner must replace to meet current standards. It is suggested that homeowners have up to two years from the date of initial identification to rectify.</p>	<p>This element of review should point to relevant WHS legislation and CoPs when appropriate instead of replicating requirements for the safe management of asbestos on legacy sites.</p>
<b>Recommendation 74(c):</b>	<p>Consider clarifying and enhancing standards that apply to electrical installations (Regulations, Part 6), including by considering:</p> <p>(c) ensuring there is a legislative basis in the Act for regulations concerning work involving water equipment (s 72), and, if it is to be maintained, work involving electric motors (s 73).</p>	<p>Further clarification of intent and content should be provided.</p>
<b>Recommendation 79</b>	<p>Consider clarifying and enhancing the requirements for safety management systems (SMS) (Regulations, Part 11), including by considering:</p> <p>(a) clarifying the requirements regarding both the contents of and need to supply the Regulator with annual audit plans, audit reports, corrective action plans, and risk management plans (s 234); and</p> <p>(b) requiring prescribed electricity entities to provide risk management plans to the Regulator, in addition to maintaining a SMS (s 234(3c), (4a)).</p>	<p>The intent and benefit from this recommendation should be clarified. The term risk management plan should be clarified. If this topic relates to the Formal Safety Assessments referenced in AS5577-2013 (Electricity network safety management systems) this should be clarified.</p> <p>The review should consider if revisions to legislation should reference or adopt the requirements of AS5577 to move towards a common approach to developing and maintaining electricity network safety management systems across States and Territories whenever practical. A common approach could foster improved collaboration and sharing of information across relevant industry stakeholders.</p>
<b>Recommendation 81</b>	<p>Consider amending the Serious Electrical Incident and Dangerous Electrical Event notification and reporting requirements to ensure they remain contemporary and to clarify miscellaneous requirements (Regulations, Part 14), including by considering:</p> <p>(a) requiring distribution entities to notify the Regulator of Serious Electrical Incidents and Dangerous Electrical Events even if they are not the distribution entity whose works are the subject of the incident, or that supplies electricity to the electrical equipment that is the subject of the incident (Regulations ss 264, 266(1)(b)); and</p> <p>(b) clarifying that off-grid contexts are within the reporting required by distribution entities for electric shock (Regulations s 267); and</p> <p>(c) requiring prescribed electricity entities to publish reports of incidents occurring in each calendar year, within three months of the end of the relevant year (Part 14, Schedule 6).</p>	<p>Further clarification of intent and content should be provided.</p> <p>The duty of PCEE (Person in control of electrical equipment) should be clarified further in the definition (perhaps using examples) to address the intent of this recommendation.</p>