

Northern Territory Electrical Safety and Licensing Reference Group Report on electrical safety and licensing review:

*Electrical Workers and
Contractors Act 1978 and
Electricity Reform Act 2000*

20 December 2019

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Acronyms	Full form
NT	Northern Territory
WHS (NUL) Act	<i>Work Health and Safety (National Uniform Legislation) Act 2011</i>
ERA	<i>Electricity Reform Act 2000</i>
EWCA	<i>Electrical Workers and Contractors Act 1978</i>
ESR	Electricity Safety Regulator (appointed under the <i>Electricity Reform Act 2000</i>)
The Board	Electrical Workers and Contractors Licensing Board established under the <i>Electrical Workers and Contractors Act 1978</i>
PWC	Power and Water Corporation
NTWS	NT WorkSafe

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1. Terms of Reference

Terms of Reference – Occupational Licensing and Electrical Safety

The Hon Natasha Fyles MLA, Attorney-General and Minister for Justice, established the Electrical Safety and Licensing Reference Group (the Reference Group) and asked that its members work together for the following purposes:

1. Develop recommendations for the Minister relating to amendments to both the *Electricity Reform Act 2000* and the *Electrical Workers and Contractors Act 1978*;
2. Compile a list of necessary short term changes and longer term amendments to improve electrical safety and licensing;
3. Identify legislative mechanisms to improve electrical safety for all Territorians;
4. Identify existing gaps and issues in current legislation and potential way to improve the operation of the legislation;
5. Consider legislation and governance in other jurisdictions in mapping out future reforms in the Northern Territory (NT);
6. Provide direction on how electrical licensing in the NT can better align with other jurisdictions and provide pathways to national licensing;
7. Clarify the roles and responsibilities for the Electrical Licensing Board and NT Worksafe Electrical Inspectors;
8. Take into account the Government's Roadmap to Renewables commitment and the increasing popularity for renewable energy;
9. Ensure suggested amendments meet the needs of the Northern Territory and take into account the geographic isolation and current and future energy sources in the NT;
10. Assess licence renewal requirements for electrical workers and constructors licences to ensure competency;
11. Ensure the quality and oversight of electrical apprentice training, profiling and assessment within the electrical industry is adequate;
12. Assess the impact of a strong auditing regime and use if the disciplinary process to ensure maximising safety outcomes and effectiveness to act as deterrence;
13. Seeks appropriate industry and other expert advice where required; and
14. Liaise with the Department of Treasury and Finance (including the Utilities Commission) and the Department of Attorney-General and Justice (including NT Worksafe and Licensing NT) in developing recommendations.

Terms of Reference – Department of Treasury and Finance (Treasury) Review of Electricity Regulation

In establishing these terms of reference the Minister also noted that Treasury will also be undertaking an internal review in early-mid 2018 with the following points to be considered:

- Ensure all the frameworks 'work' together from a legal/regulatory perspective (application of the National Electricity Rules, design and implementation of a wholesale electricity market, and strengthening customer protections).

- Outdated/incorrect terms, including to recognise that there is now contestability in the electricity industry and the structural separation of the Power and Water Corporation.

Membership of the Reference Group

Name	Role/background
[REDACTED]	Department of the Attorney-General and Justice
[REDACTED]	Office of Sustainable Energy, Department of Trade, Business and Innovation*
[REDACTED]	Licensing NT Department of the Attorney-General and Justice
[REDACTED]	NT Worksafe Department of the Attorney-General and Justice
[REDACTED]	Licensing/Consumer Affairs (from July 2019)
[REDACTED]	Chair, Electrical Workers and Contractors Licensing Board
[REDACTED]	Electrical Trades Union
[REDACTED]	Industry (and member of the Electrical Workers and Contractors Licensing Board)
[REDACTED]	Power and Water Corporation

* In September 2019, responsibility for the *Electricity Reform Act 2000* (excluding provisions about pricing and safety regulation) was transferred from the Department of Treasury and Finance to the Office of Sustainable Energy within the Department of Trade, Business and Innovation. This was formalised with the Administrative Arrangements Order of 16 December 2019.

2. Summary of Recommendations and Findings

Recommendations regarding legislative and administrative reform

2.1. Long Term Reforms

General proposals applicable to electrical safety, economic regulation and occupational licensing

1. Separate the electrical safety provisions from those dealing with economic regulation. [see chapter 5]
2. The enactment of modern legislation that provides for the licensing of electrical workers and contractors being a single Act (i.e. covering Electrical Safety and Licensing). The new Act will replace the provisions of the *Electricity Reform Act 2000* concerning electrical safety and the provisions of the *Electrical Workers and Contractors Act 1978* concerning the licensing of electrical workers and businesses. It would not deal with economic regulation of the generation, supply, distribution and retailing of electricity. [see chapter 7]
3. The creation of the NT Electrical Safety Regulator (senior government official) who will have overall statutory responsibility for the operation of the new Act, including occupational licensing support, enforcement (including public and industry awareness, actions for breach and policy reforms) [see chapter 7].
4. Remove the statutory role of executive officer to the Board under the *Electrical Contractors and Workers Act 1978* but state that it is the role of the Electrical Safety Regulator to provide both administrative and technical support for the Board. The NT Electrical Safety Regulator would take over the current statutory role of the executive officer. [see chapter 7]
5. The establishment of an electrical safety and licensing authority that will, with the support of the Electrical Safety Regulator, have responsibility:
 - (a) for the making of licensing and disciplinary decisions relating to electrical workers (as currently defined in the *Electrical Workers and Contractors Act 1978*) and the businesses (including individuals that can perform electrical installation work that employ such workers (as set out in section 33 of the *Electrical Workers and Contractors Act 1978*); and
 - (b) for providing advice on regulatory matters to the Electrical Safety Regulator and the Attorney-General and Minister for Justice. [see chapter 7]
6. The licensing authority be structured so that it has seven members – namely the relevant senior government official (as an ex officio member) plus six other members appointed by the Minister. In making an appointment of a person the Minister must have regard to the person's practical experience and competence in the management of electrical safety and training [see chapter 7].
7. The Minister having the power to establish additional specialist subject matter committees (for training, safety education and electrical equipment) which would comprise the Departmental representative and others who may be specialists in the field relevant to the work of the specialist committee [see chapter 7]).
8. The Electrical Safety Regulator having responsibility for appointing authorised officers (inspectors) for both licensing and electrical safety and that the operations of those authorised officers be governed by provisions along the lines set out in Part 9, sections 156-190 of the *Work Health (National Uniform Legislation) Act 2011*. [see chapter 8]
9. Authorised officers/inspectors for licensing and for electrical safety should be part of a single work unit that is the administrative responsibility of NT Worksafe. In the short term the Electrical

Contractors and Workers Act 1978 and the *Electricity Reform Act 2000* could be amended so as to provide for common terminology and appointment processes for electrical safety authorised officers/inspectors. [see chapter 8]

10. Ensure that a breach of safety requirements under the *Electricity Reform Act 2000* is grounds for disciplinary action before the licensing authority with the Electrical Safety Regulator having responsibility for determining what might be the appropriate regulatory response to the breach. [see chapter 8]
11. Provide that the limitations period for prosecutions for electrical safety offences be five years. [see chapter 8]
12. Provide that the limitations period for prosecutions for licensing and stealing offences be two years. [see chapter 8]
13. The proposal, for the short term, is that the Department of the Attorney-General and Justice and the Electrical Workers and Contractors Board establish an enforcement and compliance policy.

In the longer term, legislation along the lines of section 230 of the *Work Health and Safety (National Uniform Legislation Act 2011)* should oblige the Electricity Safety Regulator to establish an enforcement and compliance policy (and publish it). This would, for example, spell out when disciplinary action might be taken (before the Board) or an infringement notice issued or prosecution occur in the criminal courts or where a safety improvement notice might be issued [see chapter 8].

14. Formalise who can commence a prosecution with the model being section 230 of the *Work Health and Safety (National Uniform Legislation) Act 2011* which provides that the prosecutions are brought in the name of the main statutory regulator (i.e. in this case the Electrical Safety Regulator) or by an inspector who has an appropriate authorisation from the regulator. Additionally, it is proposed that the Electrical Safety Regulator have the power to authorise others, such as licensed electrical entities (eg Power and Water Corporation), to commence prosecutions if satisfied that they have an enforcement policy consistent with the policy referred to in recommendation 12 [see chapter 8].
15. Retain the current position that there is no time limit on commencing disciplinary action and that the *Electrical Workers and Contractors Act 1978* state this but also set out general principles (in a published enforcement and compliance policy) for determining when it is too late to commence disciplinary proceedings. [see chapter 8]
16. Review offences with the view to widening the scope of electrical safety offences that may be dealt with by way of infringement notices. [see chapter 8]
17. Provide for the issuing of infringement notices for breaches of the regulatory provisions of the licensing legislation. [see chapter 8]
18. Provide that it is an offence for an unlicensed person to hold out (e.g. advertise under pretence) that they are a licensed electrician or provider of electrical services. [see chapter 8]
19. Amend the *Electricity Reform Act 2000* so that it is clear that an order for rectification can be made by the Electrical Safety Regulator without the need for any prosecution and that it can be directed at either the occupier of the installation or the person who conducted the work. Any costs incurred by the occupier or owner of the installation would be recoverable from the person who did the work that required rectification. [see chapter 8]

Occupational licensing proposals

20. Interstate licensed electricians (licenced workers, not licenced contractors) should be able to provide electrical services of the kind permitted by their interstate licence in the Northern Territory without obtaining a Northern Territory licence:
 - (a) if they have not set up a permanent business in the Northern Territory;
 - (b) if they notify the regulatory body that they intend to conduct such a business or work; and
 - (c) so long as they comply with Northern Territory laws regarding matters such as standards and certificates of compliance.

[see chapter 9]
21. Automatic recognition should not apply to corporate licensees. [see chapter 9]
22. Take out the licensing provisions references to classes of licence and permit the licensing body to issue restricted licences (subject to any prescriptions in the regulations) and to a general discretion to provide for exemptions. [see chapter 9]
23. Apprentices should continue to be registered under both the *Training and Skills Development Act 2016* and under the licensing legislation. [see chapter 9]
24. Replace section 42B of the *Electrical Workers and Contractors Act 1978* with a requirement that apprentices and their supervisor comply with regulations or guidelines issued by the regulatory body concerning the range of electrical work and the degree of supervision required having regard to their technical and practical experience. [see chapter 9]
25. The *Electrical Workers and Contractors Act 1978* should permit regulations to be made so that an apprenticeship pre-entry assessment test could be made compulsory. The making of such a regulation would depend on the practicality of developing such a test. [see chapter 9]

Proposals applicable to electrical safety

26. The enactment of legislation mandating standards concerning the safety of electrical appliances (with the standards to be aligned with those in place elsewhere in Australia) with the legislative provisions to be based on those in place in Tasmania. [see chapter 10]
27. Amend the *Electricity Reform Act 2000* so that the various regulatory requirements applicable to “electrical installations” apply to solar panels, batteries, other small generation units and other emerging technologies [see chapter 10].
28. Provide that the electrical safety regulator rather than the Utilities Commission is responsible for approving safety management systems and mitigation plans for licensed generators and network operators and that such schemes become regulatory obligation. [see Chapter 10]
29. The Electricity Safety Regulator be provided with certificates of compliance (except where regulations provide that there is no need to provide certificates) as approved by the Electricity Safety Regulator; and be informed by the Network Operator of proposed commissioning of electrical work. [see chapter 11].
30. Repealing section 71 “Reporting of Accidents” of the *Electricity Reform Act 2000* in favour of Part 3 “Incident Notification” of the *Work Health and Safety (National Uniform Legislation) Act 2011*. [see chapter 11]

Miscellaneous proposals

31. Amend the current stealing and tampering offences in sections 96 and 97 of the Electricity Reform Act 2000 so that:
 - (a) they mirror the offences in sections 66-70 of the *Electricity Supply Act 1995 NSW*;
 - (b) they include proof provisions along the lines of section 251 of the *Electricity Act 1994 (Qld)*; and
 - (c) so that they are infringement notice offences.[see chapter 11]
32. Vegetation Management - amend the *Electricity Reform Act 2000* so that:
 - (a) landowners are responsible for costs of ensuring that vegetation on their land does not interfere with the supply of electricity;
 - (b) electricity entities have power to enter land and deal with vegetation in emergency situations;
 - (c) provide for the making of regulations that deal with what are requirements concerning vegetation; and
 - (d) oblige electrical entities to publish requirements concerning vegetation (so if land owners comply) they are not liable for any costs in the event that the electrical entity incurs costs arising from the existence of that vegetation. [see chapter 11]
33. Revise penalties so that they equate to the maximum penalties in place elsewhere in Australia. [see chapter 12]
34. All criminal offences should be worded so that they are consistent with the application of Part IIAA of the *Criminal Code*. [see chapter 12]
35. Provide that the Northern Territory Civil and Administrative Tribunal deals with appeals against administrative decisions regarding licensing and safety [see chapter 12]
36. Amend the *Electrical Workers and Contractors Act 1978* by repealing the provisions of that Act which suggest that government entities such as the Power and Water Corporation and Power Generation Corporation retain regulatory roles or are in a special position compared to other electrical supply or distribution businesses. [see chapter 13]
37. The Reference Group members agreed that there can be no difference in electrical safety standards between major centres and remote communities. [see chapter 14]

2.2. Short Term/Urgent/Statute Law Revision Administrative and Legislative Reforms

For the short term the appropriate amendments are those numbered 8-13, 15-17, 21, and 24, 26-27, 29-30.

2.3. Findings in respect to the Terms of Reference (TOR)

TOR 1-5

The Reference Group identified that there are overlaps and lack of clarity in with the *Electrical Contractors and Workers Act 1978*, *Electricity Reform Act 2000* and the *Power and Water Corporation Act 1987* from a technical, licensing and safety perspective.

Responsibilities for both sets of regulatory responsibilities (licensing and safety) must be set out in a manner designed to maximise understanding and be reasonably practicable to implement and administer. The

Reference Group finds that for the longer term, the regulatory responsibilities should be in the one Act (based on the Queensland legislation).

The Reference Group also found that the legislative structure for the inspectorate is confusing and unnecessarily complex. There is no good reason why persons with inspectorial and investigative roles should operate under governance provisions that differ depending on the kind of breaches being investigated,

For the short term the Reference Group finds that the following changes should be made:

Electricity Reform Act 2000

- amend the definition of electricity installations so that it includes solar panels, batteries, other small generation units and emerging technologies; and
- repealing section 71 “Reporting of Accidents” in favour of Part 3 “Incident Notification” of the *Work Health and Safety (National Uniform Legislation) Act 2011*.

Electrical Contractors and Workers Act 1978

- remove legislative provisions that deal with the Power and Water Corporation as if it has regulatory authorities. Under the formal structure of the legislation the Corporation should be dealt with in the same way as any other supplier or distributor of electricity;
- update the maximum penalties and provide for a wider range of enforcement options including the provision of a comprehensive infringement notice scheme; and
- remove the executive officer to the Board under the *Electrical Contractors and Workers Act 1978* but state that it is the role of the Electrical Safety Regulator to provide support for the Board.

General Amendments

- amend both the *Electrical Contractors and Workers Act 1978* and the *Electricity Reform Act 2000* so that there is a common inspectorate whose function would include the administrative and investigative functions of the Executive Officer and the Chairman of the Board but not the support role to the Board.

TOR 5 and 7

The Reference Group finds that there is a need for a single government regulator responsible for the overall administration of the legislation for both safety and licensing. This would cover matters such as the issuing of licences, supervision of inspectors, industry education and enforcement (disciplinary action and prosecutions);

There is a need for other bodies (such as a licensing/disciplinary authority) that would deal with more complex licensing decisions (e.g. licensing applications rejected by the government regulator), disciplinary matters and policy reviews and consultations as directed by the Minister.

The creation of a single enforcement inspectorate with stronger auditing and regulatory powers and more appropriate penalties will maximise safety outcomes.

The Reference Group examined a sample of interstate electrical licensing and safety legislation and the following aspects of the interstate Acts:

- a) the extent to which licensing of workers and contractors is integrated with general electrical safety and work health legislation;
 - b) the operations of the main electrical safety regulator;
-

- c) the operations of the licensing regulator; and
- d) the interrelationships with the economic/industry regulator.

After a benchmarking exercise against other jurisdiction's legislation, the Reference Group concluded that it is appropriate to develop new legislation against the current Queensland legislation.

Whilst all of the policy positions taken in the Queensland legislation might not necessarily be suitable for the Northern Territory. The Queensland legislation appears to deal in relatively straightforward terms with the issues that will need to be dealt with in the longer term.

TOR 6

The Reference Group found that in considering the content of any new legislation, the core definitions of electrical work and competency requirements should align with those in place elsewhere in Australia as set out in recent modern legislation in jurisdictions such as Queensland, Tasmania and the Australian Capital Territory. The crux of this appears to have the basic licence as being for electrical workers and electrician businesses. But with a clear capacity for subordinate legislation to provide for classes of electricians business and employees of electricians.

The Reference Group also found that the legislation should provide for automatic recognition of prescribed interstate licensing of individual licences (rather than simply relying on mutual recognition or administrative processes).

It was also found that there should be a requirement to obtain a local licence if an individual substantially operates in the Northern Territory.

The Reference Group considers that the simplification of the regulatory regime in the Northern Territory along with the automatic recognition of individual interstate licences meet, as best possible, the issues that arise from geographic isolation.

TOR 8

The Reference Group found a need for urgent amendments to the *Electricity Reform Act 2000* to provide for modern definitions and improve capture of renewable energy sources and of modern battery storage systems. These reforms will support the Government's Roadmap to Renewables commitment and improve safety outcomes for consumers and business and home owners.

TOR 9

In recognising the varying locations in which electrical work is undertaken in the Northern Territory, the Group recommended no difference in safety or assurance standards.

TOR 10

The Reference Group did not identify any problems relating to competency issues regarding the renewal of licences.

TOR 11

The Reference Group did not identify any systematic or legislative problems concerning training and assessment that is occurring in the Northern Territory. The Reference Group noted, and supported, the hands on approach of the current licensing authority when dealing with licensing applications and disciplinary matters. The Reference Group suggests some regulation making powers that might bolster the hands on approach.

TOR 12

The Reference Group identified that this term of reference dealt with problems from the government perspective in administering the licensing and safety regime for electricity as a whole. It found that by creating a single Act, with a single jurisdiction and definition, which covers safety, technical compliance and illegal activity would dramatically increase the ability and usefulness of audits on electrical work.

TOR 13

The Reference Group did not identify the need for outside advice. However it is acknowledged that if the recommendations of the Review are accepted, significant external consultation will need to occur.

TOR 14

The Reference Group, in considering Treasury's agenda, found that:

- (a) its proposals support the overall simplification of the regulatory framework and strengthen consumer protections; and
- (b) its recommendation that the discriminatory provisions concerning the Northern Territory Government electricity bodies be repealed will create a framework better suited to the Northern Territory situation. Though outside the scope of this review it is also fairly clear that the *Electricity Reform Act 2000* needs modernisation in light of the Northern Territory's ongoing electricity supply industry reforms (including the application of the National Electricity Rules and reform of the wholesale electricity market arrangements) coupled with technical changes in the electricity sector.

Summary of regulatory responsibilities/scope of this report

The following table summarises regulatory and policy responsibilities and indicates the extent to which they are within the scope of this report.

Activity	Legislation	Agency	Scope/notes
Generation of electricity	<i>Electricity Reform Act 2000</i>	Department of Trade, Business and Innovation*/Utilities Commission	Out of scope
Supply of electricity (electricity networks)	<i>Electricity Reform Act 2000</i>	Department of Trade, Business and Innovation*/Utilities Commission	Out of scope
Sale of electricity to customers	<i>Electricity Reform Act 2000</i> ¹	Department of Trade, Business and Innovation*/Utilities Commission	Out of scope
Safety of electrical networks	<i>Electricity Reform Act 2000</i>	Utilities Commission and Attorney-General and Justice (Worksafe)	
Safety of electrical installations	<i>Electricity Reform Act 2000</i>	Attorney-General and Justice (Worksafe)	In scope
Safety of electrical equipment (appliances)	No specific legislation	Attorney-General and Justice (Worksafe)	In scope
Competence of persons responsible for installing and maintaining electrical equipment	<i>Electrical Workers and Contractors Licensing Act 1978</i>	Attorney-General and Justice (Consumer Affairs)	In scope

* In September 2019 responsibility for the *Electricity Reform Act 2000* (excluding provisions about pricing and safety regulation) was transferred from the Department of Treasury and Finance to the Office of Sustainable Energy within the Department of Trade, Business and Innovation. This was formalised with the Administrative Arrangements Order of 16 December 2019.

¹ There may be other laws that have general application – eg the Australian Consumer Law

3. Brief History of Electricity Safety and Licensing in the Northern Territory

Regulatory Environment before 2000

Prior to the commencement of the *Electricity Reform Act 2000* (and related legislation) on or about 1 April 2000 the Power and Water Authority was:

- (in effect) a monopoly supplier of electricity;
- the regulator of the supply of electricity; and
- largely responsible for policy issues.

2000 Legislative reforms

As explained in the second reading speech for the 2000 legislation (*Electricity Reform Act 2000* and related legislation) the legislation:

- repealed the *Electricity Act 1978*;
- provided for licensing, regarding the generation of electricity, the operation of networks and the retailing of electricity;
- created the Utilities Commission for the purpose of carrying out the licensing function (and related activities such as economic regulation) in respect to generation, networks and the retailing of electricity;
- created the system controller – who was given the power to issue directions of electricity operators for reasons of public safety or the security of the power system;
- created the electrical safety regulator who was to be responsible for monitoring and regulating safety and technical standards in respect to electrical installations; and
- created electricity officers – being officers of licensed electricity operators.

The *Power and Water Authority Amendment Act 2000* repealed the provisions of the *Power and Water Authority Act 1987* which had given the Power and Water Authority regulatory powers over matters such as the sale/use of electricity (section 14(1) (c)), setting of standards for electrical installations (section 14(1) (f)) and the enforcing of standards relating to electrical workers and contractors (section 14(1) (g)).

Effect of the 2000 Legislation on the *Electrical Workers and Contractors Act 1978*

The 2000 legislative amendments did not deal with all of the various provisions in the *Electrical Workers and Contractors Act 1978* that were written on the basis that the Power and Water Authority was the regulatory body. Subsequent legislative reform has removed most of those provisions.

However, some remnants exist. Many of them are meaningless but some read as if government owned entities (such as the Power and Water Corporation and Power Generation Corporation) are in a special position compared to other sellers or suppliers of electricity.

Effect of the 2000 Legislation on the roles of inspectors

Historically, the electrical inspectors were appointed by a relevant Northern Territory Government agency and worked for the Power and Water Authority but were obliged to work closely with the Licensing Board to ensure ongoing good and safe electrical work (from generation to use of electrical equipment) in the Northern Territory.

When the Power and Water Authority was converted to the Power and Water Corporation and the position of Electrical Safety Regulator was created within the Northern Territory Government, the legislative connection between the Electrical Inspectors and the Licencing Board and the Power and Water Corporation was not replicated in the amending legislation. Whilst administrative attempts were made to retain the connection the relationship dissolved at various times.

Electrical Inspections

When the Power and Water Authority was responsible for all electricity regulation and inspection, all facets of the industry (domestic, network, generation) were inspected; and by one unit.

The (repealed) *Electricity Act 1978* set out that the duties of an electrical inspector include:

- inspecting or testing, as required by the Chief Executive Officer, any electrical installation, apparatus, equipment, implement or thing used or capable of being used in the generation, storage, reticulation or consumption of electricity;
- examining and testing electricity meters; and
- performing such other duties as are required of the officer by the Chief Executive Officer.

In the year 2000 split, the generation and transmission sector became, in practice, self-regulating and self-inspecting, while worker licensing went to the Board and installation safety went to NT Worksafe.

4. Current Northern Territory Regulatory Environment Regarding Electricity Safety and Licensing

4.1. *Electricity Reform Act 2000*

The *Electricity Reform Act 2000* (the ERA) commenced on 1 April 2000 with the aim being to regulate the electricity supply industry from both an economic and technical perspective and to make provision for safety and technical standards for electrical installations. The specific objects of the ERA are:

- to promote efficiency and competition in the electricity supply industry;
- to promote the safe and efficient generation, transmission, distribution and selling of electricity;
- to establish and enforce proper standards of safety, reliability and quality in the electricity supply industry;
- to establish and enforce proper safety and technical standards for electrical installations;
- to facilitate the maintenance of a financially viable electricity supply industry; and
- to protect the interests of consumers of electricity.

Electricity Reform Act 2000 – Role of the Utilities Commission

The *Electricity Reform Act 2000* gives additional functions to the Utilities Commission (created by the *Utilities Commission Act 2000*) in relation to licensing of electricity entities and economic regulation (amongst other things) in the electricity supply industry.

Electricity Reform Act 2000 – Role of the Electrical Safety Regulator

The Electricity Safety Regulator is established by section 7 of the *Electricity Reform Act 2000*. The Electricity Safety Regulator is appointed by the relevant Minister and is responsible for monitoring and regulating electrical safety and technical standards from the point of network connection at the premises to the outlet. The Electricity Safety Regulator is an employee of the Department of the Attorney-General and Justice.

Electricity Reform Act 2000 – Relationship with NT Worksafe - Enforcement and Officers

Electrical safety regulation is conducted by a specialist electrical safety unit within NT Worksafe (which is part of the Department of the Attorney-General and Justice), and made up of authorised officers (inspectors who are licenced electricians) who are subject to the control and direction of the Electrical Safety Regulator. The Electrical Safety Regulator is also the regulator under the *Work Health and Safety (National Uniform Legislation) Act 2011*.

These authorised officers can exercise a range of powers in order to monitor and regulate the safety and technical standards of electrical installations. These include powers of entry, general investigative powers, the power to disconnect an electricity supply, the power to make an installation safe and the power to require information.

The Electricity Safety Regulator has directed that where Inspectors encounter a direct conflict between the *Work Health and Safety (National Uniform Legislation) Act 2011* and the *Electricity Reform Act 2000*, the *Electricity Reform Act 2000* and Regulations will apply to technical non-compliance, and the *Work Health and Safety (National Uniform Legislation) Act 2011* and Regulations will apply to work practice or process non-compliance.

This determination is based on the coverage and the intent of the two pieces of legislation. In the main disciplinary action for breaches of electrical standards and electrical safety offences would be progressed through the framework in the *Electricity Reform Act 2000*.

The *Electricity Reform Act 2000* provides two types of officers – authorised and electricity. The authorised officer can be considered an inspector working for the regulator with all the powers and authorities needed to carry out such a role, whilst an electricity officer works for an electrical company and is given powers to allow meter reading and to ensure safety and continuity of supply of electricity.

In many respects the powers are the same, especially when it comes to ensuring safety of installations and electricity connections; the critical difference being that authorised officers have less legal checks on their activities and can order workers and contractors to comply and can conduct investigations leading to prosecutions.

Electricity Reform Act 2000 – Economic Regulation and Pricing

The *Electricity Reform Act 2000* provides for the economic and price regulation of the electricity supply industry, including some safety and technical standards.

The Treasurer, as advised by the Department of Treasury and Finance, is responsible for provisions about pricing regulation.

The Minister for Renewables, Energy and Essential Services, as advised by the Department of Trade, Business and Innovation (from September 2019) is responsible for provisions about economic regulation.

The Attorney-General and Minister for Justice, as advised by the Department of the Attorney-General and Justice, has responsibility for provisions about electrical safety.

Electricity Reform Act 2000– Regulations

The *Electricity Reform Act 2000* has three subordinate sets of regulations:

- **Electricity Reform (Administration) Regulations 2000**
Prescribes matters relating to licence fees, returns and conditions in the electricity industry; establishes classes of customers prescribed as contestable customers in the electricity industry as well as for electricity pricing orders; and regulates vegetation clearance around infrastructure.
- **Electricity Reform (System Control and Market Operator Functions Code) Regulations 2015**
Sets out the System Control and Market Operator Functions Code that an electricity entity must comply with (as far as is applicable).
- **Electricity Reform (Safety and Technical) Regulations 2000**
Prescribes requirements relating to safety and technical matters such as requirements for, and regulation of, electrical installation work and certification (including calling up the relevant Australian Standards); the safeguarding of persons working with conductors and electrical equipment including high voltage work; and regulates activities in the vicinity of infrastructure and installations.

4.2. *Electrical Workers and Contractors Act 1978*

The *Electrical Workers and Contractors Act 1978*:

- establishes the Electrical Workers and Contractors Licensing Board as a body corporate, with five members appointed by the Minister, with powers and functions set out in the Act. (see chapter 7 for more details on the Board).
- establishes a licensing framework for electrical workers, contractors and provides for the registration of apprentices and permits to be issued in respect of specific electrical work. The framework includes competency, experience, and fit and proper requirements and for licence terms and conditions.
- contains offences about the performance of electrical work without having a licence.
- deals with complaints against the holder of a licence in relation to work done by or on behalf of the holder (including broad powers for investigations, hearings and actions that can be taken against a licence holder which include suspension or cancellation of licence).
- provides that the Board can take disciplinary action for a range of matters including work in contravention of the *Power and Water Corporation Act 1987* or the *Mining Management Act 2001*; incompetent or negligent manner electrical work; a failure to rectify faults as required by the Power and Water Corporation or Power Generation Corporation or an authorised person (under the *Electricity Reform Act 2000*)².
- deems the Power and Water Corporation and the Power Generation Corporation to have a licences or permits to supervise or perform electrical work.
- does not provide for inspectors. Instead it provides that complaints can be made to the Executive Officer who is then responsible for investigating the complaint.
- complaints can be instigated by a member of the Board but when this occurs the Board member cannot take part in any hearing by the Board of the complaint.
- permits the Chairman of the Board to authorise various investigative actions (such as inspecting books).
- provides that “authorised persons” (as defined in the *Electricity Reform Act 2000*) have some limited statutory powers (mainly related to being able to demand that persons conducting electrical work produce their licence).

Licensing Board membership and Executive Officer

The Electrical Workers and Contractors Licensing Board is comprised of five members appointed by the Minister. The Act also establishes the position of Executive Officer, which is a Ministerial appointment of a public servant.

The Board operates on a day-to-day basis mainly through the Executive Officer. When the Board meets to make decisions they operate within the confines of the *Electrical Workers and Contractors Act 1978* and Regulations as they understand them.

² See section 43 of the *Electrical Workers and Contractors Act 1978* for the grounds for suspension or cancellation of a licence.

Inspectors and Authorised Officers for the Licensing Legislation

The *Electrical Workers and Contractors Act 1978* (the EWCA) provides for “authorised persons” which means:

- an authorised officer as defined in section 4(1) of the *Electricity Reform Act 2000* or
- a member or employee to whom a power or function is delegated under section 17B [Delegations].

However, authorised officers have few powers or functions under the *Electrical Workers and Contractors Act 1978* (the Act) with the Executive Officer responsible for dealing with complaints.

The EWCA is silent concerning responsibility for the investigation of offences other than in the context of a breach of the Act being a ground for disciplinary action.

Neither the EWCA nor the regulations provide for the issuing of infringement notices.³

The Electrical Workers and Contractors Regulations 1984

The Electrical Workers and Contractors Regulations set out the qualifications required for various electrical worker licences, in addition to prescribing forms and setting fees for applications under the Act.

Statutory relationship between the licensing boards, the Power and Water Corporation and the Electrical Safety Regulator

The Board can refer matters to the Power and Water Corporation for investigation and act on complaints in regard to electrical work carried out by either licence holders or unlicensed persons. The Power and Water Corporation may refer matters to the Board for consideration and the Board must report the outcomes of referred matters back to the Corporation.

There is no such legislative mechanism for reporting on the outcome of matters referred to the Board by the Electricity Safety Regulator.

4.3. Utilities Commission Act 2000

The object of the *Utilities Commission Act 2000* (this Act) is to create an economic regulatory framework for regulated industries (including the electricity industry) that promotes and safeguards competition and fair and efficient market conduct or, in the absence of a competitive market, promotes the simulation of competitive market conduct and the prevention of the misuse of monopoly power.

Whilst this Act is solely focussed on economic regulation, it does provide a technical and safety framework through the approval of Codes and the use of conditions on licences.

Utilities Commission Regulations 2000

These regulations authorise the Utilities Commission to make codes that regulate electricity generation, supply and distribution businesses.

³ Section 65D of the *Interpretation Act 1978* operates so that it is possible for regulations to be made that establish an infringement notice scheme.

Utilities Commission – Roles and Responsibilities

Part 2 of the *Electricity Reform Act 2000* provides that the Utilities Commission has additional functions to those provided under the *Utilities Commission Act 2000*. Whilst the Utilities Commission is located administratively within the Department of Treasury and Finance, it operates independently and unless provided for by the *Utilities Commission Act 2000*, it is not subject to the control or direction of the Minister. The Utilities Commissioner is part-time and supported by one part-time Associate Commissioner and a small number of staff seconded from the Department of Treasury and Finance.

Historically, the Utilities Commission was responsible for economic regulation of, and third party access to, electricity networks under the *Electricity Networks (Third Party Access) Act*, however on 1 July 2015 these responsibilities were transferred to the Australian Energy Regulator (AER) under the *National Electricity (Northern Territory) (National Uniform Legislation) Act 2015*.

Despite the transfer of some functions to the AER, the Utilities Commission retains responsibility for the licensing of electricity entities (including generators, network providers and retailers (to carry out operations in the Territory's electricity supply industry under the *Electricity Reform Act 2000*. It also makes and monitors compliance with codes and rules relating to the conduct or operations of the electricity supply industry and electricity entities, amongst other things.

4.4. Government Policy Developments

The Minister for Renewables, Energy and Essential Services is responsible for the *Electricity Reform Act 2000* as it relates to economic regulation. The Department of Trade, Business and Innovation is responsible for providing the Minister advice on economic regulation matters, including current and potential reform of the Territory's electricity market

Current Policy Reforms regarding Economic Regulation

The Government's electricity reform program is aimed at delivering financial transparency, improving quality and efficiency of service delivery, and promoting competition to reduce costs and benefit consumers.

Two of these reforms are currently underway - the application of the National Electricity Rules and the development of a wholesale electricity market in the Darwin-Katherine power system. As part of the electricity industry reforms it may be necessary to amend various legal instruments, and amongst other things, ensure the framework issues and gaps and overlaps are addressed.

4.5. National Electricity (Northern Territory) (National Uniform Legislation) Act 2015

On 1 July 2015, the *National Electricity (Northern Territory) (National Uniform Legislation) Act 2015* commenced operation. It provided for the immediate transfer of electricity network regulation from the Utilities Commission to the Australian Energy Regulator, and the adoption of the National Electricity Law and Rules on 1 July 2016.

All relevant aspects of the National Electricity Rules, which provide, among other things, an economic regulatory framework and third party access framework for networks, commenced (with compliance required) on 1 July 2019.

Although the National Electricity Rules primarily provide a framework for economic regulation, they do contain technical components including engineering and metering requirements.

4.6. *Power and Water Corporation Act 1987*

The *Power and Water Corporation Act 1987* establishes the Power and Water Corporation (PWC) and sets out its functions. The functions of PWC in relation to electricity are:

- to manage, plan, develop, expand, enhance, improve and reinforce electricity networks and power systems;
- to provide and improve electricity network services;
- to provide services designed to improve the efficiency of electricity supply and the management of demand on electricity networks;
- to generate, acquire, exchange, transport, distribute, market and otherwise supply electricity;
- to undertake, maintain and operate any works, system, facilities, apparatus or equipment required for any purpose referred to in paragraphs above;
- to use its expertise and resources to provide consultative, advisory or other services for profit;
- to develop and turn to account any technology, software or other intellectual property that relates to a function referred to in paragraphs above;
- to manufacture and market any product that relates to a function referred to in paragraphs above;
- to do anything that the Corporation determines to be conducive or incidental to the performance of a function referred to above; and
- to do anything that it is required or authorised to do under the *Electricity Reform Act 2000* or any other written law.

Electricity Entities – Roles and Obligations

As discussed above there used to be a clear role for electrical inspectors in the safety of the entire electrical system from generation through to use. That role was not carried over into the *Electricity Reform Act 2000* or any of the other Acts created to manage the electrical industry but was instead captured as a licence condition under the powers of the *Utilities Commission Act 2000* without strong regulatory oversight.

Currently PWC is required, as part of its network and generation licences granted by the Utilities Commission to prepare, have approved (by the Commission), and annually review, a safety management and mitigation plan for its electricity infrastructure.

Given the lack of expertise in the area of generation and transmission safety outside the utility licence holders and regardless of public feedback sought, the default setting is to accept the proposal of a utility licence holder.

4.7. *Work Health and Safety (National Uniform Legislation) Act 2011*

The main object of the *Work Health and Safety (National Uniform Legislation) Act 2011* (WHS (NUL)) is to provide for a balanced and nationally consistent framework to secure the health and safety of workers and workplaces by:

- protecting workers and other persons against harm to their health, safety and welfare through the elimination or minimisation of risks arising from work or from specified types of substances or plant;
- promoting the provision of advice, information, education and training in relation to work health and safety;

- securing compliance through effective and appropriate compliance and enforcement measures;
- ensuring appropriate scrutiny and review of actions taken by persons exercising powers and performing functions under this [WHS (NUL)] Act;
- providing a framework for continuous improvement and progressively higher standards of work health and safety; and
- maintaining and strengthening the national harmonisation of laws relating to work health and safety and to facilitate a consistent national approach to work health and safety in the Territory.

Work Health and Safety (National Uniform Legislation) Regulations 2011

In the Work Health and Safety (National Uniform Legislation) Regulations 2011, Part 4.7 (General electrical safety in workplaces and energised electrical work) addresses electrical safety in the workplace. Part 4.7 requires persons conducting a business or undertaking at a workplace to (amongst other things):

- manage electrical risks;
- inspect and test electrical equipment at the workplace;
- disconnect and replace or remove unsafe electrical equipment; and
- use and test appropriate residual current devices.

It imposes duties upon a person conducting a business or undertaking at a workplace about the proximity of persons, plant or things at the workplace to electric lines. It imposes prohibitions and duties upon persons conducting a business or undertaking regarding electrical work carried out on energised electrical equipment. It imposes additional duties upon persons conducting a business or undertaking that includes the carrying out of construction work.

5. Electrical Safety

Issues with the Legislative Structure for Electrical Safety Regulation

The legislative provisions dealing with electrical safety in the *Electricity Reform Act 2000* are mixed in with the legislative provisions governing the economic regulation of the supply and distribution of electricity. The two sets of provisions share definitions and regulators. The current form is complicated in terms of responsibilities concerning, respectively, what parts are specific to regulating the economic regulation of industry and what parts are regulating electrical safety.

The two roles (safety and economic regulation) are fundamentally different. It is highly likely that they will always be administered by different agencies.

The administrative arrangement order made under section 35 of the *Interpretation Act 1978* attempts to identify which agency is responsible for the respective parts of *Electricity Reform Act 2000*. However, sometimes it is not clear who is responsible for what – particularly regarding those provisions of the Act that are applicable to both types of regulation.

Interstate Provisions – Electrical Safety

Chapter 4 sets out the regulatory position in the Northern Territory for electrical safety.

Appendix 1 sets out the detail of the interstate provisions. As a broad generality there are two main interstate models relating to electrical safety.

The first is electrical safety regulation is combined with the regulation of electrical business and workers. This is the case for Queensland, Tasmania and Victoria. The type of government agency varies between these jurisdictions.

The second model is that electrical safety regulation is administered separately from licensing. This is the case for New South Wales, Northern Territory, Western Australia, and South Australia.

There are, however, various permutations. For example, the South Australian system separates licencing from safety but includes both electrical installation and electricity network safety in the one inspectorate. Licencing is managed through Consumer and Business Services which is responsible for the administration of the *Plumbers, Gas Fitters and Electricians Act 1995*, and works closely with the Office of the Technical Regulator in maintaining industry integrity, and protecting consumer welfare.

Options concerning Legislative Structure for Electrical Safety Regulation

Option 1

Retain the status quo – with electrical safety and economic regulation being in one Act and occupational licensing being in another Act. The Acts would be amended so that the inspectorate roles, for safety and occupational licensing, would be consolidated.

Option 2:

Amend the *Electricity Reform Act 2000* so that it only deals with economic regulation and move the electrical safety provisions into a separate Act that would deal with electrical safety and occupational licensing. Thus the regulation of electrical safety and of the electrician occupation and businesses will be one piece of legislation. The legislation would provide for a single regulator responsible for the operation of the legislation for the purpose of ensuring electrical safety.

The gap for licensed or unlicensed activity under the *Utilities Commission Act 2000* would be removed by making, under this new Act, the Safety Management and Mitigation Plans (SMMPs) the responsibility of the Electrical Safety Regulator, along with a statutory obligation (rather than a licence condition) to have SMMPs. While this would be an increased regulatory burden and require additional resourcing for the Electrical Safety Regulator, it is believed there will be greater net public benefit by having the safety of electricity utility infrastructure independently approved and monitored.

Option 3:

Same as for option 2 except have three Acts – for, respectively, economic regulation, electrical safety and occupational licensing.

Proposal concerning the Structure of the Legislation for Electrical Safety/Economic Regulation

Recommendation 1

Adopt option 2 - Separate the electrical safety provisions from those dealing with economic regulation and ensuring that the safety of the entire electrical industry is the responsibility of one agency.

6. Economic Regulation

Interstate Provisions – Economic versus Safety Regulation

Appendix 2 sets out the detail concerning economic regulation elsewhere in Australia. In most other Australian jurisdictions it seems safety issues for networks are handled by a government body whose focus is on the network rather than on the economic regulation of the network.

Options concerning Legislative Structure for Economic Regulation

Economic reform issues do not come within the scope of the work of the Reference Group. However, it would be useful if any legislative reforms concerning economic regulation could be timed to occur at the same time as legislative reforms concerning licensing and electrical safety. This timing is not, however, critical.

7. Occupational Licensing

7.1. Electrical Workers and Contractors Licensing Board – Functions and Activities

Electrical licensing is a role of the Electrical Workers and Contractors Licensing Board (the Board). All applications for licences are lodged with the Board through Licensing NT or directly with a Board member. The Board considers the applications at its regular meetings and issues a licence through Licensing NT.

The Board states in its Annual Reports⁴ that its main objective is to ensure, through licensing, that work in the industry is only carried out by adequately trained workers and that they produce safe electrical installations. However, this is not stated objective of the *Electrical Workers and Contractors Act 1978* (the EWCA). Nor does the EWCA set this out as an objective or function of the Board.

The functions of the Board are set out in section 17C of the EWCA. The functions are:

- exercising the powers conferred on it by the *Electrical Workers and Contractors Licensing Act 1978* relating to licensing and complaints, the Board is required to;
- co-operate with institutions providing apprenticeship training for apprenticed electrical workers;
- co-operate with the Power and Water Corporation in relation to the inspection of electrical work and the investigation of complaints relating to electrical inspections;
- consider matters referred to it by the Minister and to report to the Minister on those matters; and
- consider matters referred to it by the Power and Water Corporation and to report to the Power and Water Corporation on those matters.

Handling of Complaints against Electrical Workers and Contractors

All complaints must be lodged with the Executive Officer who has obligations under the *Electrical Workers and Contractors Licensing Act 1978* (EWCA) to as soon as practicable:

- inform the holder of the licence of the substance of the complaint and shall give the holder an opportunity to comment in writing on the substance of the complaint);
- conduct such investigations in relation to the substance of the complaint as the Executive Officer thinks appropriate ; and
- forward the comment, if any, the Executive Officer receives under paragraph (a), together with the results of the investigations to the Board

This means that under the EWCA the Executive Officer has responsibility for investigating complaints. The EWCA contains no specific power to delegate the complaint receiving function. There is no evidence of any delegation (as is possible under section 46 of the *Interpretation Act 1978*).

It appears that in some cases the investigation is conducted by a member of the Board with the Executive Officer conducting the majority of the remainder whilst the Electrical Safety Inspectorate are rarely asked to investigate.

⁴ See, for example, annual reports for 2006 and 2018

Breaches of the Occupational Licensing requirements – Role of the Board

The Board may conduct a hearing in relation to a complaint regarding a licence holder and, where it is satisfied that there are grounds for so doing, it may:

- dismiss the complaint;
- cancel the licence;
- suspend the licence for such period as it thinks fit;
 - i. vary the conditions of the licence including an endorsement relating to the trade classification or grade of the licence;
 - ii. fine that holder an amount not exceeding \$100;
- admonish the holder and endorse the holders licence to that effect; or
- do any combination of the penalty options.

In conducting a hearing the Board;

- has the same legal protection and immunity given to a Judge of the Supreme Court;
- is not bound by rules of evidence; and
- may require a person appearing before it to give evidence on oath.

The Chair of the Board may:

- summons a person to attend the Board and provide evidence and documents as required by the Board.
- authorise a person to have full and free access to all buildings, places, goods, books, documents and other papers for the purposes of an inquiry and for that purpose may make extracts from, copies of, or take photographs of any such buildings, places, goods, books, documents or papers.

7.2. Modernisation/Reform of the Occupational Licensing Legislation

Issues with the Generality of the Occupational Licensing Legislation

The *Electrical Workers and Contractors Act 1978* is out of date in form, structure and the wording of its licensing content. It commenced operation in 1978 and has been amended on an ad hoc basis on numerous occasions since that time, but it has not been holistically reviewed. It lacks up to date provisions concerning inspectorates, criminal responsibility principles, enforcement, penalties (for offences and for disciplinary matters), appeals and delegations.

Power and Water Corporation and Territory Generation have apparent authorities in the EWCA because historically the electrical inspectorate was part of the Power and Water Authority. For example section 42 (power to carry out electrical work), section 43 of the EWCA (ground of disciplinary action of licensed persons provides misleading information to the Power and Water Corporation or the Power Generation Corporation).

As set out above in chapter 3, when the Authority became a corporation, the EWCA was (cosmetically) updated to refer to the Corporation. The fact that the inspectorate had been moved out from Power and Water to operate separately (initially from within the Building Advisory Service and later moved to NT Worksafe) under the *Electricity Reform Act 2000* was not recognised in the legislation.

The key problem with the current structure and contents of the EWCA is that they provide for an unnecessary gap between licensing decision and responsibilities (which rest with the Board) and the actual licensing and enforcement roles which, in a practical sense, belong to the Department. The EWCA is structured as if the Board can call on and control the resources of an agency to do its job.

Interstate Provisions regarding Electrical Occupational Licensing Legislation

In Australia, each state and territory administers its own occupational licences. A variety of approaches is followed. Appendix 3 sets out the detail of the approaches followed.

Summary – Interstate Occupational Licensing

In Australia occupational licences for electricians range from:

- Different categories of licences with the licences being potentially subject to other restrictions and conditions – as in Northern Territory; or
- A single licence but with restricted versions of the licence – as in New South Wales, Australian Capital Territory and Tasmania,

In most jurisdictions there are also separate licences depending on whether the licensed person is running the business or is an employee of the business. This is the case in Northern Territory.

In summary, in respect to the key issues:

- Most commonly the main licensing regulator is a senior government official. This is the case in New South Wales and Australian Capital Territory. In some jurisdictions the regulator is an independent board or authority. This is the case in Northern Territory and Queensland.
- The jurisdiction of the agency with licensing responsibilities varies greatly. They range from consumer affairs/fair trading agencies in New South Wales and South Australia, to the work health and safety agency in Queensland, to an electricity regulatory agency in Victoria; while the Northern Territory, Tasmania and the Australian Capital Territory have omnibus licensing authorities.
- The disciplinary body ranges from being the same body that handles licensing (as is the case in New South Wales, Victoria, Northern Territory), a mix of an administrative officer and an administrative appeals body (Australian Capital Territory) or a mix of the licensing body and an administrative appeals body (Tasmania, South Australia).

TOR 6 requires the Electrical Safety and Licensing Reference Group to provide direction on how electrical licensing in the Northern Territory can better align with other jurisdictions and provide pathways for national licensing.

Options regarding the Occupational Licensing Legislation

Option 1

Maintain the current position with licensing and discipline being the responsibility of an independent board, comprised of persons with a mix of relevant occupational backgrounds and with there being an executive officer with specific responsibilities to the Board.

Option 2

Vest all licensing responsibilities in a government official.

Option 3

Have a mixed model under which a single government official is responsible for most licensing decisions and for enforcement action (e.g. making applications for disciplinary actions, commencing prosecutions, issuing infringement notices). There would be an independent board that would have the role of reviewing decisions, dealing with disciplinary applications and setting policy frameworks for the granting of licences.

The government officer would take over the current statutory role of the executive officer. This will require increased resourcing however the net benefits should outweigh the costs to Government.

Proposal regarding Occupational Licensing Legislation

The recommendation is that Option 3 be adopted. This option clarifies the respective roles of the licensing body (which is independent of executive government) and enforcement of legislation (which is a key role of executive government operating through its administrative agencies). It also retains the practical benefits of retaining private sector intelligence and knowledge as being key factors in ensuring that licensing activities retain awareness of what is occurring on the ground.

Recommendation 2

The enactment of modern legislation that provides for the licensing of electrical workers and contractors being a single Act (i.e. Covering Electrical Safety and Licensing). The new Act will replace the provisions of the *Electricity Reform Act 2000* concerning electrical safety and the provisions of the *Electrical Workers and Contractors Act 1978* concerning the licensing of electrical workers and businesses. It would not deal with economic regulation of the generation, supply, distribution and retailing of electricity.

Recommendation 3

The creation of the NT Electrical Safety Regulator (senior government official) who will have overall statutory responsibility for the operation of the new Act, including occupational licensing support, enforcement (including public and industry awareness, actions for breach and policy reforms).

Recommendation 4

Remove the statutory role of executive officer to the Board under the *Electrical Contractors and Workers Act 1978* but state that it is the role of the Electrical Safety Regulator to provide both administrative and technical support for the Board. The NT Electrical Safety Regulator would take over the current statutory role of the executive officer.

7.3. Size and Membership of the Electrical Workers and Contract Licensing Board

Problem with the Size and Responsibilities of the Licensing Board

The Board is structured so as to be representational of electrical engineers, training institutions, electrical contractors and electrical workers. The suggestion is that the membership of the Board be increased so that it includes members with knowledge about alternative energy sector and government procurement.

The composition of the Board may make it awkward for the Board to make relevant decisions about matters that call on the need for specialist expertise.

Provisions interstate with size and responsibilities of the licensing board and advisory bodies

Australian Capital Territory (ACT) – Boards

In the ACT, the registrar may establish advisory boards. Such boards must comprise at least seven members with four of them being members of the affected occupation. The role of the Boards is to provide advice about qualifications and assist with investigations and to help and develop information about emerging issues⁵.

Queensland – Board Membership

The Queensland Licensing Committee has five members – namely the relevant senior government officer (Commissioner) plus four members appointed by the Minister.

- In making an appointment the Minister is to have regard to the person's practical experience and competence in the management of electrical safety and training.
- The appointments must be such that one person is a representative of employers, one person is a representative of workers and one person is a representative of the Community, The fourth member must be either a licensed electrical worker or an electrical engineer.

The Queensland legislation also provides for subject matter committees (e.g. dealing with matters such as training, safety education and equipment).

Summary of Interstate Provisions for Boards

Most jurisdictions do not have licensing Boards. The only one with a board is Queensland. It is structured along the same lines as currently applies in the Northern Territory.

Options for the Size and Responsibilities of the Board

Option 1

Maintain the current position.

Option 2

Increase membership of the Board from the current five members by including two new members –one from the 'alternative energy sector' and one from the Department responsible for electrical safety.

Option 3

Adopt the same structure as in Queensland.

Option 4

Adopt the same general structure as in Queensland but provide the Minister to establish additional subject matter committee which would comprise of Departmental representative and others who may be specialists in the field relevant to the work of the specialist committee.

⁵ Sections 114-116 of *Construction Occupations (Licensing) Act 2004*

Proposal for the Size and Responsibilities of the Board

Recommendation 5

The establishment of a licensing authority that will, with the support of the Electrical Safety Regulator, have responsibility:

- (a) for the making of licensing and disciplinary decisions relating to electrical workers (as currently defined in the *Electrical Workers and Contractors Act 1978*) and the businesses that can perform electrical installation work (including individuals) that employ such workers (as set out in section 33 of the *Electrical Workers and Contractors Act 1978*);
- (b) for providing advice on regulatory matters to the Electrical Safety Regulator and the Minister.

Recommendation 6

The licensing authority be structured so that it has seven members – namely the relevant senior government official (as an ex officio member) plus six members appointed by the Minister. In making an appointment of a person the Minister is to have regard to the person's practical experience and competence in the management of electrical safety and training.

The appointments must be such that:

- (a) one person is a representative of employers;
- (b) one person is a representative of workers;
- (c) one person is a representative of the Community;
- (d) one person is to be from the licensed electrical entities;
- (e) one person is from government (selected from time to time to reflect expertise in an emerging issues (eg new technologies); and
- (f) one person represents training issues.

Recommendation 7

The Minister having the power to establish additional specialist subject matter committees (for training, safety education and electrical equipment) which would comprise the Departmental representative and others who may be specialists in the field relevant to the work of the specialist committee.

8. Breaches of the Legislation

8.1. Criminal Law Breaches of the Licensing Legislation

Carrying out unlicensed electrical work is a breach of the *Electrical Workers and Contractors Act 1978* (EWCA) with the maximum penalty being:

- 8 penalty units⁶ (\$1256) or six months imprisonment for a worker,
- 15 penalty units (\$2355) or imprisonment for 12 months, or both for a contractor, and
- 8 penalty (\$1256) units or imprisonment for 12 months for a person, body or association of persons who employs or engages an unlicensed person.

Similarly a refusal to comply with a summons or decline to provide evidence or documents or refuse to take oath are offences under the EWCA attracting fines whilst a finding of false testimony is an offence with a penalty of up to 12 months imprisonment.

An allegation of a breach of these offences would involve a prosecution under the criminal jurisdiction of the Local Court.

Enforcement of these provisions is the responsibility of Licensing NT.

8.2. Enforcement and Inspectorates

Issues with Enforcement and Inspectorates

There is no clearly defined role for inspectors under the *Electrical Workers and Contractors Act 1978* regarding investigations for the purposes of the *Electricity Reform Act 2000*.

Authorised persons under the *Electricity Reform Act 2000* have at best limited and at worst ambiguous powers under the *Electrical Workers and Contractors Act 1978*.

Facts identified for licensing proposes can be relevant for the purpose of taking action under the electrical safety legislation. Equally facts identified as part of the enforcement of the electrical safety legislation can be relevant in determining whether an individual or business should be permitted to have a licence or registration under the licensing legislation.

An underlying objective of both Acts is that of ensuring the safety for consumers and electrical workers when dealing with electricity. It seems unarguable that the legislation should facilitate a coherent range of oversight and enforcement actions. This includes the option of taking action that might involve both the faulty work and the licensing of the person responsible for the faulty work.

The Board does not have a clearly defined role regarding investigations for the purposes of the *Electricity Reform Act 2000*. In other words it is not clear if it can investigate allegations of faulty work (regulated by the *Electricity Reform Act 2000*) for the purpose of determining whether to take disciplinary action. In part this is because the Board's delegates may not be authorised officers for the purposes of the *Electricity Reform Act 2000*.

⁶ The current value of a penalty unit for 1 July 2019-30 June 2020 is \$157

Meanwhile authorised persons under the *Electricity Reform Act 2000* have very limited powers under the *Electrical Workers and Contractors Act 1978*. They do not have any capacity, other than as delegates of the Board, to undertake any investigations for the purposes of the licensing legislation.

For the Northern Territory authorised officers under the *Electricity Reform Act 2000* are also authorised officers for the purposes of the *Electrical Workers and Contractors Act 1978*. The Board has no capacity to appoint its own authorised officers other than for the purposes of delegation of some of its powers and functions. Persons with such delegated functions have no status under the *Electricity Reform Act 2000*.

Additionally, the *Electricity Reform Act 2000* provides for employees of electricity entities to be appointed as electricity officers with power and functions relating to the safety of the entities various installations.

Two regulatory regimes

There is a common objective for the regulation of electrical safety and the licensing of electricians. It is that of ensuring over time the safety of both the users of electricity and of those persons who install and maintain electrical equipment and installations.

The existence of two regulatory regimes can mean that there are areas where there is doubt as to which agency is responsible for a particular kind of issue. Most of these kinds of doubts are successfully dealt with by way of administrative arrangements between regulators who share a common goal. However, idiosyncratic differences in the various Acts or differing priorities/resources between the regulators can lead to misunderstandings and lack of capacity to focus on what might be the best solution.

For electricity regulation, for example, the best action in the view of the Electrical Safety Regulator might be the removal from the industry of a particular electrician or electrician's business. However, the electrical safety regulator's hands are tied if the licensing board or the persons serving it happen to consider that, operating under its principles, disciplinary or prosecution action is not possible.

A clear overlap is that some activities might be subject to potential regulatory or prosecution action under a number of Acts.

There is also the matter of the Licensing Board having the function of co-operating with the Power and Water Corporation regarding the inspection of electrical work but not having such a clearly defined role regarding investigations for the purposes of the *Electricity Reform Act 2000*; and that authorised person under the *Electricity Reform Act 2000* not being able to directly report and cooperate with either the Board nor with Power and Water Corporation or Territory Generation.

Historically, under section 20(3) of the (repealed) *Electricity Act* one of the duties of an electrical inspector (who was appointed by the CEO of the relevant Agency) was to "at the request of the Electrical Workers and Contractors Licensing Board within the meaning of the *Electrical Workers and Contractors Act 1978*, report to that Board on the electrical workmanship of any person." This created a clear connection and a managed overlap between the two pieces of legislation in place at that time.

That connection was not carried over into the *Electricity Reform Act 2000* or any amended version of the *Electrical Workers and Contractors Act 1978*, which has resulted in an ad-hoc, poorly managed overlap.

A further issue arises with relation to jurisdiction. There is no specification of jurisdiction in the *Electrical Workers and Contractors Act 1978*. However, its definition of electrical installation incorporates an electric line or electrical article placed in, on or over land or a building and used or intended to be used for or for purposes incidental to the conveyance, control or use of electricity supplied or intended to be supplied by the Power and Water Corporation or a licensee under the *Electricity Reform Act 2000* to supply electricity or an owner or occupier of a private plant, whether or not supplied by the person contracting or undertaking

to install it, and includes additions and alterations to an electrical installation. Whilst this definition is very confusing, the definition of electrical article includes a wire, cable, appliance, fitting, meter, insulator, apparatus, material or article intended or designed for use in connection with the transmission of electricity or operated by electricity which clarifies the intent of that definition.

The *Electrical Workers and Contractors Act 1978* further defines electrical installation work to mean the actual electrical work of installing, altering or adding to an electrical installation and the supervision of such work. Whilst electrical work means work done in connection with the installation or repair of an electric line or electrical article for the generation, transmission, supply or use of electric energy, but does not include work done in manufacturing, or assembling at the place of manufacture, electrical articles or constructing a completely new overhead powerline.

Under the *Electricity Reform Act 2000*, an electrical installation means a set of wires and associated fittings, equipment and accessories installed in a place for conveying, controlling, measuring or using electricity that is, or is to be, or has been, supplied for consumption in the place, but does not include:

- electricity infrastructure owned or operated by an electricity entity (i.e. is licensed to carry on operations in the electricity supply industry); or
- any wires, fittings, equipment or accessories connected to and beyond an electrical outlet at which fixed wiring terminates (other than an electrical outlet used to connect sections of fixed wiring).

Thus whilst the two Acts have overlapping definitions of an installation, the jurisdiction of the *Electrical Workers and Contractors Act 1978* is significantly greater than that of *Electricity Reform Act 2000*. This has created an issue where electrical workers can be licensed under the *Electrical Workers and Contractors Act 1978* but the technical standards and safety of the work undertaken by those workers are not regulated under the *Electricity Reform Act 2000*.

This means that as a general rule a person (if unlicensed) can be prosecuted for breach of the licensing act for some work concerning installations but that under the *Electricity Reform Act 2000* there is nothing that can be done in respect of poorly done work (i.e.:

- no requirement to comply with standards (sections 67-69)
- no requirement to rectify – sections 70, 71
- no requirement to make safe (section 80)
- no power for regulator to make safe (section 90)
- no requirement to provide information (section 96)

However, this may not be the case with all electrical installations.

The adequacy of audits is directly affected by the dissimilar jurisdiction and definitions of the *Electricity Reform Act 2000* and the *Electrical Workers and Contractors Act 1978*. A further issue arises due to the fact that under the *Electricity Reform Act 2000* there is a 6-month limit after which orders to rectify cannot be made. In addition, the nature and provision of Certificates of Compliance is unclear under the *Electricity Reform Act 2000* which means that not all works are notified to the Electrical Safety Inspectorate in a timely or useful fashion. It should also be noted that it is not illegal to conduct electrical work under the *Electricity Reform Act 2000* as this is captured by the *Electrical Workers and Contractors Act 1978* where the maximum penalty to be an unlicensed worker is 8 penalty units or imprisonment for six months whilst the maximum penalty to be an unlicensed contractor is 15 penalty units or imprisonment for 12 months, or both.

Creating a single Act, with a single jurisdiction and definition, which covers both safety, technical compliance and illegal activity would dramatically increase the ability and usefulness of audits on electrical work.

Interstate Provisions regarding Enforcement and Inspectorates

Appendix 4 sets out some of the detail of interstate inspectorate regimes.

There is little commonality in the legislative structures concerning inspectorates elsewhere in Australia.

Options regarding Inspectorates

Option 1

Non –legislative option

This would involve:

- Delegations from the Board or authorisations from the Chairman of the Board so that authorised officers under the *Electricity Reform Act 2000* have all of the investigative functions of the Board. Section 17B permits such delegations.
- Delegations from the Minister administering the *Electricity Reform Act 2000* to persons employed as delegates of the Board regarding the enforcement of the *Electrical Workers and Contractors Act 1978*.

Option 2

Legislative option

The recommendation is that there be legislative reform so that the Regulator appoints authorised officers for both licensing and electrical safety and that the operations of those authorised officers be governed by provisions along the lines set out in sections 72-81 of the *Electricity Reform Act 2000* or in sections 156-190 of the *Work Health (National Uniform Legislation) Act 2011*.

This would create a single inspectorate regime for both licensing and electrical safety. It would have one person responsible for making the appointments (either the Minister or the Electrical Safety Regulator) and one set of statutory controls regarding powers and functions.

Such legislative reform simplify the performance of functions by inspectors (in so one as there would be only one set of overriding rules and there would be a simpler line of authority through to the single enforcement agency).

This would create a single inspectorate regime for both licensing and electrical safety. It would have one person responsible for making the appointments (either the Minister or the Electrical Safety Regulator) and one set of statutory controls regarding powers and functions.

Option 2 is recommended.

Proposal

Recommendation 8

The Electrical Safety Regulator have responsibility for appointing authorised officers (inspectors) for both licensing and electrical safety and that the operations of those authorised officers be governed by provisions along the lines set out in sections 156-190 of the *Work Health (National Uniform Legislation) Act 2011*.

Recommendation 9

Authorised officers/inspectors for licensing and for electrical safety should be part of a single work unit that is the administrative responsibility of NT Worksafe. In the short term the *Electrical Contractors and Workers*

Act 1978 and the *Electricity Reform Act 2000* would be amended so as to provide for common terminology and appointment processes for electrical safety authorised officers/inspectors.

Recommendation 10

A breach of safety requirements of the kind currently provided for in the *Electricity Reform Act 2000* is a ground of disciplinary action before the licensing authority with the Electrical Safety Regulator having responsibility for determining what might be the appropriate regulatory response to breach (with the options ranging from taking disciplinary action before the licensing board, issuing of an infringement notice or prosecution in respect of whether licensing of safety through the criminal courts).

8.3. Limitation Period for Prosecutions regarding Occupational Licensing and Electrical Safety

Problem - Inadequacy of the Time Period in which a Summary Prosecution can occur (six months)

Under section 52 of the *Local Court (Criminal Procedure) Act 1928* where no time is specially limited for commencing a prosecution of an offence the prosecution must be commenced within six months from the time when the offence occurred.

Neither the *Electricity Reform Act 2000* or the *Electrical Workers and Contractors Act 1978* contain a specific provision dealing with the limitation periods for the commencement of prosecutions. This means that the prosecution of offences under either of these Acts are likely to fail if commenced more than six months after the offence occurred. This can be contrasted with the position under the *Work Health and Safety (National Uniform Legislation) Act 2011* (WHS (NUL)). Section 232 of the WHS (NUL) provides that the limiting period is two years commencing when the offence first comes to the notice of the regulator or one year if a coronial report indicates that an offence has been committed.

For offences of a regulatory nature (such as those under the *Electricity Reform Act 2000* or the *Electrical Workers and Contractors Act 1978*) it is often the case that there is no knowledge about an offence until well after the expiry of the six months limitations period. Additionally, putting together the paper work for prosecuting for a regulatory offence can be so time consuming as to mean that laying the necessary complaint in time is impossible.

The default limitations per in section 52 of the *Local Court (Criminal Procedure) Act 1928* was designed in the context of the prosecution of offences commence in courts of summary jurisdiction by police e.g. minor assaults, minor thefts and other offences of the kind contained in the *Summary Offences Act 1928*. The provisions in the WHS (NUL) represent best practice for regulatory offences.

Interstate Provisions – Limitation Periods for Offences

Limitations period for electrical safety laws

As can be seen in the table below, the majority of states and territories have a 2-year period for complaints or findings of non-compliance for electrical work.

State and Territory Statute of Limitations for prosecutions for Non-Compliant Electrical Works and other electricity related offences		
State or Territory	Limitation	Legislative Reference
Northern Territory	six months	Section 52 Local Court (Criminal Procedure) Act 1928
Queensland	2 years - one year after offence is committed or one year after the offence comes to the complainants knowledge (but within 2 years of the committing of the offence)	Section 186B Electricity Safety Act 2002 Section 244, <i>Electricity Act 1994</i>
New South Wales	2 years (but up to 5 years in some circumstances)	Section 68 <i>Electricity (Consumer Safety) Act 2017</i>
Australian Capital Territory	1 year	Section 192 Legislation Act
Victoria ⁷	3 years	Section 148A Electricity Safety Act
Tasmania	2 years	Section 89 Electricity Industry Safety and Administration Act
South Australia	2 years	Section 61(3) Electricity Act
Western Australia	2 years	Section 53 Electricity Act
New Zealand	5 years	Section 165 Electricity Act

⁷ Victoria - in the absence of a specific period, the period in an Act, the period is 12 months from the offence (for a summary offence) Section 7 of the *Criminal Procedure Act 2009*.

Statute of Limitations for breach of licensing provisions		
State or Territory	Limitation	Legislative Reference
Northern Territory	six months	Section 52 Local Court (Criminal Procedure) Act 1928
Queensland ⁸	2 years	Section 186B Electricity Safety Act
New South Wales ⁹	3 years	Section 68 Gas and Electricity (Consumer Safety) Act 2007
New South Wales	3 years	Section 138A Home Building Act 1989
Australian Capital Territory	1 year	Section 192 Legislation Act
Victoria	1 year	Section 148A Electricity Safety Act
South Australia	6 months (expiable offences ¹⁰) Other – 2 years from the offence or 5 years if minister approves	Section 40 <i>Plumber, Fitters and Electricians Act</i> 1995
Tasmania	1 year	Section 89 Electricity Industry Safety and Administration Act

As can be seen in the tables above:

- the majority of other jurisdictions have a 2-year prosecution period for complaints or findings of non-compliance for electrical work; and
- most jurisdictions have a one or two year period for licensing prosecutions.

Options for Electrical Safety – Limitations Period

Option 1

Retain the current position.

Option 2

Amend the legislation so that the period is five years.

⁹ NSW - in the absence of a specific period, the period in an Act, the period is 12 months from the offence (for a summary offence) Section 179 of the *Criminal Procedure Act* 1986.

¹⁰ An expiation offence is one for which an expiation (infringement) notice can be issued, there do not seem to be any such offences.

This seems appropriate in the Northern Territory given the unfortunately lower level of inspections and the greater likelihood that a system installed to southern best practice may not fail in the first two years of operation offences).

Prosecution Limitations Periods (Electrical Safety) Proposal

Recommendation 11

Adopt option 2

Provide that the limitations period for electrical safety offences of the kind currently contained in the *Electricity Reform Act 2000* or proposed new offences) be five years.

Options for Licensing and Stealing– Limitations Period

Option 1

Retain the current position.

Option 2

Amend so that it is two years.

Option 3

Align with the period for electrical safety.

Limitations Periods (Licensing) Proposal

Recommendation 12

Provide that the limitations period for licensing offences and for stealing offences be two years.

8.4. Prosecution/Disciplinary Policy

Issue

For breaches of electrical safety and licensing there is a range of enforcement actions that might be taken. The possible actions include:

- Disciplinary action (against persons who hold licences)
- Action in the courts – against both licensed and unlicensed persons
- Rectification (sometimes in conjunction with disciplinary action or prosecution)
- Issuing of infringement notices
- Warnings.

From the perspective of both industry and inspectors it is important to understand the circumstances in which any particular action should be taken.

Under the present law it is not possible to have a coherent policy because different agencies are responsible for making decisions about what action to take. Some options, for example, issuing of infringement notices, are not currently available¹¹

Interstate Provisions

The Queensland *Electrical Safety Act* 2002, section 186 (prosecutions) sets out at sub-section 4 that:

The regulator must issue, and publish on the regulator's website, general guidelines for—

- (a) the prosecution of offences under this Act; and
- (b) the acceptance of electrical safety undertakings under this Act.

In the Northern Territory there is no such provision in the *Electricity Reform Act* 2000. However, section 230 of the *Work Health and Safety (National Uniform Legislation) Act* 2011 provides that the regulator must issue, and publish on the web site, general guidelines for or in relation to the prosecution of offence and the acceptance of undertakings under the Act.

Options for a Prosecution/Disciplinary Policy

Option 1

Retain the current position.

Option 2

As an administrative decision, create and publish a prosecution/disciplinary policy.

Option 3

By legislation, mandate that a prosecution/disciplinary policy be created and published.

Proposal

Recommendation 13

The proposal, for the short term, is that the Department of the Attorney-General and Justice and the Electrical Workers and Contractors Licensing Board establish an enforcement and compliance policy.

In the longer term, legislation along the lines of section 230 of the *Work Health and Safety (National Uniform Legislation) Act* 2011 should oblige the Electricity Safety Regulator to establish an enforcement and compliance policy (and publish it). This would, for example, spell out when disciplinary action might be taken (before the Board) or an infringement notice issued or prosecution occur in the criminal courts or where a safety improvement notice might be issued.

8.5. Who should be responsible for the commencement of prosecutions

¹¹ In the sense that no offences have been prescribed as infringement notice offences.

Issue

In terms of general principle anyone can commence a prosecution. This is well settled and understood concerning police prosecutions under legislation such as the *Summary Offences Act 1928* or the *Misuse of Drugs Act 1990*. The Director of Public Prosecutions can take over any prosecution launched by any other person.¹²

The position is less obvious for agencies that do not engage in prosecutions on a day to day basis. The problems came to light in 2015 when a prosecution launched by Power and Water Corporation failed owing to an array of perceived technical problems.

Interstate Provisions

The subject matter legislation in other jurisdictions does not appear to set who is responsible for commencing prosecutions. There may, however, be other legislation that contains principles applicable to all prosecutions.

Options for Commencing a Prosecution

Option 1

Retain the current position but make it clear that anyone can commence a prosecution.

Option 2

Formalise who can commence a prosecution with the model being section 230 of the *Work Health and Safety (National Uniform Legislation) Act 2011* which provides that the prosecutions are brought in the name of the main statutory regulator (i.e. in this case the Electrical Safety Regulator) or by an inspector who has an appropriate authorisation from the regulator.

Proposal

Adopt option 2

Recommendation 14

Formalise who can commence a prosecution with the model being section 230 of the *Work Health and Safety (National Uniform Legislation) Act 2011* which provides that the prosecutions are brought in the name of the main statutory regulator (i.e. in this case the Electrical Safety Regulator) or by an inspector who has an appropriate authorisation from the regulator. Additionally, it is proposed that the safety regulator have the power to authorise others, such as licensed electrical entities (eg Power and Water Corporation), to commence prosecutions if satisfied that they have an enforcement policy consistent with the policy referred to in recommendation 13.

8.6. Time Limits for Commencing Disciplinary Action

Issue

For most disciplinary schemes across a range of occupations there are no limits on when disciplinary action can be commenced. In part this is because disciplinary proceedings can often be delayed pending the

¹² See sections 13,14 and 20 of the *Director of Public Prosecutions Act 1990* and section 230(4) of the *Work Health and Safety (National Uniform Legislation) Act 2011*

outcome of criminal proceedings. Additionally, it may often be the case that disciplinary proceedings relate to a course of conduct over a long period of time that not meet the criteria for a prosecution.

However, there can be significant practical problems if disciplinary action is commenced years after the events in question. The absence of time imperatives may mean that decisions about disciplinary action are not made quickly enough.

Interstate Provisions

There does not seem to be any specific provisions.

Options for Commencing Disciplinary Action

Option 1

Retain the current position of no time limit.

Option 2

The legislation set out that there is no limit on the time when disciplinary action can be commenced but obliges the enforcement authority and the decision maker (via a published enforcement and compliance policy) to take into account in deciding whether to commence proceedings or impose a penalty the length of time and any associated evidentiary issues that may affect either the utility or the fairness of the proceeding.

Proposal

Recommendation 15

Retain the current position that there is no time limit on commencing disciplinary action and that the *Electrical Workers and Contractors Act 1978* state this but also set out general principles (via a published enforcement and compliance policy) for determining when it is too late to commence disciplinary proceedings.

8.7. Infringement Notices

Issue of Infringement Notice Offences – Licensing

The *Electrical Workers and Contractors Act 1978* does not provide for the issuing of infringement notices. However, section 65D of the *Interpretation Act 1978* means that all Acts under which regulations can be made means they also have the power to make regulations that provide for infringement notices. This means that regulations could be made which would permit infringement notices to be issued for breaches of the *Electrical Workers and Contractors Act 1978*.

An infringement penalty can only be imposed where there is an offence. For example, an infringement penalty could not be imposed for a breach of a code of conduct or failure to comply with a standard (unless failure to comply is an offence in itself).

Issue of Infringement Notice Offences – Electrical Safety

The issue is whether more offences should be identified in Part 9 of the Electrical Reform (Safety and Technical) Regulations as offences for which an infringement notice can be issued.

The specific number of offences for which an infringement notice can be issued is comparable in relation to other legislation in the Northern Territory, and to equivalent legislation in other jurisdictions. This can be seen in the table below, there are three breaches of the *Electrical Workers and Contractors Act 1978* and seven breaches of the Regulations for which an Infringement Notice can be issued plus any breaches of a regulation that has no specific penalty (approximately 20 in total). As a comparison, the Victorian Electricity Safety (Installations) Regulations 2009 set out 28 regulations for which an Infringement Notices can be issued with the amount of penalty being 10% of the maximum allowable fine which in many cases equates to only 2 penalty units.

Electrical Reform Regulation - Schedule 4 Infringement notice penalties

Provision of Act or Regulations	Number of penalty units
Section 69 (Electrical installation work shall be carried in accordance with the Regulations)	10 penalty units
Sections 99(1) and 99(3) (Notice must be given of work that may affect electricity infrastructure and such work must comply with regulations and electricity entity instructions)	5 penalty units
Regulations 21, 22, 23, 26, 28(1), 28(2) and 29 (Dealing with working around buried and overhead lines and substations)	5 penalty units
Regulation 40 (A general clause that states that "A person must not contravene or fail to comply with a provision of these Regulations for which a specific penalty is not provided.")	10 penalty units

(A penalty unit is \$157)

Interstate Provisions

New South Wales– Infringement/Penalty Notices

Section 187 of the *Electricity Supply Act 1995* provides that enforcement officer can issue penalty notices¹³. The offences for which penalty notice can be issued are prescribed by Regulation. None of the offences in that *Electricity Supply Act 1995* relating to matters covered by this report have been prescribed¹⁴.

Section 66 of the *Gas and Electricity (Consumer Safety) Act 2017* provides for the issuing of infringement notices by authorised officers. The offences for which penalty notices can be issued are prescribed by Regulation. The Regulations prescribe a number of offences relating to the sale of unsafe electrical appliances and the carrying out of work by qualified persons and for that work to comply with regulations and the notification provide for infringement notices for breaches of a regulatory nature. Examples include:

- Failure to main register (section 50B)
- Breach of licensing and employment provisions where the breach relates to failure to pay licence fee on time (sections 54 and 54A)

Summary of Interstate Provisions: Infringement

Infringement notice schemes have been identified in some jurisdictions for electrical safety but not for occupational licensing.¹⁵

Options for Infringement Notices

Option 1

Retain the status quo.

Option 2

Develop a scheme for the use of administrative penalties for both electrical licensing and electrical safety.

Proposal

Recommendation 16

Review offences with the view to widening the scope of electrical safety offences that may be dealt with by way of infringement notice.

Recommendation 17

Provide for the issuing of infringement notices for breaches of the regulatory provisions of the licencing legislation.

¹³ As defined in section 187(6) of the *Electricity Supply Act 1995*

¹⁴ Electricity Supply (General regulations) 2014

¹⁵ States and Territories have a range of statutory regimes governing administrative penalties. It is difficult to be confident that all such schemes have been identified for the purposes of this report.

8.8. Holding out as being an Electrician when not licensed

Issue relating to Unlicensed Persons “Holding out as being able to provide Electrical Services”

If a person is caught providing electrician’s services without being licensed the person can be prosecuted. However, if the only evidence is that they are holding themselves out as being an electrician there is no capacity to take any prosecution or other regulatory action. This can be compared to legislation that exists for lawyers, real estate agents and medical practitioners where it is a major offence for a person to hold themselves out as being able to provide the professional or occupational service in circumstances where a licence or other statutory authority is required.

There is no provision in the *Electrical Workers and Contractors Act 1978* for such an offence. This absence of capacity to take action can interfere with the possibility of the regulatory body taking proactive action.

Interstate provisions

Holding out is an offence in the Australian Capital Territory¹⁶, New South Wales, Tasmania and South Australia.

So most jurisdictions provide that pretending to be licensed (when not actually licensed) is an offence – generally with the maximum penalty for breach being at least equal to that of practising without a licence.

Options

Option 1

Retain the current position.

Option 2

Provide for the offence of holding out.

Proposal

Recommendation 18

It should be an offence for an unqualified or unlicensed person to hold out they are a licensed electrician or provider of electrical services.

8.9. Rectification

Issue - Rectification of Works for Non-Compliant Electrical Work

Under section 70 of the *Electricity Reform Act 2000* (the ERA) (Power to require rectification, etc., in relation to installations) the Electrical Safety Regulator can make an order to rectify works that are unsafe or which do not comply with the ERA. Such orders are directed to the person in charge of the installation or the occupier of the place in which the installation is situated.

The main issue is that the ERA does not deal with the responsibility of the person who provided the electrical installation that has to be rectified. The legislation has been interpreted so that such a person can only be

¹⁶ Section 81 of the *Construction Occupations (Licensing) Act 2004*

made responsible for fixing the problem in the context of a prosecution. If so, this power ends for any problems discovered after the expiry of the prosecution period.

The statute of limitations also affects section 67 of the ERA (Electrical installations to comply with technical requirements) as that talks about making a connection. There should not be any issues with section 68 of the ERA (Responsibility of owner or operator of installation) as that is an ongoing duty (however rectification would be an issue). There may be issues with one part of section 69 of the ERA (Electrical installation work) that deals with lack of reporting (which may not be held to six months by a court) but the other parts of that section are about work – and that may be limited to six months.

It also means that if the owner/manager of the installation does not comply, they are in breach of the *Electricity Reform Act 2000*, not the contractor. It is the same situation under section 80 of the ERA (Power to make installation safe) even though in the first instance that is less likely to be an issue for home owners as new works are unlikely to be unsafe.

So if a complaint or a finding of non-compliance is made more than six months after the work, all that can be done is the issuing of an order for disconnection, rectification or removal and the home or business owner then has to pay to get it fixed. This has created much hardship in the community with some incidents imposing significant financial hardship on home owners as they have to incur the cost for the necessary work to keep their house habitable and safe.

Interstate Provisions

Australian Capital Territory – Rectification

Sections 34 and 35 of the *Construction Contracts (Licensing) Act 2004* provide for the making of rectification orders. These are made by the registrar, if the registrar believes on reasonable grounds that a licensee or former licensee has provided a service otherwise than in accordance with the relevant legislation and if it is appropriate that an order be made. The order is directed at the person who conducted the work with copies to the land owner. Responsibility for paying the cost lies with the licensee or former licensee, emergency rectification orders can also be made. It is a breach of the *Construction Contracts (Licensing) Act 2004* (maximum penalty of 2000 penalty units) to fail to comply with a rectification order.

Section 8 of the *Electrical Safety Act 1971* also provides for rectification if an inspector believes on reasonable grounds that the electrical installation or electrical wiring is unsafe or has not been inspected or passed as required.

Tasmania – Rectification

The *Electrical Industry Safety and Administration Act 1997* sets out that the Secretary of the relevant agency may order the owner of person in charge of “electrical infrastructure” if the Secretary considers that the infrastructure is deficient in any respect, the maximum penalty for not complying is 50 penalty units.¹⁷ This relates to power equipment, used for the generation, transmission or distribution of electricity.

¹⁷ In Tasmania a penalty unit is \$168 (8 September 2019)

Options

Option 1

Retain the current position.

Option 2

Amend the *Electricity Reform Act 2000* so that it is plain that an order for rectification can be made by the Electrical Safety Regulator without the need for any prosecution and that it can be directed at either the occupier of the installation or the person who conducted the work. Any costs incurred by the occupier or owner of the installation would be recoverable from the person who did the work that required rectification.

The order could be reviewed by Northern Territory Civil and Administrative Tribunal as an administrative decision, however, breach of an order would remain an offence as set out in section 70 of the *Electricity Reform Act 2000*.

Proposal concerning Rectification

Adopt option 2.

Recommendation 19

Amend the *Electricity Reform Act 2000* so that it is plain that an order for rectification can be made by the Electrical Safety Regulator without the need for any prosecution and that it can be directed at either the occupier of the installation or the person who conducted the work. Any costs incurred by the occupier or owner of the installation would be recoverable from the person who did the work that required rectification.

9. Licensing Qualifications and Recognition

9.1. Current Qualifications

No issues were identified.

9.2. Recognition of Interstate Licensing Qualifications and Licensing Status

Mutual Recognition Legislation

The *Mutual Recognition Acts* of the Commonwealth, New Zealand and each state and territory¹⁸ allow people licensed or registered to practise an occupation in one jurisdiction to practise an equivalent occupation in other jurisdictions without the need to undergo further testing or examination.

Mutual recognition is not an automatic process. Individuals must apply for recognition of their existing licence and pay any applicable fee. From the date a person lodges their application they are deemed to be registered pending the granting or refusal of registration. Deemed registration continues until it is cancelled, suspended or is otherwise terminated. Deemed registration ends if a person is granted substantive registration or refused registration.

Equivalency is based on whether or not the activities authorised to be carried out under the original occupational licence are substantially the same as those under an occupational licence in the jurisdiction where mutual recognition is sought. Ministerial Declarations are used to declare specified occupations as equivalent. Often a declaration will cover numerous occupations, and require agreement from all state and territory Ministers.

Problem with Non-Territory Occupational Licensing Qualifications and Status

Arguably a properly qualified interstate licensed electricians at both the corporate (business) level and the employee level should be able to come into the Northern Territory on business and work.

In emergency situations there is a need for an exemption for interstate electrical workers responding to emergency situations.

Additionally, mutual recognition does not apply to licences held by corporate bodies.

Mutual recognition of occupational licences for individuals does part of this job.

The mutual licensing process still imposes significant regulatory hurdles if the proposed work under the licence is short term or is occurring in a border region. For example, where there is an emergency such as a natural disaster that calls for work to be conducted as a matter of some urgency or convenience.

Interstate Provisions regarding Automatic Recognition

Australian Capital Territory

There is no statutory provision providing for automatic recognition.

¹⁸ For the Northern Territory these Acts are the *Mutual Recognition (Northern Territory) Act 1992* and the *Cross-Tasman Mutual Recognition Act 1998*

New South Wales

There is no statutory provision providing for automatic recognition. However, there is an administrative arrangement with Victoria and Queensland that operates as a form of automatic recognition so far as individuals are concerned.

Victoria

There is no statutory provision providing for automatic recognition. However, there is an administrative arrangement with New South Wales and Queensland that operates as a form of automatic recognition so far as individuals are concerned.

Queensland

Section 65 of the *Electrical Safety Act 2002* (the Act) provides for “external licences”. These are interstate licences that are prescribed in the Regulations. The current Regulations recognise Northern Territory licences as being external licences for the purposes of the Act. Such licences are taken for the purpose of the Act to be equivalent to the relevant Queensland licence. Section 110 of the *Electrical Safety Act 2002* permits the taking of disciplinary action against a person carrying on in business in Queensland under an external licence.

Tasmania

There is no statutory provision providing for automatic recognition.

South Australia

There is no statutory provision providing for automatic recognition.

Western Australia

There is no statutory provision providing for automatic recognition.

Summary – Automatic recognition

Automatic recognition of occupational licences, particularly electrical licences, has only been introduced in Queensland allowing electrician to more easily work across borders. Automatic recognition of electrical licences is subject to requirements to obtain a jurisdictional licence under mutual recognition in some cases (for example if there is a relocation of the primary place of residence to another jurisdiction).

Automatic recognition would relate to prescribed interstate licences determined by the Minister based on advice from the licensing body after it benchmarks local requirements and standards against current settings in other jurisdictions.

Options

Option 1

Maintain the current position.

Option 2

Amend section 53 of the *Electrical Workers and Contractors Act 1978* (offences concerning work conducted or supervised by unlicensed persons) so that there is an exemption for interstate electrical workers responding to emergency situations

Option 3

Interstate licensed businesses and electricians should be able to provide electrical services of the kind permitted by their interstate licence in the Northern Territory without obtaining a Northern Territory licence:

- (a) if they have not set up a permanent business in the Northern Territory;
- (b) if they notify the regulatory body that they intending to conduct such a business or work; and
- (c) so long as they comply with Northern Territory laws regarding matters such as standards and certificates of compliance.

Persons operating under such licences would be subject to the same disciplinary actions as apply to persons licensed under Northern Territory issued licences.

There is an issue as to whether it should apply to corporate licences. It might be argued that an interstate corporate licensee is less vulnerable to disciplinary sanctions that might be imposed in the Northern Territory than might be the case with individuals. However, so long as employees need to comply with the requirements set out for option 3 it does not seem to be a significant risk to also provide that their employer does not need a licence in order to arrange for them to work in the Northern Territory.

Notwithstanding, the view of the Working group considered that it is not appropriate for the Northern Territory to extend recognition concepts beyond the principle that they relate to individuals rather than business (a corporate body). If a business wishes to operate in the Northern Territory it should seek the appropriate regulatory approval.

Notification will give the regulatory body the opportunity to provide basic regulatory information. The regulatory authority should also have disciplinary powers over business and individuals whose licences are automatically licensed. That is, have the power to fine, suspend or ban the provision of services. It should be an offence for a business or person whose licence is automatically licensed to provide electrical services in circumstances that, in their home jurisdiction, they could not lawfully do.

The working group acknowledges the concern with automatic recognitions, is that interstate and New Zealand business and electricians may not be aware of Northern Territory technical requirements. However, the risk is no greater than is the case with mutual recognition. The working group also notes the potential loss of revenue (albeit this is likely to be minimal).

Proposal regarding Automatic Recognition

Recommendation 20

Interstate licensed electricians (licensed workers, not licensed contractors) should be able to provide electrical services of the kind permitted by their interstate licence in the Northern Territory without obtaining a Northern Territory licence:

- (a) if they have not set up a permanent business in the Northern Territory;
- (b) if they notify the regulatory body that they intending to conduct such a business or work; and

(c) so long as they comply with Northern Territory laws regarding matters such as standards and certificates of compliance.

Persons operating under such licences would be subject to the same disciplinary actions as apply to persons licensed under Northern Territory issued licences.

Recommendation 21

Automatic recognition should not apply to corporate licensees.

9.3. Categories and Classes of Electricians

Issue

The *Electrical Workers and Contractors Act 1978* allows for various classes of licences. These classes do not line up with classes of licences interstate – see appendix 4. This makes recognition difficult to recognise interstate licences or qualifications.

Interstate Provisions

See Appendix 5 regarding classes of licences elsewhere in Australia. There is a considerable range of classes of licences. It is not practically possible to rationalise them into a coherent model that could be adopted in the Northern Territory.

Options

Option 1

Retain the current position.

Option 2

Rationalise current classes with those that exist interstate.

Option 3

Take out of the *Electrical Workers and Contractors Act 1978* references to classes of licence and permit the licensing body to issue restricted licences (subject to any prescriptions in the regulations) and to a general discretion to provide for exemptions.

Proposal

Option 3 is recommended.

Recommendation 22

Take out of the *Electrical Workers and Contractors Act 1978* references to classes of licence and permit the licensing body to issue restricted licences (subject to any prescriptions in the regulations) and to a general discretion to provide for exemptions.

9.4. Regulation of Apprenticeships

Apprenticeship Provisions

An apprentice is a person who is an apprentice as defined in section 4 of the *Training and Skills Development Act 2016*. For the purposes of the definition of apprentice section 5 of this Act provides:

“5. Apprentices

- (1) An employee who is seeking to attain a nationally recognised qualification that is an approved qualification and that may be attained through being trained in an approved apprenticeship is an **apprentice** if a training contract for the approved apprenticeship has been signed by the persons mentioned in section 45(3).
- (2) However, an employee is not an apprentice if:
 - (a) the employee's employer is a prohibited employer; or
 - (b) the employment of the person in the approved apprenticeship is not covered by an approval under section 38.
- (3) An employee ceases to be an apprentice if the CEO decides to refuse to register the training contract under section 50(1).”

The *Training and Skills Development Act 2016* also provides for traineeships.

Other relevant provisions of the *Training and Skills Development Act 2016* include:

- Section 34 – this provides that the relevant CEO can approve nationally recognised qualifications;
- Section 35 – this provides that the CEO must publish a list of approved qualifications along with various regulatory requirements concerning apprenticeships;
- Section 36 – this provides that the CEO can approved types of apprenticeships that leads to nationally recognised qualifications;
- Section 37 – this creates an offence for an employer to employ an apprentice without first obtaining an approval under section 38;
- Section 38 – this sets out the requirement that approval from the CEO is required for the employment of apprenticeships. It also sets out key restrictions and obligations concerning apprentices (e.g. they must be at least 15 years of age);
- Section 45 – this sets out there requirements concerning contracts between employers and apprenticeships; and
- Section 57 - prides for the approval of the CEO to providers of training.

Section 42A of the *Electrical Workers and Contractors Act 1978* provides that a person who is an apprentice within the meaning of the *Training and Skills Development Act 2016* can apply to the Board to be registered as an apprentice.

Section 42B of the *Electrical Workers and Contractors Act 1978* then provides for the electrical work that a registered apprentice can perform and the circumstances for such work. These are:

- the apprentice must be under the direct supervision of a person authorised under the Act to do electrical work or
- the apprentice has passed “a prescribed examination” and has completed not less than 3800 hours of practical electrical work or the work of the apprentice is on installations or lines that are physically isolated (as defined in section 42B of the *Electrical Workers and Contractors Act 1978*).

Issue with Apprenticeships

The main issue with the apprenticeship provisions is whether the requirement for registration is superfluous given the regulatory requirements contained in the *Training and Skills Development Act 2016*.

However, there is an argument that apprentices need to be recognised under the *Electrical Workers and Contractors Act 1978* for licencing and training and supervision purposes. Anybody working on electricity needs to be licenced – be it a full, restricted or apprentice licence to ensure appropriate training and safety knowledge is present. In addition, not all persons have the aptitude to be an electrician and even experienced apprentices still require supervision.

The other is that of whether to retain the principle in section 42B of the *Electrical Workers and Contractors Act 1978* concerning the need for legislation to spell out the kind of supervision required for an apprentice to engage in electrical work.

Interstate Provisions

Australian Capital Territory

Apprentices do not appear to be required to have any kind of registration.

Victoria

Apprentices are deemed to be licensed¹⁹.

Queensland

The *Electrical Safety Act 2002* (ERA) defines “worker” as including apprentices (within the meaning of the *Further Education and Training Act 2014*). It then provides that apprentices doing work within the scope of their role are not required to be licensed. Apprentices are workers for the purpose of provisions such as section 39 of the ERA (duty of employer to workers and section, 48N (industrial manslaughter). Regulation 279 of the *Electrical Safety Regulations 2013* spells out the duties of supervisors in respect of apprentices (about what kind of work they can do with supervision).

Regulation 43 of the *Electrical Safety Regulations 2013* sets out apprenticeship requirements for the purposes of obtaining a licence.

Summary of Interstate Provisions regarding Apprentices

It appears that in most jurisdictions there is only one system for registration rather than the dual system in place in the Northern Territory.

¹⁹ Section 39 of the *Electrical Safety Act 1998*

Options

The main regulatory burden regarding obtaining an apprenticeship is that of the approval needed under the *Training and Skills Development Act 2016*. The subsequent requirements under the licensing legislation mainly service, so as to ensure that the apprentice obtain some official recognition of their status, including an identity card.

It also seems appropriate to formally identify what an apprentice can lawfully work on when doing electrical work. The current prescriptive requirements, based around hours of apprenticeship rather than skills obtained, are overly prescriptive and out of date. It is appropriate that they be replaced by a process, such as the need for both apprentices and supervisors to comply with authoritative guidelines, which spell out the kind of work that can be done in the context of technical skills and actual experience.

This supervision and stepped guideline approach still requires extensive commitment from workers, trainers and supervisors. Effort that some apprentices are not able to mirror for one reason or another. As such the industry sees a need to ensure interested people before becoming apprentices undertake an aptitude test to ensure they have the requisite background skills to become an apprentice.

Option 1

Retain the current position.

Option 2

Remove the registration requirements.

Option 3

Retain a section along the lines of section 42B of the *Electrical Workers and Contractors Act 1978*.

Option 4

Replace section 42B of the *Electrical Workers and Contractors Act 1978* with a requirement that apprentices and their supervisor comply with guidelines issued by the regulatory body concerning the range of electrical work and the degree of supervision having regard to their technical and practical experience.

Option 5

Create the ability for the Regulations to set an aptitude test prior to individuals becoming electrical apprentices.

Proposal

Options 1, 4 and 5 are recommended.

Recommendation 23

Apprentices should continue to be registered under both the *Training and Skills Development Act 2016* and under the licensing legislation.

Recommendation 24

Replace section 42B of the *Electrical Workers and Contractors Act 1978* with a requirement that apprentices and their supervisor comply with regulations or guidelines issued by the regulatory body concerning the

range of electrical work and the degree of supervision required having regard to their technical and practical experience.

Recommendation 25

The *Electrical Workers and Contractors Act 1978* should permit regulations to be made so that an apprenticeship pre-entry assessment test could be made compulsory. The making of such a regulation would depend on the practicality of developing such a test.

10. Coverage Issues of the *Electricity Reform Act 2000* for Electrical Safety

10.1. Electrical Equipment and Appliances

Issue with Electrical Equipment (including household appliances)

The safety of electrical appliances and tools is covered either by consumer law for domestic use or work health and safety obligations for industrial use. Neither framework offers the strongest assurances of safety for users of electrical appliances and tools. In other jurisdictions there exists an Electrical Equipment Safety Scheme that provides that strong assurance.

Historically, under the Section 21 of the (repealed) *Electricity Act* the Authority could create by-laws controlling electrical equipment (which was further established under Electricity By Law 5 that set out, that certain equipment could not be sold and called-up inter-state approval frameworks) whilst section 22 allowed that electrical equipment may be inspected and tested with section 23 allowing a person to request an inspection not just of equipment but of anything associated with the electricity network including generation and transmission.

This framework was not carried over into the *Electricity Reform Act 2000*.

Currently a number of jurisdictions have an electrical equipment safety system to ensure that any electrical equipment manufactured in that jurisdiction or imported from an international manufacturer meet minimum safety standards. As there have been issues with conformity between jurisdictions and the systems needed modernisation, an updated (national) system was commenced in March 2013 in Queensland. Since then a number of other participating jurisdictions have introduced complementary legislation or have called up the Queensland legislation.

However, this cannot occur in the Northern Territory as the *Electricity Reform Act 2000* specifically excludes electrical equipment. It is appropriate that this opportunity be taken to enable such a system to be implemented in the Northern Territory.

Interstate Provisions

Appendix 6 contains the interstate provisions. In summary all jurisdictions apart from the Northern Territory have legislation that contains various offences regarding the selling and labelling of various electrical products and enables the relevant authority to approve an electrical appliance.

Options

Option 1

Retain the current position (of no regulation).

Option 2

Adopt the Queensland provisions in full.

Option 3

An alternative to directly adopting the Queensland legislation is for the Northern Territory to recognise external certification schemes. This power could be given to the Minister via gazettal in the same way the Queensland legislation gives the ability to their Regulator (see s48J) with the proviso of course that the *Electricity Reform Act 2000* would need to be amended to allow capture of electrical equipment.

48J Recognised external certification schemes

(1) *The regulator may, by gazette notice, declare a scheme for the certification of types of in-scope electrical equipment to be a recognised external certification scheme.*

(2) *A regulation may make provision about the declaration of a scheme under subsection (1).*

Option 4

Adopt a version of the Tasmanian legislation that creates a certification scheme but only recognises external certification in recognition that the Northern Territory does not have the skill set or demand to create an approving agency.

Adopting such a scheme would also allow the creation of offences and other regulatory powers that Option 3 would not allow.

Proposal

Option 4 - Adopt a version of the Tasmanian legislation that creates a certification scheme (with appropriate penalties and regulatory powers) but only recognises external certification.

Recommendation 26

The enactment of legislation mandating standards concerning the safety of electrical appliances (with the standards to be aligned with those in place elsewhere in Australia) with the legislative provisions to be based on those in place in Tasmania.

10.2. Solar Installations and Alternative and External Energy Sources

Issue

The *Electricity Reform Act 2000* (ERA) does not apply to solar photovoltaic (PV) panels and other alternative generation systems, other small generation units, domestic and industrial storage batteries and meter installations. This is because such matters are not covered by the definition of 'electrical installation' (section 4 of the ERA).

This absence of regulation may lead to electrical safety risks for homes and businesses.

Data from the Commonwealth Small-scale Renewable Energy Scheme in support of the Renewable Energy Target indicates that almost 1900 solar panel systems installed on houses, schools and small business properties in the Northern Territory over the past five years. The Scheme has been undertaking inspections of those solar panels.

In the Northern Territory, of the 1900 only 21 have been inspected by the Scheme with seven (33%) found to be sub-standard with three of them found to be unsafe.

However, the national average is 16% have been found to be sub-standard with only 4% unsafe. On that basis we could expect in the Northern Territory that possibly 310 are sub-standard with 82 of them possibly having unsafe installations.

Over the past few years, NT Worksafe has conducted a campaign targeting solar installers for the purpose of addressing this issue, and will continue such work into the future. NT Worksafe also conducts proactive random inspections of solar installations; which have resulted in the discovery of a small number of unsafe installations requiring disconnection.

Where deficiencies are identified, NT Worksafe provides advice and education to installers; and follows up on sub-standard installations to ensure they are brought up to national standards. The inability to order rectification is a serious impediment to this campaign's success and the long-term safety of the Northern Territory public.

Whilst this absence of legislative coverage has been the case for some time, it has only recently become an issue. This is due to the Australian Standards and technical definitions that the *Electricity Reform Act 2000* and Regulations refer to being recently being modernised with their scope extended and additional technical definitions provided. Previously, the relevant scope and definitions in the Australian Standards were similar to those used in the *Electricity Reform Act 2000* or the Standards were called up in the Wiring Rules (AS3000) – the main Standard called up by the *Electricity Reform Act 2000*. Unfortunately, that Standard now needs updating to call up the modernised or new Standards – which means that a lot of modern Standards are not called-up by Northern Territory legislation because neither the Regulations nor the proscribed Australian Standard refer to them.

The impact of this issue is that authorised officers cannot legally, under the *Electricity Reform Act 2000* require a contractor or building owner to fix a sub-standard or dangerous installation of a solar panel. This is especially the case where an alternative generation system is generating Extra Low Voltage (<120VDC) (which is not captured by the Wiring Rules or the Regulations currently) yet because of the systems being used are actually dangerous High Energy Systems (typically >9W) which creates both a human safety risk and a risk that any infrastructure such a system is attached to could become 'live'.

It is possible in a workplace under the *Work Health and Safety (National Uniform Legislation) Act 2011* for an inspector to order such an installation to be fixed. However, this is not the case if the location of the installation is solely a residence then a work health inspector is not permitted to enter without permission or a warrant. The *Electricity Reform Act 2000* allows an inspector to enter any place.

To be clear, as stated above, this matter also involves batteries that are connected to alternative energy supplies.

Domestic battery storage systems installed in conjunction with or separate to solar systems are a relatively new technology and set to increase in popularity in Australia over the coming years. Australian Standard AS/NZS 4777.1:2016 Grid connection of energy systems via inverters was published partially to assist electrical authorities, contractors and workers to design and install domestic battery storage systems in a safe and compliant manner in conjunction with AS/NZS 3000:2018 (the Wiring Rules).

On 30 January 2019 Australian Standards released 'DR2 AS/NZS 5139:2019, Electrical installations – Safety of battery systems for use with power conversion equipment' for public comment with the submission period closing 3 April 2019. The draft Standard looks to replace the Standard published in 1997 that is very limited in scope and expand upon AS/NZS 4777.1:2016.

The draft Standard is significant in scope and provides manufacturers, system integrators, designers and installers of battery energy storage systems with the requirements for the safety and installation of battery systems connected to power conversion equipment for the supply of alternating current (AC) and/or direct current (DC) power. This Standard is necessary not only because battery technology has advanced significantly in the last decade but also because batteries such as Lithium-ion batteries are dangerous and require correct installation and adequate ongoing maintenance – procedures which are set out by the draft Standard.

Adoption in the Northern Territory may be difficult as the *Electricity Reform Act 2000* does not allow the enforcement of standards not referred by the Wiring Rules; and AS/NZS 5139:2019 is not currently called

up by the Wiring Rules and may not be for some time. There are short-term workarounds to ensure proper regulation however a long-term solution is required.

Interstate Provisions

Appendix 7 sets out interstate provisions concerning electrical installations. Every jurisdiction defines an installation in a slightly different way however with the exception of South Australia (which provided the parent definition adapted for use in the Northern Territory) the definition and coverage of electrical work includes small power generating units.

Options

Option 1

Retain the status quo and rely on educational and information for persons in the business of solar installations.

Option 2

Amendment to the *Electricity Reform Act 2000* is required to clearly include solar panels and other alternative energy sources (but exclude those fitted to mobile-homes and caravans and permanent infrastructure if they are not High Energy Systems) but ensure that their batteries and all meters are in scope. Capture all solar panel and renewable generators and systems in a similar fashion to that recently adopted in Queensland.

Queensland has developed a Code of Practice regarding the construction and operation of solar farms that was recently adopted under both their *Work Health and Safety Act 2011* and *Electricity Reform Act 2000*.

Consequently, the *Electricity Reform Act 2000* could be updated to cover existing technology and be flexible enough to cover emerging technology.

Option 3

Limit the capture to small-scale installations and not capture large-scale generators such as those used on some remote communities.

In limiting the scope of the amendments, it is also envisaged that the impact will also be low. Whilst the amendment will capture residences and small commercial properties, those are the very people who are most at risk from shoddy installations.

Option 4

Amend the *Electricity Reform Act 2000* so that the various regulatory requirements applicable to “electrical installations” apply to meters, solar panels, batteries, other small generation units and other emerging technologies and includes low-voltage, high energy systems. This amendment should not be dependent upon Australian Standards for its implementation and interpretation.

Proposal

The recommendation is that Option 4 be implemented.

Recommendation 27

Amend the *Electricity Reform Act 2000* so that the various regulatory requirements applicable to “electrical installations” apply to meters, solar panels, batteries, other small generation units and other emerging

technologies and includes low-voltage, high energy systems. This amendment should not be dependent upon Australian Standards for its implementation and interpretation.

10.3. Power and Water Corporation and Providers and Transmitters of Electricity

Issue

The Power and Water Corporation and Territory Generation and other companies providing or transmitting electrical energy are in the main exempt from regulatory activity by the Electrical Safety Regulator as the definition of an electrical installation in the *Electricity Reform Act 2000* explicitly excludes electricity infrastructure (e.g. electricity generating plant; powerlines) owned or operated by an electricity entity.

It should be noted that safety management and mitigation plans (SMMPs) are required for all networks and generators as a licence condition imposed by the Utilities Commission (initial Plan within 3 months of being issued a licence and then an annual review). This requirement was added to licences in approximately 2011 at the request of the then Treasurer to address a gap in addressing public safety around electricity utility infrastructure.

Under current law the Utilities Commission can only impose the obligation for a SMMP on licensed generators and network operators that still makes the need for a SMMP somewhat dependent on the Utilities Commission licencing an electricity entity. This can expose the framework to gaps – for example, the Utilities Commission could:

- grant a licence exemption to a generator or network provider, rather than a licence; or
- the network provider could be operating an embedded network, which the Utilities Commission does not licence; or
- the generator could also be exempt from needing to be licensed under the *Electricity Reform Act 2000* (which is the case for some generators)

Any of those situations would then limit any regulators' ability to impose obligations regarding SMMP.

Options

Option 1

The Utilities Commissioner (rather than the Electrical Safety Regulator) should continue to be responsible for approving safety management systems and mitigation plans for generators and network operators (including generators of electricity) who operate a licence under the *Electricity Reform Act 2000* or any other relevant Act.

Option 2

Provide that the requirements of the safety components of the *Electricity Reform Act 2000*, or any new Act created as per the recommendations of this Review, apply to all providers and transmitters of electrical energy.

Proposal

The proposal is that Option 2 be adopted preferably at the same time as economic reform and other reforms being undertaken by the Department of Trade, Business and Innovation are complete.

Recommendation 28

Provide that the Electrical Safety Regulator rather than the Utilities Commission is responsible for approving safety management systems and mitigation plans for licensed generators and network operators.

11. Compliance Certificates and Notifications

11.1. Provide for the Electrical Safety Regulator to be Notified of Major Works and be provided with Certificates of Compliance

Issue

The *Electricity Reform Act 2000* provides that a person can rely on a certificate of compliance if there is any suggestion that works do not comply with the legislation. However, the *Electricity Reform Act 2000* does not provide any detail about how certificates issued and who should retain them. The following requirements are prescribed in the Regulations as follows:

"5 Certificates of compliance

- (1) The licensed electrical worker personally carrying out the examinations and tests under regulation 4 must, when satisfied that the work has been carried out in accordance with the standards and requirements referred to in that regulation and before the installation is made available for energisation, complete and sign a certificate of compliance for the purposes of Part 5 of the Act, in a form approved by the electricity safety regulator to that effect.
- (2) If the licensed electrical worker who signs the certificate of compliance under subregulation (1) was employed or engaged to carry out the examinations and tests (whether or not together with other work on the installation) by a licensed electrical contractor, then:
 - (a) the contractor; or
 - (b) a person who has or had a supervisory role in relation to the worker and who is acting as a duly authorised agent of the contractor,must, if satisfied that the standards and requirements referred to in regulation 4 have been complied with in relation to the work, also complete and sign the certificate in accordance with the directions contained in it.
- (3) If the work is associated with the making of a connection to a transmission or distribution network, a copy of the certificate (completed and signed in accordance with subregulations (1) and (2)) must be given to the operator of the network before the energisation of the work or a part of the work.
- (4) If the work was carried out on behalf of the owner or occupier of the premises concerned, a copy of the certificate (completed and signed in accordance with subregulations (1) and (2)) must be given to the owner or occupier within 30 days after the installation was made available for energisation.
- (5) A copy of the certificate (completed and signed in accordance with subregulations (1) and (2)) must be kept at the business premises of the person to whom section 69 of the Act applies or, if that person does not have business premises, at that person's residence for at least 5 years after the installation was made available for energisation.
- (6) A certificate of compliance may not be relied on by an owner or operator of an electrical installation under section 68(2) of the Act if the certificate has been issued in relation to the installation by a licensed electrical worker who is an employee of the owner or occupier.

6 Exemption from certificate of compliance requirements

- (1) Regulation 5 does not apply in relation to work on an electrical installation or proposed electrical installation in specified premises if the electricity safety regulator has given an exemption under this regulation in respect of the premises and the conditions of the exemption are complied with.
- (2) The electricity safety regulator may, on application or on the electricity safety regulator's own initiative, give an exemption referred to in subregulation (1) subject to the conditions that the electricity safety regulator thinks fit, including conditions as to the keeping of records relating to electrical work in the premises."

Not only is there confusion about regulation and management of Certificates of Compliance, but there is currently no requirement to report proposed works to the Electricity Safety Regulator.

Under the Power Water Corporation's Network Technical Code and Network Planning Criteria clause 7.1.4, not less than 65 business days prior to the proposed commencement of commissioning by a User of any new or replacement equipment that could reasonably be expected to alter performance of the power system, the User shall advise the Network Operator in writing of the commissioning program including test procedures and proposed test equipment to be used in the commissioning. The Network Operator must either agree or set out required changes. Commissioning can only commence once the program has been agreed to.

Prior to connection the User shall test the equipment and provide certification to the Network Operator that the equipment has been properly installed (clause 7.1.5).

Under clause 11.2.1, before any new or additional equipment (plant) is connected, the User may be required to submit information to the Network Operator including design details and compliance with AS3000. Under clause 11.2.2 unless otherwise agreed by the Network Operator, Users shall provide the Network Operator with full details of proposed protection designs, together with all relevant plant parameters, a minimum of 12 months prior to energisation of the protected primary plant. The Network Operators has 65 business days to respond.

There are even more onerous obligation upon Users with Generators, Users with Small Generators, Users with Small Inverter Energy Systems, and Users with loads. All such systems could have significant safety issues pre-, at and post-commissioning yet the Electricity Safety Regulator is generally unaware of these systems being installed and if no Certificate of Compliance makes its way to the Regulator, then no overall worker and user safety inspection occurs.

Interstate Provisions

Australian Capital Territory

Section 6 of the *Electrical Safety Act 1971* obliges a person who has carried out electrical wiring work to give a copy of the report on the work to the construction occupations registrar and one to the owner of the installation. Regulations can prescribe installations to which this obligation does not apply²⁰.

²⁰ Regulation of the Electrical Safety Regulations 2004 provides an exempting in respect of lifts and escalators.

New South Wales

The New South Wales Gas and Electricity (Consumer Safety) Regulation 2018, requires that safety and compliance tests be carried out in accordance with Part 9 of said Regulations. Regulation 37 sets out to whom notices of the results of such testing should be provided:

- (a) to the person for whom the work is carried out and to the owner or the owner's agent,
- (b) in relation to an electrical installation that is connected, or is intended to be connected, to the distribution system of a distributor—to the distributor and to the Commissioner for Fair Trading, but only if the electrical installation work concerned involves:
 - (i) a new electrical installation, or
 - (ii) any alterations or additions to an existing electrical installation that will require additional work to be done by or on behalf of the distributor in relation to the network connection for the installation, or
 - (iii) work on a switchboard or associated electrical equipment (other than work to repair or replace equipment that does not alter the electrical loading, method of electrical protection, system of earthing or physical location of the switchboard or equipment being repaired or replaced),
- (c) in the case where the electrical installation work concerned involves the connection of the installation to a stand-alone power system—to the Commissioner for Fair Trading,
- (d) in the case where the electrical installation is connected, or is intended to be connected, to a distribution system and the electrical installation includes the installation, alteration or replacement of an electricity meter—to the Commissioner for Fair Trading.

Victoria

Under the Victorian *Electricity Safety Act 1998*, electrical installation work must be tested by the licenced electrical installation worker who carried out the work prior to completing and signing a "certificate of compliance". That installation must then be inspected by a licenced electrical inspector prior to connection to the electricity supply who will sign a "certificate of inspection".

Before an electricity supplier first connects an electrical installation to an electricity supply, the electricity supplier must ensure that the appropriate certificate of inspection has been issued. The two certificates combined are a "certificate of electrical safety" which is managed and regulated by Energy Safe Victoria. A completed certificate of electrical safety must be given to the person for whom the work was carried out and a copy given to Energy Safe Victoria.

Tasmania

Under the *Occupational Licensing (Electrical Work) Regulations 2008*, the Administrator of Occupational Licensing may determine that electrical work may be classified as one or more of the following:

- (a) electrical work that is required to be notified before it is commenced;
- (b) electrical work that is not required to be notified before it is commenced;
- (ba) electrical work that is required to be notified when it is capable of being energised;
- (bb) electrical work that is not required to be notified when it is capable of being energised;
- (c) electrical work that is required to be notified after it has been energised;
- (d) electrical work that is not required to be notified after it has been energised.

Regulation 17 requires that where any electrical work is energised, or is capable of being energised, the person responsible for the electrical work must, as soon as practicable, give a copy of the approved form to the person for whom the work was carried out; while Regulation 18 states that a person responsible for electrical work that is required to be notified must give notification of that work in accordance with this regulation, accompanied by the prescribed fee payable to the person specified in the form for that purpose.

The payment of a fee is crucial as Tasmania has established an Electrical Safety Inspection Service that inspects new electrical work and existing electrical installations for compliance and electrical safety under the powers of Regulation 19 that states that an authorised officer –

- (a) may inspect, or cause to be inspected, any electrical work; and
- (b) must, as far as practicable, inspect, or cause to be inspected, any electrical work of high voltage or in a hazardous area.

Queensland

The Queensland *Electrical Safety Regulation* 2013 sets out that electrical installations must not be connected to an electricity source if the work has not been tested (Regulation 218); or if being connected for the first time – examined and tested by the distribution entity (R219). If the installation is high voltage or in a hazardous area then as per Regulation 221 the work must be inspected by an accredited auditor (appointed under section 129 of the *Electrical Safety Act* 2002).

If a test needs to be conducted then under Regulation 226, the licenced electrical contractor must give notice to the distribution entity that a test will occur and that the installation will be safe to connect after testing (on a nominated date). After connection has been made Regulation 227 requires that the licenced electrical contractor must give certificate of testing and compliance to the person for whom the work was performed.

The Queensland Electricity Connection Manual states that where an Electrical Contractor needs to submit an Electrical Work Request (as per Regulation 226 set out above) they should contact the distributor at the earliest opportunity to obtain an estimate of the time that may be required to modify the network to accommodate the changes or load increases.

South Australia

Section 61(1) of the *Electrical Act* 1995 provides for certification of compliance. Regulation 56 of the Electricity (General) Regulations 2012 provides that certificates for specified kinds of work need to be provided to the Technical Regulator²¹.

Western Australia

Under the Electricity (Licencing) Regulations 1991, an electrical contractor/electrician who carries out any electrical installing work on a consumer's premises must provide an electrical safety certificate to the person for whom the work was done within 28 days of completion of the work (the relevant person may be the owner, occupier or another party such as a builder or property manager).

²¹ Work of the kind referred to in AS/NZS 3000

An electrical safety certificate is a legal document certifying that the installing work:

- has been completed;
- has been checked, tested and complies with all regulatory requirements; and
- is safe to connect to the electricity supply.

Under Regulation 51 an electrical contractor who carries out any notifiable work, or causes any notifiable work to be carried out, commits an offence unless a preliminary notice of the proposed notifiable work, in a form approved by the Director of Energy Safety and duly completed, is prepared by the electrical contractor or a person authorised by the electrical contractor and delivered to the relevant network operator at the required time.

Under Regulation 52B an electrical contractor who carries out any electrical installing work, or causes any electrical installing work to be carried out, must provide to the person for whom the work was carried out, a duly completed electrical safety certificate, in a form approved by the Director.

Summary of Interstate Provisions for Compliance Certificates

In summary the majority of jurisdictions require that certificates of compliance or safety are presented to the appropriate Regulator, and in some jurisdictions, notification of works is also required to be given to the Regulator as well as to the network operator or electricity distributor.

Options

Option 1

No change with the status of Certificates of Compliance uncertain and no safety over sight of proposed and current electrical work.

Option 2

Clarification that the Certificate of Compliance is regulated by the Electricity Safety Regulator and that they must be provided to the Regulator as well as the relevant electricity distributor; and that the network operator must inform the Regulator of all proposed commissioning of electrical work that is notifiable under Power Water Corporation's Network Technical Code and Network Planning Criteria.

Proposal

Recommendation 29

The proposal is that the Electricity Safety Regulator be provided with certificates of compliance (except where regulations provide that there is no need to provide certificates) as approved by the Electricity Safety Regulator; and be informed by the Network Operator of proposed commissioning of electrical work.

11.2. Provide for the Electrical Safety Regulator to be Notified of Accidents

Issue - Reporting of Accidents

The requirements for reporting of accidents under the *Electricity Reform Act 2000* (the Act) are very basic and are out-of-step with modern safety reporting. The requirement is set out in section 71 of the Act where it only requires reporting if an accident happens that involves electric shock caused by the operation or condition of an electrical installation. The Electricity Reform (Safety and Technical) Regulations states that a report must be made to the Electricity Safety Regulator of the details of the accident—

- a) in the case of a death resulting from the accident—immediately by telephone;
- b) in the case of a person requiring medical assistance resulting from the accident—within 1 working day of the accident;
- c) in any other case—within 10 working days of the accident.

This is a very basic statement of duties lacking in clarity and not meeting modern expectations of regulatory oversight. It does not include fires or damage to other property and does not differentiate between an electrical shock to a worker and an electrical shock to another person.

As the requirements under the *Work Health and Safety (National Uniform Legislation) Act 2011* dominate the operations of the NT WorkSafe and are very modern, adopting those requirements is appropriate. Especially as that will mean electrical contractors only need to report under one system, not two.

The *Work Health and Safety (National Uniform Legislation) Act 2011* sets out that a notifiable incident is:

- (a) the death of a person; or
- (b) a serious injury or illness of a person; or
- (c) a dangerous incident.

Its definition of **serious injury or illness** of a person includes an injury or illness requiring the person to have:

- (a) immediate treatment as an in-patient in a hospital; or
- (b) immediate treatment for:
 - a serious burn; or
 - the loss of a bodily function; or
 - serious lacerations.

Its definition of **dangerous incident** means an incident in relation to a workplace that exposes a worker or any other person to a serious risk to the person's health or safety emanating from an immediate or imminent exposure to amongst other things:

- an uncontrolled implosion, explosion or fire; or
- an uncontrolled escape of gas or steam; or
- electric shock.

Under the *Work Health and Safety (National Uniform Legislation) Act 2011* a person who conducts a business or undertaking must ensure that the regulator is notified immediately after becoming aware that a notifiable incident arising out of the conduct of the business or undertaking has occurred.

Interstate Provisions

Australian Capital Territory

The *Electricity Safety Act 1971* defines a serious electrical accident as an accident in which electricity causes, or contributes to:

- a) the death or injury of a person; or
- b) damage to property; or
- c) a fire.

The *Electricity Safety Act 1971* sets a duty upon either the occupier of the premises or the contractor undertaking works to report such an accident immediately to the relevant electricity distributor. The electricity distributor has a duty to tell the construction occupations registrar immediately upon the distributor becoming aware of the accident.

New South Wales

In New South Wales, the *Gas and Electricity (Consumer Safety) Act 2017* and Regulations sets out that a serious electrical accident meaning an accident:

- a) involving an electrical article or electrical installation that was used for (or for purposes incidental to) the conveyance, control and use of electricity at the time of the accident, and
- b) as a consequence of which a person dies or suffers permanent disability, is hospitalised, receives treatment from a registered health practitioner or is unable to attend work for any period of time,

The report should go to the Commissioner for Fair Trading.

This reporting does not include an accident in which only electricity works (within the meaning of the *Electricity Supply Act 1995*) are involved, as that Act requires that a serious electricity works accident must be notified to the Independent Pricing and Regulatory Tribunal by the distributor or transmission operator that owns, controls or operates the distribution system or transmission system of which the electricity works concerned forms part.

Victoria

The Victorian *Electricity Safety Act 1998* sets out that a "serious electrical incident" means an incident involving electricity which causes or has the potential to cause—

- a) the death of or injury to a person; or
- b) significant damage to property; or
- c) a serious risk to public safety.

The *Electricity Safety Act 1998* sets reporting duties with the Electricity Safety (Installations) Regulations 2009 providing the detail of whom should report a serious electrical incident to Energy Safe Victoria and when. Those Regulations also contain a requirement that if an incident occurs involving electricity in which a person has made accidental contact with any electrical installation or received an electric shock as the result of direct or indirect contact with any electrical installation then the duty holder also needs to report to Energy Safe Victoria.

Tasmania

The *Electricity Industry Safety and Administration Act 1997* defines a serious electrical accident as an accident involving –

- a) electrocution; or
- b) electric shock serious enough to cause temporary or permanent disability or to require medical attention; or
- c) electricity that produces a burn serious enough to cause temporary or permanent disability or to require medical attention.

Section 72 of the *Electricity Industry Safety and Administration Act 1997* sets out that if a serious electrical accident occurs, the person responsible for reporting the accident –

- a) must, as soon as practicable, inform the Secretary of the Department of the time and place of the accident and the general nature of the accident; and
- b) must, within 21 days after the accident or a longer period approved by the Secretary, give the Secretary a written report containing full details of the accident and the reasons for the accident.

It states that the following persons are responsible for reporting serious electrical accidents –

- a) if the accident occurs in the course of work being carried out by the holder of a licence within the meaning of the Occupational Licensing Act 2005, the holder of the licence; or
- b) if the regulations designate a person as responsible for reporting accidents of the relevant type, the person so designated; or
- c) in any other case, the occupier of the premises in which the accident occurred.

Queensland

The Queensland *Electrical Safety Act 2002* sets out the reporting and investigation requirements for both serious electrical incident and dangerous electrical event. These two matters are defined as:

- A serious electrical incident is an incident involving electrical equipment if, in the incident—
 - a) a person is killed by electricity; or
 - b) a person receives a shock or injury from electricity, and is treated for the shock or injury by or under the supervision of a doctor; or
 - c) a person receives a shock or injury from electricity at high voltage, whether or not the person is treated for the shock or injury by or under the supervision of a doctor.
- A dangerous electrical event is any of the following—
 - a) the coming into existence of circumstances in which a person is not electrically safe, if—
 - i. the circumstances involve high voltage electrical equipment; and
 - ii. despite the coming into existence of the circumstances, the person does not receive a shock or injury;
 - b) the coming into existence of both of the following circumstances—
 - i. if a person had been at a particular place at a particular time, the person would not have been electrically safe;

- ii. the person would not have been electrically safe because of circumstances involving high voltage electrical equipment;
- c) an event that involves electrical equipment and in which significant property damage is caused directly by electricity or originates from electricity;
- d) the performance of electrical work by a person not authorised under an electrical work licence to perform the work;
- e) the performance of electrical work by a person if, as a result of the performance of the work, a person or property is not electrically safe;
- f) the discovery by a licensed electrical worker of electrical equipment that has not been marked as required under this Act.

Part 14 of the Queensland Electrical Safety Regulation 2013 sets out the duties and reporting processes for these types of incidents in very similar language to that used in the Work Health and Safety legislation. However, it is more specific than the Work Health and Safety legislation in that it defines very strictly who holds a reporting duty – either a person who conducts a business or undertaking, or the relevant a distribution entity. The Regulations also set out the actions required to be undertaken by a distribution entity if a distribution entity is advised by a consumer to whom the distribution entity supplies electricity that a person has received an electric shock.

South Australia

The *Electricity Act 1996* sets out that if an accident happens that involves electric shock or electrical burns caused by the operation or condition of electricity infrastructure or an electrical installation, the accident must be reported as required under the regulations—

- a) if the accident involves part of an electricity entity's infrastructure— by the electricity entity; or
- b) if the accident happens while an electrical worker is working on an electrical installation and the electrical worker is able to make the report—by the electrical worker; or
- c) in any other case—by the occupier of the place in which the accident happens.

The Electricity (General) Regulations 2012 states that a report must be made to the Technical Regulator of the details of the accident—

- d) in the case of a death resulting from the accident—immediately by telephone;
- e) in the case of a person requiring medical assistance resulting from the accident—within 1 working day of the accident;
- f) in any other case—within 10 working days of the accident.

Western Australia

The Electricity (Licensing) Regulations 1991 defines an electrical accident as an accident —

- a) that results from a sudden discharge of electricity or that otherwise has, or is likely to have, an electrical origin; and
- b) that causes, or is likely to cause, danger to life, a shock or injury to a person or loss of or damage to property

The Regulations set out duties of employees, employers and the network operator to report such accidents to the Director of Energy Safety.

Summary of Interstate Provisions - Reporting of Accidents

Most jurisdictions have an expanded definition of a notifiable electrical accident and sets comprehensive duties with regards to reporting such accidents with the Queensland definition and requirements being the most modern and being very similar to the reporting provisions in their work health and safety legislation.

Options

Option 1

Retain the current position.

Option 2

Repealing Section 71 "Reporting of Accidents" of the *Electricity Reform Act 2000* in favour of legislation similar to that in Part 3 "Incident Notification" of the *Work Health and Safety (National Uniform Legislation) Act 2011* and the reporting provisions in the *Queensland Electrical Safety Act 2002*.

Proposal

Recommendation 30

Repealing section 71 "Reporting of Accidents" of the *Electricity Reform Act 2000* in favour of legislation similar to that in Part 3 "Incident Notification" of the *Work Health and Safety (National Uniform Legislation) Act 2011* and the reporting provisions in the *Queensland Electrical Safety Act 2002*.

12. Issues facing the Power and Water Corporation

12.1. Stealing of Electricity

Issue relating to the Stealing of Electricity

Thefts of electricity can be difficult to prove. In part this is because of the often disingenuous nature of the offence. Often it arises from activities and actions which affect the measuring of the amount of electricity that is being consumed. Such activities and actions include those where:

- the measuring meter is by-passed (so that the electricity being used is simply not measured);
- the meter is physically affected by being made to run slower (meaning that there is an under measurement of electricity being used).

In most cases it is relatively easy to prove who has received the benefit of the under measurement of the electricity. It is much less easy to prove that that person had the requisite criminal intent.

Additionally:

- Enforcement of some offences under the *Electricity Reform Act 2000*, including for stealing of electricity is somewhat problematic for electrical entities as they have no experience with criminal law.
- In addition the current level of penalty is low in relation to the cost of an investigation and prosecution.
- There may also be issues about who is responsible for prosecutions – the crown as is the case for most prosecutions of the criminal law or the electricity entity (as the entity that is suffering commercial losses from the theft/tampering with devices)

Stealing and Tampering Offences

Section 96 and 97 of the *Electricity Reform Act 2000* includes a range of civil penalty provisions (either 100 or 200 penalty units) that were intended to be enforceable by the Electrical Safety Regulator. However, the Electrical Safety Regulator (in its functions under section 8 of the *Electricity Reform Act 2000*) does not have the function to 'enforce' these provisions. The Utilities Commission does have the power to 'enforce' its offences under the *Electricity Reform Act 2000* (although it does not have many) because section 6 of the *Utilities Commission Act 2000* provides that one of the Utilities Commissioner's functions is to 'enforce compliance'.

Section 100 of the *Electricity Reform Act 2000* also allows that it is a defence to a charge of an offence against this Act if the defendant proves that the offence was not committed intentionally and did not result from any failure on the part of the defendant to take reasonable care to avoid the commission of the offence.

Interstate Provisions

Australian Capital Territory

Section 38 of the *Utilities (Technical Relations) Act 2014* makes it an offence to abstract, deliver or use electricity unless authorised by the relevant electricity utility (including customer meters).

New South Wales

The *Electricity Supply Act 1995* has a general offence dealing with the theft of electricity (section 64) as well as more specific offences dealing with:

- Altering or interfering with electricity meters (section 66);
- Altering or interfering with distributors seals (section 67);
- Unauthorised connections (section 6*)
- Unauthorised increase in capacity for connections (section 69)
- Unauthorised alterations or additions to electrical installations (section 70)

The *Electricity Supply Act 1995* also permits the Local Court to order persons found guilty of an offence against sections 64-70) to have their power disconnected and that they pay to the wholesale supplier or retailer of the electricity an amount of money for any electricity wasted, diverted, consumed, or used,

Queensland

Section 251 of the *Electricity Act 1994* provides, as part of the evidential provision of that Act as follows:

251 Proof of taking of electricity etc.

The existence on, or in association with, a customer's electrical installation of ways to—

- (a) take electricity provided from an electricity entity's transmission grid or supply network; or
- (b) change or interfere with a meter or the works of an electricity entity and connected (directly or indirectly) to an electricity entity's transmission grid or supply network if the meter is or works are in the custody or control of the customer;

is evidence that electricity has been taken by the customer and the change or interference has been caused by the customer.

Summary of Interstate Provisions: Stealing and Tampering

Some jurisdictions have amended the legislation so that the onus of proving the offence is made easier by shifting responsibility to the person who appears to have received electricity without paying for it.

Options

An option could be to increase the penalty for illegal activity and the creation of administrative arrangements with NT Police or a regulator to ensure appropriate management of criminal cases is undertaken. However that is unlikely to resolve the issue.

A more holistic approach, like those taken in New South Wales and Queensland, is needed.

Option 1

Retain the current position.

Option 2

Shift onus of responsibility to the person who has apparently received electricity without paying for it and increase the enforce tools available to the Regulator.

Proposal

Recommendation 31

Amend the current stealing and tampering offences in sections 96 and 97 of the *Electricity Reform Act 2000* so that:

- (a) They mirror the offences in sections 66-70 of the *Electricity Supply Act 1995 NSW*) and
- (b) They include proof provisions along the lines of section 251 of the *Electricity Act 1994 (Qld)*;
- (c) So that they are infringement notice offences.

12.2. Vegetation Management

Issue

There are practical issues about who is responsible for vegetation on private and public land as it relates to the safety of electrical installations such as power lines.

Currently section 64 of the *Electricity Reform Act 2000* provides that electricity entities can, through electricity officers, enter land and clear it vegetation to the extent necessary to avoid interruption to the electricity supply. For such entry there is a need for consent from the land owner or a warrant that authorises entry. The electricity entity pays for the costs of dealing with the vegetation and incurs a liability to make good any damage.

Additionally, there are sometimes trees on public land (such as nature strips) that are, in practice, the responsibility of the adjoining land owner – in the sense that such trees are often planted and cared for by the landowner.

This legislative framework means that, in practice, distributors of electricity in the Northern Territory rely on cooperative arrangements with landowners,

Interstate Provisions

Australian Capital Territory

Part 5A.2 of the *Utilities (Technical Regulation) Act 2014* deals with vegetation. Electrical entities are obliged for the clearance of vegetation around land,. That can enter the land to conduct the necessary work, in doing that work they must comply with management requirements as set out in sections 41L-41M),

New South Wales

Section 48 of the *Electricity Supply Act 1994* provides that network operators may require owners or occupiers of premises to remove vegetation that could destroy or, damage or interfere with electrical works or which might make electrical works a potential risk for bushfire. In an emergency the network operator can remove the vegetation. The cost of carrying out the work is borne by the network operator except where the vegetation is in an electricity easement or an owner or occupier has planted the vegetation or arranged for it to be planted where they should have reasonably known that damage could result,

South Australia

Section 55 of the *Electricity Act 1996*, imposes a general duty on electricity entities to take reasonable steps to keep vegetation clear of powerlines. Various other duties are also imposed on councils and private land owners. If the electrical entity has to clear land where some else is responsible it can claim the costs from

that other person or body. Part 5 of the *Electricity Act 1996* provides for the making of regulations dealing with the clearing of vegetation²².

Options

Option 1

The appropriate powers in respect to vegetation managements are provided to electrical entities through the *Electricity Reform Act 2000*.

Option 2

Amend the *Electricity Reform Act 2000* so that:

- (a) landowners are responsible for costs of ensuring that vegetation on their land does not interfere with the supply of electricity;
- (b) electricity entities have power to enter land and deal with vegetation in emergency situations;
- (c) provide for the making of regulations that deal with what are requirements concerning vegetation; and
- (d) oblige electrical entities to publish requirements concerning vegetation (so if land owners comply) they are not liable for any costs in the event that the electrical entity incurs costs arising from the existence of that vegetation.

Proposal

Recommendation 32

Amend the *Electricity Reform Act 2000* to clarify roles and responsibilities for vegetation management

²² See *Electricity (principles of Vegetation Clearance) Regulations 2010* (contains some 250 pages)

13. Issues requiring Statutory Revision and Modernisation

13.1. Maximum Penalties for Criminal Offences need to be Reviewed and Updated

Issue

Many penalties were established some time ago and may be out of date.

Interstate Provisions

Sample of maximum penalties for offences by individual (I) and corporations (C) relating to licensing, safety, stealing and discipline safety, stealing and discipline.

Electrical safety and related offences – sample of offences and penalties

Offence	NT (\$) ²³	NSW ²⁴ (\$)	Qld ²⁵ (\$)	ACT ²⁶ (\$)	SA (\$)
Stealing electricity	i:31,000, 2 year gaol c:157,000	I:11,000. 5 years gaol c:\$220,000	I:133,450 or 6 months gaol	I: 8000 C: 40,050	I:50,000 (to \$50,000) ²⁷ or 12 months gaol C:250,000
Interference and tampering offences	i:31,000, 2 year gaol c:157,000	I:11,000 2 years gaol C:220,000			
Failure to carry out electrical work in accordance with standards or prescribed requirements	50PU or 500PU	i:55,000 Or 82,599 (2 years gaol) c:550,000 or 825,000 ²⁸			
Failure to comply with direction from inspector, compliance officers, hindering	500PU or 100PU/6-months gaol			I:8000 C:40,500	10,000

²³ NT – fines are expressed in terms of penalty units – one penalty unit is \$157 (as at 9 September 2019). The maximum penalty for a corporation if no specific penalty is set out is 5 times the maximum penalty for any individual

²⁴ NSW – fines are expressed in terms of penalty units – one penalty unit is \$110 (as at 9 September 2019)

²⁵ Qld – fines are expressed in terms of penalty units – one penalty unit is \$133.45 (as at 9 September 2019)

²⁶ ACT – fines are expressed in terms of penalty units – one penalty unit for an offence committed by a corporation is \$810 and for an individual is \$160 (as at 9 September 2019)

²⁷ varies depending on whether first or subsequent offence

²⁸ Maximum penalties vary depending on whether it is a first or subsequent offence

Failure to comply with a rectification order	500PU			I:320,000 C: 1,620,000	
Failure to provide certificate of compliance			I:800 C:4.050		
Failure to report serious electrical accident	100PU		I:8000 C: 40,050		

Sale of electrical appliances – sample of offences and penalties

Offence	NT (\$) ²⁹	NSW ³⁰ (\$)	Qld ³¹ (\$)	ACT ³² (\$)	SA (\$)
Sale of electrical appliances that do not meet standards		I:55,000 Or 82,599 (2 years gaol) c:550,000 or 825,000 ³³			
Sale of electrical appliances that are not marked as required by the Act or regulations		I:55,000 Or 82,599 (2 years gaol) c:550,000 or 825,000			5,000
Sale of electrical product when sale of which is prohibited					10,000

²⁹ NT – fines are expressed in terms of penalty units – one penalty unit is \$157 (as at 9 September 2019). The maximum penalty for a corporation if no specific penalty is set out is 5 times the maximum penalty for any individual

³⁰ NSW – fines are expressed in terms of penalty units – one penalty unit is \$110 (as at 9 September 2019)

³¹ Qld – fines are expressed in terms of penalty units – one penalty unit is \$133.45 (as at 9 September 2019)

³² ACT – fines are expressed in terms of penalty units – one penalty unit for an offence committed by a corporation is \$810 and for an individual is \$160 (as at 9 September 2019)

³³ Maximum penalties vary depending on whether it is a first or subsequent offence

Licensing and related offences – sample of offences and penalties

Offence	NT (\$) ³⁴	NSW ³⁵ (\$)	Qld ³⁶ (\$)	ACT ³⁷ (\$)	SA (\$)
Carrying on business as a contractor without a licence	l:2355 or 12 months gaol c:11,775	l:22,000 c:119,000 ³⁸	l:53,380	l:20,000 C:100,000	
Failure to comply with conditions of a Contractor's licence			l:53,380	l:20,000 C:100,000	
Failure to make sure employees are appropriately licensed	l:1256 c:6280		l:53,380	l:20,000 C:100,000	
Failure to produce documents to the licensing authority	l:628 c: 3140				
False testimony to the disciplinary body or other regulatory body	l:15,700,12 months gaol				10,000
Failure to comply with direction from inspector, compliance officers, hindering				l:8000 C:40,500	10,000
Holding out	NA	l:22,000 c:119,000 ³⁹		l:20,000 C:100,000	l:50,000 (to \$50,000) ⁴⁰ or 12 months gaol C:250,000
Maximum financial penalty for disciplinary breach		i:11,000 c: 50,000		l:20,000 C:100,000	20,000

³⁴ NT – fines are expressed in terms of penalty units – one penalty unit is \$157 (as at 9 September 2019). The maximum penalty for a corporation if no specific penalty is set out is 5 times the maximum penalty for any individual

³⁵ NSW – fines are expressed in terms of penalty units – one penalty unit is \$110 (as at 9 September 2019)

³⁶ Qld – fines are expressed in terms of penalty units – one penalty unit is \$133.45 (as at 9 September 2019)

³⁷ ACT – fines are expressed in terms of penalty units – one penalty unit for an offence committed by a corporation is \$810 and for an individual is \$160 (as at 9 September 2019)

³⁸ Home Building Act 1989

³⁹ Home Building Act 1989

⁴⁰ Varies depending on whether first or subsequent offence

Inadequate supervision of an employee		I:22,000 C: 110,000		I:20,000	
Failure to comply with a rectification order				I:320,000 C: 1,620,000	
Failure to provide corticated of compliance			I:800 C:4.050		
Failure to report serious electrical accident			I:8000 C: 40,050		

Options

Option 1

Retain the present penalties.

Option 2

Revise penalties so that they equate to the maximum penalties in place elsewhere in Australia.

Option 3

Revise the penalties so that they equate to the average in place elsewhere in Australia.

Proposal

Recommendation 33

Revise penalties so that they equate to the maximum penalties in place elsewhere in Australia.

13.2. Part IIAA of the Criminal Code

Since 2005 there has been a process in place to amend offences so that they are worded in terms of Part IIAA of the Criminal Code. Generally, the policy has been to retain the same general outcomes in terms of fault.

It is recommended that any new legislation have offences in line with the model Criminal Code and the *Work Health and Safety (National Uniform Legislation) Act 2011* to simplify processes and to better ensure appropriate coverage.

Recommendation 34

The offences should be worded so that they are consistent with the application of Part IIAA of the Criminal Code.

13.3. Appeals from Occupational Licensing and Disciplinary Decisions

Issue

The Local Court is the relevant court for issues arising from the *Electrical Workers and Contractors* 1978. This can be contrasted with the Work Health Court being the court of jurisdiction for matters arising from safety breaches under the *Electricity Reform Act* 2000.

Since the establishment of Northern Territory Civil and Administrative Tribunal (NTCAT) in 2014, Northern Territory legislation has gradually been amended so that appeals to the Local Court are replaced by reviews or appeals by NTCAT. The *Electrical Workers and Contractors Act* 1978 retains appeals to the Local Court (see sections 47-49). It is appropriate that these provisions be amended so that NTCAT has the appellate responsibility.

Interstate Provisions

Australian Capital Territory

The Registrar is responsible for taking disciplinary action – with some immediate powers of suspension but with other disciplinary matters to be taken to the ACT Civil and Administrative Tribunal.

New South Wales

The disciplinary body is the Commissioner for Fair Trading.

Queensland

The Disciplinary body is the Electrical Safety Board/Electrical Licensing Committee.

South Australia

The Disciplinary Body is Commissioner for Consumer Affairs. The Commissioner may impose disciplinary sanctions or may refer matters to the Administrative and Disciplinary Division of the District Court. Appeals against decisions of the Commissioner are handled by the Administrative and Disciplinary Division of the District Court.

Tasmania

The Disciplinary Body is the Administrator. The Administrator may impose demerit points for breaches of the Act or of codes of practice. Infringement notices may also be issued. Decisions of the Administrator are reviewed by the Administrator. Additionally, persons directly affected by a decision of the Administrator can appeal about the decision to the Magistrates Court (Administrative Appeals Division). The Occupational Licensing Advisory Board functions relate to providing advisory services to the Administrator.

Victoria

The Licensing Body is Energy Safe Victoria. The Disciplinary Body is Energy Safe Victoria.

Western Australia

The Disciplinary Body is the State Administrative Tribunal based on applications made by the Director, Energy Safety.

Summary

There are a range of appeals bodies in place nationally.

Option 1

Retain the current position (i.e. appeals dealt with by the Local Court).

Option 2

Provide that the Northern Territory Civil and Administrative Tribunal deals with appeals (noting that any safety breaches under the new legislation (as recommended by this panel) will still be referred to the Work Health Court.

Proposal

Recommendation 35

Provide that the Northern Territory Civil and Administrative Tribunal deals with appeals (noting that any safety breaches under the new legislation (as recommended by this panel) will still be referred to the Work Health Court.

13.4. Proposal regarding the Relationship between the Electrical Workers and Contractors Licensing Board and the Power and Water Corporation

Issue

As stated above, there are remnant provisions in the *Electrical Workers and Contractors Act 1978* that appear to place the Power and Water Corporation in a special position compared to other entities licensed under the *Electricity Reform Act 2000*. These serve no purpose – they can be repealed.

There are also special reporting and investigatory arrangements between the licensing board and the Power and Water Corporation for investigating and acting on complaints in regard to electrical work carried out by either licence holders or unlicensed persons. This relationship is inappropriate under the current licencing regime.

Options

Option 1

Retain status quo.

Option 2

Ensure these provisions operate between all the entities licenced under the *Electricity Reform Act 2000* and that they apply to in respect of both licensing legislation and safety legislation.

Proposal

Recommendation 36

Amend the *Electrical Workers and Contractors Act 1978* by repealing the provisions of that Act which suggest that government entities such as the Power and Water Corporation and Power Generation Corporation retain regulatory roles or are in a special position compared to other electrical supply or distribution businesses.

14. Roadmap to Renewables

Emerging New Technologies

Electrical safety legislation needs to cover existing technology and be flexible enough to cover emerging technology (see section 19 of the *Electricity Reform Act 2000* – ‘electrical installation’ definition issues).

Improved regulation of such installations along with expanded definitions of what the legislation covers will ensure the Northern Territory Government’s push for 50:50 renewable energy by 2030 will not affect safety.

An example of the problem with the current provisions is that of the definition of “installation”. This does not apply up installations that have low voltages. It is intended to exclude installations such as batteries used in the home for torches and the like. But under new technologies items with low voltages, such as solar, can be combined in vast numbers to create an installation of such size, capacity and complexity that it should be regulated.

Emerging New Technologies - Training relating to the Emerging of New Technology

Currently there is no additional training or qualifications required for a qualified electrician to be able to install solar photovoltaic systems at a local or national level. A national program being undertaken by the COAG Industry and Skills Council to address any skills gaps in training/qualification programs given the changing nature of electricity systems and emerging technologies will go a long way to rectifying this.

However in the meantime, the use of new technologies is increasing in remote communities as part of a modernisation program for electricity provision. These centres are often without licenced electricians (who may or may not have appropriate training for working with these new technologies).

This is an issue that needs to be managed to ensure workers and users are safe.

Proposal

Recommendation 37

The Reference Group members agreed that there can be no difference in electrical safety standards between major centres and remote communities. As such any work undertaken by Essential Services Officer’s should either not require a licence or the Essential Services Officer’s should be licenced. This assumes that the Power and Water Corporation will meet their obligations under the *Work Health and Safety (National Uniform Legislation) Act 2011* to ensure their workers are trained and competent to undertake any tasks expected of them.

Appendix 1 – Interstate Electrical Safety Arrangements

New South Wales – Electrical Safety

- The regulation of electrical safety in NSW is shared between SafeWork NSW, NSW Fair Trading and the Independent Pricing & Regulatory Tribunal (IPART).
- SafeWork NSW powers relate specifically to general electrical safety and energised electrical work and duty of care in workplaces (in accordance with the *Work Health & Safety Act 2011* & *Work Health & Safety Regulation 2011*).
- NSW Fair Trading issues electrical trade licences and, using their own inspectors and contractors, performs a number of regulatory functions which includes enforcing minimum safety requirements for electrical work and industry maintenance of electrical installations under the *Gas and Electricity (Consumer Safety) Act 2017*.
- Electricians must submit a Certificate of Compliance for electrical work upon completion of a job. Substantial penalties apply, including on the spot fines of up to \$1000, for each occasion when a Compliance Certificate is not supplied to the consumer (or network provider if relevant).
- Under the *Electricity Consumer Safety Act 2004*, substantial penalties also apply (up to \$550,000) for failure to carry out electrical installation work in accordance with the technical standards set out in the Regulation.
- Infringement notices can be issued.

Queensland – Electrical Safety

The Electrical Safety Office and Electrical Safety Commissioner within the Office of Industrial Relations in Queensland Treasury is responsible for electrical safety. The responsibilities and functions of the Electrical Safety Office include:

- under the *Electricity Safety Act 2002* the registration, licensing, approval (electrical equipment) and accreditation regimes
- promoting compliance with electrical safety laws and standards across industry and the community,
- enforcing standards when non-compliance is evident through a state-wide inspectorate (including audits, incident investigations and fire investigations where electricity is suspected of being the cause)
- undertaking pre and post market surveillance schemes of equipment supply to promote compliance with electrical safety laws and standards
- working with the VET industry and other jurisdictional regulators and key stakeholders to ensure current industry practice and processes form part of the training and licensing regime to ensure electrical licence holders are competent and safe, and
- collaborating with the compliance unit, the Electrical Licensing Committee and Electrical Safety Board to assist their statutory functions such as taking disciplinary action in relation to electrical licence issues.

Australian Capital Territory – Electrical Safety

- The *Electricity Safety Act 1971* requires all new electrical installations to be inspected by an electrical inspector before connection to the electricity network.
- All the electrical inspectors are employees of the Territory through the Environment, Planning and Sustainable Directorate. The *Electricity Safety Act* empowers electrical inspectors' right of entry, and

there are also some powers under the *Construction Occupations Licensing Act 2004* that the inspectors are delegated.

- On generation projects over 200kW the developer can apply for an Operating Certificate under the *Utilities Act 2000* and then engage independent electrical inspectors for that project. The operations of the Distributor are exempted from the *Electricity Safety Act 1971*, and are regulated by the *Utilities Act 2000* administered by the Utilities Technical Regulator.

Tasmania – Electrical Safety

- Electrical safety is administered by the Electricity Standards and Safety (ESS) Branch within the Consumer, Building and Occupational Services business unit in the Department of Justice.
- The main functions of ESS are:
 - monitoring standards of electrical work through the inspection of electrical work
 - auditing of recording, notification and certification of electrical work by electrical practitioners and contractors
 - management of the Electrical Safety Inspection Service for the inspection of electrical work
 - approving the sale of prescribed electrical articles
 - investigating complaints and incidents involving electrical appliances and equipment
 - the investigation of electric shocks and accidents
 - promoting electrical safety to industry and the community
 - infringement notices can be issued (section 620)

Authority comes from the *Electricity Industry Safety and Administration Act 1997* and its *Electricity Industry Safety and Administration (Energy Efficiency) Regulations 2009* as well as the *Electricity Supply Industry Act 1995*.

ESS work with Worksafe Tasmania on investigations involving electricity and decide on a case by case basis who will be the lead agency. In basic terms if it is a work practice issue e.g. failure to appropriately isolate, then it would be Worksafe Tasmania. If it relates to the standard of electrical work or competence then ESS will deal with it.

ESS can also help to resolve complaints, however they cannot make a decision about a complaint nor a business to compensate consumers or rectify a problem. If a business has broken the law, ESS can:

- notify them and seek their help to fix the issue
- get the business to follow the law in the future
- formally warn them
- publicly warn consumers not to trade with them
- issue them with a fine
- take the business to court
- seek a court order to ban the business from operating.

Western Australia – Electrical Safety

- Energy Safety is responsible for the technical and safety regulation of all the electrical industry. It is a division under the Department of Mines, Industry Regulation and Safety, but is considered an independent statutory regulator whose activities are fully funded through industry via a combination of licensing and industry levy revenue./

- Under the *Electricity Act 1945* and the *Electricity (Licensing) Regulations 1991* EnergySafety licences electrical workers and electrical contractors (through the functions of the associated statutory Electrical Licensing Board).

Under the *Electricity Act 1945*, the *Electricity Regulations 1947*, and the *Electricity (Network Safety) Regulations 2015*, EnergySafety also:

- enforces prescribed technical standards for electrical installing work
- requires electricity network operators to conduct consumer installation safety inspections in accordance with prescribed requirements and auditing this work to ensure compliance
- conducts safety inspections of consumers' electrical installations that are not connected to utility networks
- audits electrical appliances and equipment being offered for sale, to check compliance with prescribed safety requirements
- ensures the safety of electrical workers by enforcing prescribed safety requirements and providing guidance in respect of safe work practices
- investigates electrical safety incidents (although incidents associated with electricity utilities supply systems, or their customers, are usually inspected first by the utilities' inspectors);
- enforces statutory requirements through advice, warnings and prosecutions
- responds to consumer concerns regarding electrical technical safety matters; and
- promotes electricity safety to both the public and industry operatives

South Australia – Electrical Safety

- The *Electricity Act* establishes the statutory role of the Technical Regulator.
- The Office of the Technical Regulator has the following principal functions being:
 - monitoring and regulation of safety and technical standards in the electricity supply industry
 - monitoring and regulation of safety and technical standards relating to electrical installations
 - administration of the provisions of the Act relating to clearance of vegetation from powerlines
 - monitoring and investigation of major interruptions to the electricity supply

Victoria – Electrical Safety

- Energy Safe Victoria (ESV) is the independent technical regulator responsible for electricity, gas and pipeline safety in Victoria. They are a statutory authority that licences electricians, manages the Certificate of Electrical Safety Program, conducts community safety campaigns, investigates electrical incidents, and ensures electrical appliances for use in homes meet safety and energy efficiency standards before they are sold.
- The electrical industry is regulated by the *Electricity Safety Act 1998* and the *Electricity Safety (Installations) Regulations 2009*. They require a Certificate of Electrical Safety to be issued for all electrical installation work. Failure to comply with these requirements is a criminal offence and licensed workers who do so may be subject to disciplinary action which could result in the suspension or cancellation of their licence.
- In the generation and transmission sector, these technical and safety requirements are to be applied in conjunction with the National Electricity Rules, administered by the Australian Energy Regulator (AER). However these requirements do not apply to the five Major Electricity Companies (MEC's) that hold a distribution licence under the *Electricity Industry Act 2000*, but do apply to subsidiary companies

installing metering equipment not owned by the MEC (non-MEC metering). These requirements apply to both low and high voltage electrical installations.

- There are regulations that apply to the supply of electrical appliances and equipment. They are the *Electricity Safety (Equipment) Regulations 2009* as empowered by Part 4 of the *Electricity Safety Act 1998*.

Appendix 2 – Interstate Economic Regulation

New South Wales

Electricity Supply Act 1995 sets out the overarching jurisdictional regulatory framework for the NSW electricity supply industry.

- A licence is required under the Act to operate an electricity network.
- The Minister for Resources and Energy issues licences to the transmission and distribution network providers, and the Independent Pricing and Regulatory Tribunal (IPART) administers the licencing regime on behalf of the Minister. As well as conduct in the electricity supply industry and meeting prudential requirements, licence conditions relate to safety and technical matters. For example, network businesses are required to comply with safety related obligations, including a requirement to have a safety management system in place, as a condition of their network licences.
- Generators, retailers and other electricity entities are not required to be licenced to carry out operations in the electricity supply industry. However, under the national electricity regulatory framework, including the National Electricity Law and the National Energy Retail Law and associated rules they are must have appropriate registration and authorisations which are administered and enforced by the AER and the Australian Energy Market Operator.
- Licence conditions include safety and technical matters.
- authorised officers of licensed entities can carry out certain operations in accordance with the Act.

Queensland

- The *Electricity Act 1994* provides that the Director-General of the Department of Natural Resources, Mines and Energy (DNRME) is regulator.
- The regulator is responsible for ensuring only suitable persons are electricity entities through licencing licences for generation, transmission and distribution activities, and for monitoring of compliance with the conditions of approvals, authorities and licences under the Act, among other things.
- The *Electricity Act 1994* sets out a framework for electricity industry participants that promotes efficient, economical and environmentally sound electricity supply and use, including through regulation and the promotion of competition.
- The Director-General of the DNRME issues licences for generation, transmission and distribution activities in accordance with the Act, but not for electricity retail activities which are subject to authorisations issued by the AER under the National Energy Retail Law. Licences generally include conditions regarding reporting to the regulator. Network licences include conditions regarding reliability and network planning requirements and generation licences may include obligations regarding greenhouse gas emissions.
- The Act includes a range of other jurisdictional electricity regulatory requirements, including requirements on any equipment connecting to an electricity network to comply with the technical conditions for connection, and obligations regarding the operation of the retail electricity market.
- Electricity officers may be appointed by the chief executive officer of an electricity entity and may exercise powers in relation to the operation of the electricity entity. Additionally, the Director-General of the DNRME may appoint inspection officers, who have powers around entering land
 - Electricity officers may be appointed by the chief executive officer of an electricity entity and may exercise powers in relation to the operation of the electricity entity.

- the Director-General of the DNRME may appoint inspection officers, who have powers around entering land

Australian Capital Territory

- The *Utilities Act 2000* regulates the provision of services by certain utilities, including distribution and transmission network businesses, large generators and retailers in the electricity supply industry.
- Licences issued and enforced by the Independent Competition and Regulatory Commission (ICRC) are required.
- The Act provides that a utility business may appoint authorised people to exercise functions under the Act, such as to enter premises to carry out network operations or inspect meters.
- The *Utilities Act 2000* regulates the provision of services by certain utilities, including distribution and transmission network businesses, large generators and retailers in the electricity supply industry.
- Licence conditions may include conditions such as to comply with industry codes, reporting requirements and directions given by the technical regulator.
- The Act sets out other jurisdictional requirements, including the ability for jurisdictional codes to be made in respect to certain matters, the imposition of an industry levy to recover costs associated with regulation of utilities, and about the operation and maintenance of electricity networks and the electricity retail arrangements.

Tasmania

- The *Electricity Supply Industry Act 1995* covers electricity generation, transmission, distribution and supply, to provide for the safety of electrical installations, equipment and appliances and to enforce proper standards in the performance of electrical work.
- The Office of the Tasmanian Economic Regulator is responsible for administering, monitoring and enforcing licencing for electricity entities, monitoring and regulating technical standards in the electricity supply industry and reporting on the development of competition in the industry, among other things.
- Electricity entities may appoint electricity officers who have the power to inspect, operate and repair electrical infrastructure, enter properties to read meters and other activities.
- The *Electricity Supply Industry Act 1995* is an Act to promote efficiency and competition in the electricity supply industry, provide for a safe and efficient system of electricity generation, transmission, distribution and supply, to provide for the safety of electrical installations, equipment and appliances and to enforce proper standards in the performance of electrical work. The Act aims to protect the interests of the consumers of electricity.
- In respect to the electricity supply industry, the Office of the Tasmanian Economic Regulator established under the *Economic Regulator Act 2009*, is responsible for administering, monitoring and enforcing licencing for electricity entities, monitoring and regulating technical standards in the electricity supply industry and reporting on the development of competition in the industry, among other things.
- Licencing in the industry is required for the generation, transmission and distribution of electricity. Additionally, a licence is required for the retailing of electricity in areas where the National Energy Retail Law and associated retail authorisations issued by the AER do not apply. Licence conditions may include requirements to comply with standards and codes legislation and directions of the regulator.
- The Act also allows for the appointment of electricity officers and provides them powers in relation to infrastructure and supply of electricity by electricity entities. Electricity officers have the power to inspect, operate and repair electrical infrastructure, enter properties to read meters and other activities.

Western Australia

- The *Electricity Industry Act 2004* provides for the Economic Regulation Authority (which is responsible for issuing and enforcing licences for generation, transmission, distribution and retail electricity services).
- The Economic Regulation Authority (ERA) established under the *Economic Regulation Authority Act 2003* is regulator under the Act and responsible for issuing and enforcing licences for generation, transmission, distribution and retail electricity services. Licence conditions may include requirements to comply with jurisdictional codes, to regulate the construction and operation of generation or network assets and reporting requirements.
- The ERA is also responsible for a range of jurisdictional codes and the Act itself covers a greater number of matters compared to equivalent Acts in other jurisdictions given the national frameworks for regulation of electricity (the National Electricity Law and the National Energy Retail Law) do not apply in Western Australia.

South Australia

- The *Electricity Act 1996* regulates the electricity supply industry, as well as safety and technical matters for electrical installations.
- The economic regulator under the Act is the Essential Services Commission established under the *Essential Services Commission Act 2002*. The Commission is responsible for licencing and price regulation.
- An electricity entity may appoint electricity officers to carry out powers under the Act and at the direction of the electricity entity in relation to the operations of the electricity entity. Electricity officers have investigative powers and may inspect electrical installations, take action to prevent or minimise electrical hazards or investigate suspected theft of electricity, amongst other things.
- The *Electricity Act 1996* regulates the electricity supply industry, as well as safety and technical matters for electrical installations. The economic regulator under the Act is the Essential Services Commission established under the *Essential Services Commission Act 2002*. The Commission is responsible for licencing and price regulation.
- A licence is required for generation of electricity, operating a transmission or distribution network and retailing electricity, among other things. Licence conditions require compliance with Codes made by the Commission, prudential and operational requirements, reporting and auditing requirements, and safety requirements such as to prepare a safety, reliability and maintenance and technical management plan for the technical regulator, among other things.
- The Act also includes various jurisdictional requirements including for feed-in-tariffs for electricity and other electricity retail regulatory related matters. South Australia has adopted the National Electricity Law and the National Energy Retail Law to regulate many aspects of its electricity supply industry.

Victoria

- The *Electricity Industry Act 2000* provides for the Essential Services Commission which is responsible for regulation under the Act
 - The Commission issues and enforces licences for generation, transmission, distribution and selling of electricity. Licence conditions relate to reporting requirements, requirements to comply with codes and legislation, and activity specific requirements, such as obligations regarding retail market operation and customer protections for retailers.
 - The Act sets out requirements for terms and conditions of sale and supply of electricity, customer hardship policies, supplier of last resort arrangements, prescribes minimum electricity metering requirements and other jurisdictional regulatory matters.
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- The Act provides for enforcement officers who are appointed under the *Electricity Reform Act 2000* 1998 with certain powers, such as to enter land or premises and serve infringement notices.

Appendix 3 – Interstate Occupational Regulation

Australian Capital Territory – Electrical Occupational Regulation

- Licences are issued under the *Construction Occupations (Licensing) Act 2002*. That Act regulates a range of practitioners in occupations that provide “construction services”. The occupations include builders, gasfitters, plumbers as well as “electricians”.
- “Electrician” is defined as an entity that provides “electrical wiring services”.
- The meaning of “electrical wiring services” is linked to the definition of “electrical wiring work” as contained in the *Electricity Act 1971*.
- The licensing body is the ACT Construction Occupations Registrar.
- The Registrar is responsible for taking disciplinary action – with some immediate powers of suspension but with other disciplinary matters to be taken to the ACT Civil and Administrative Tribunal.

New South Wales – Electrical Occupational Regulation

- Licences under the *Home Building Act 1989* are issued for contractors and tradespersons who provide “electrical wiring work” (as defined in the *Gas and Electricity (Consumer Safety) Act 2017*).
- The licensing process is governed by standardised process applicable to a wide range of occupational licences with the process being governed by the *Licensing and Registration (Uniform Procedures) Act 2002*.
- The licensing authority is the Commissioner for Fair Trading,
- The disciplinary body is the Commissioner for Fair trading,

Queensland – Electrical Occupational Regulation

- Licences are issued under the *Electricity Reform Act 2000* 2002.
- The Licensing Body is called ‘the regulator’⁴¹ subject to review by the Electrical Licensing Committee.
- The Disciplinary body is the Electrical Safety Board/Electrical Licensing Committee.

South Australia – Electrical Occupational Regulation

Electrical work is defined as meaning the installation, alteration, repair or maintenance of an electrical installation and includes work prescribed by regulation.

Licences are issued under the *Plumbers Gasfitters and Electricians Act 1995*

- A licence is required for persons who perform electrical work for others.
- Electrical work is defined as meaning the installation, alteration, repair or maintenance of an electrical installation and includes work prescribed by regulation.

- The legislation provides for an electrical contractors licence and for restricted licences that limit what work can be done. The conditions are imposed by the Commissioner.
- Electrical workers (i.e. individuals who personally carry on electrical work) must be registered by the Commissioner. The Licensing Body is the Commissioner for Consumer Affairs.
- The Disciplinary Body is the Commissioner for Consumer Affairs. The Commissioner may impose disciplinary sanctions or may refer matters to the Administrative and Disciplinary Division of the District Court.
- Appeals against decisions of the Commissioner are handled by the Administrative and Disciplinary Division of the District Court.

Tasmania – Electrical Occupational Regulation

- Licences are issued under the Occupational Licensing Act 2005.
- The Act regulates “electrical work: as defined in Part 1 of Schedule 2 of that Act.
- The Licensing Bodies are the Administrator of Occupational Licensing and the Occupational Licensing Advisory Board.
- The Disciplinary Body is the Administrator.
- The Act provides that the Administrator may impose demerit points for breaches of the Act or of codes of practice. Infringement notices may also be issued.
- Decisions of the Administrator are reviewed by the Administrator. Additionally, persons directly affected by a decision of the Administrator can appeal about the decision to the Magistrates Court (Administrative Appeals Division).
- The Occupational Licensing Advisory Board functions relate to providing advisory services to the Administrator.

Victoria – Electrical Occupational Regulation

- Licences are issued under the Electricity Reform Act 2000 1998.
- The legislation regulates electrical contracting. Registrations relate to classes of electrical contracting as specified in the regulations. Employees of registered contractors must be licensed as electrical installation workers or an apprentice. The employer must maintain their own register of such employees with that register being able to be accessed by Energy Safety Victoria.
- For prescribed classes of electrical work the worker must be registered in respect of that class of work. The Licensing Body is Energy Safe Victoria.
- The Disciplinary Body is Energy Safe Victoria.

Western Australia – Electrical Occupational Regulation

- Licences are issued under the *Electricity Act 1945*.
 - Most of the detail of the licensing scheme is contained in the Electricity (Licensing) Regulations 1991. It relates to “electrical work”.
 - Electrical workers are required to be licensed.
 - The Licensing Body is the Electrical Licensing Board.
 - The Disciplinary Body is the State Administrative Tribunal based on applications made by the Director, Energy Safety.
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Appendix 4 – Interstate Inspectorate Regimes

Australian Capital Territory (ACT) – Electrical Safety

ACT summary of inspectorates:

Electrical inspectors have not been delegated the power to issue demerit points, they do however write a report to the Deputy Registrar who has been delegated the powers to issue demerit points.

The electrical inspectors are generally not conducting investigations. There is a dedicated investigations unit for all Building and Planning matters that the electrical inspectors provide technical advice too. Similarly for work place investigations done by Worksafe, they have their dedicated investigations unit that the electrical inspectors provide technical advice too.

New South Wales (NSW) - Inspectorates

The Independent Pricing and Regulatory Tribunal (IPART) monitors compliance with safety obligations of electricity network operators and distribution networks within NSW. IPART employ electrical engineers to perform inspections, audits and investigations as required. A Memorandum of Understanding exists between IPART and SafeWork NSW to share information, resources and expertise.

NSW summary of inspectorates:

There are three separate inspectorates that separately, respectively deal with worker safety, consumer safety and network safety. There is some cooperation but the delineation is clear and complied to.

Queensland (QLD) – Electrical Safety

QLD summary of inspectorates:

Work Health Safety Queensland inspectors can only respond to the following electrical issues associated with construction sites:

- Residual current devices (RCD) (safety switches)
- Inspection and testing of electrical equipment (test and tag)
- Safe approach distance to overhead electric lines (exclusion zones)
- Certain switchboard and cabling issues

In all other circumstances where a suspected electrical issue requires regulatory intervention, inspectors without a current electrical licence hand over responsibility to the Electrical Safety Unit.

South Australia – Electrical Safety

South Australia summary of inspectorates:

In relation to electrical installations the Office of the Technical Regulator (OTR) have authorised officers who have a range of powers similar the NTs. The authorised officers undertake two key roles - auditing / enforcement and education / safety promotion. All audit activity is conducted by authorised officers employed directly by the OTR.

The OTR conducts safety and technical audits of electricity entities operating in South Australia. The audits cover selected safety and technical areas in the operation of the entities. Every electricity entity operating in South Australia is audited over a two or three year cycle.

The OTR has a no role in licencing and a limited role in licence assurance. The *Plumber, Gas Fitters and Electricians Act* allows the granting of electricians licences. This is administered by the Consumer and Business Services Unit within the Attorney-General's Department.

Tasmania – Electrical Safety

Tasmania summary of inspectorates:

All Authorised Officers have similar powers to those in the Northern Territory. However whilst there are a small number of officers within ESS, the majority are with an Electrical Safety Inspection Service contractor.

That commercial operator provides electrical compliance inspectors who also investigate shocks and fires. They also administer the Certificate of Electrical Compliance notification process, issue Defective Electrical Work Notices, follow up rectification and collect the associated fees.

Victoria – Electrical Safety

Victoria summary of inspectorates:

ESV has a team of inspectors who investigate electrical safety issues in homes and businesses and ensure licence compliance including adherence to Standards.

ESV has a memorandum of understanding with Worksafe Victoria which outlines how the organisations will deal with any overlap in legislative requirements whilst minimising duplication of effort. It outlines arrangements for sharing of information; joint audits, inspections and investigations; cooperation around major hazard facilities (including in the assessment of safety cases); consultation in the development of education or enforcement projects or campaigns relating to electrical safety, gas safety or pipeline safety; and making relevant training conducted by either party available for appropriate staff from the other party to participate in.

Western Australia – Electrical Safety

Western Australia summary of inspectorates:

The Director of EnergySafety has the statutory authority to designate a person to be an Inspector (Electricity). There are three categories of Electrical Inspectors:

- **Electrical Installation Inspectors (Network Operator):** Usually an employee of a network operator (although sometimes a self-employed contractor), they carry out inspections of consumers' electrical installations, on behalf of the relevant network operator prior to connecting a new or modified installation to the network.
- **Electrical Licence Inspectors (Electrical Trade Union):** Must be full-time paid employees of the Communications, Electrical, Electronic, Energy, Information, Postal, Plumbing and Allied Services Union of Australia in Western Australia. These Inspectors are authorised to inspect electrical licences for the purpose of assessing compliance with electrical licencing requirements. Any breach must be reported to the Chief Electrical Inspector (Utilisation) at EnergySafety without delay. Right of entry provisions for Electrical Licence Inspectors is limited to licence inspection functions only. They must not carry out inspections of electrical work or electrical installations, issue orders or disconnect the supply of electricity. However, if the Inspector identifies a possible breach of electrical safety regulations, they must report the matter to the relevant network operator or to EnergySafety.
- **Electrical Inspectors (EnergySafety):** Inspector must be an employee of EnergySafety. These Inspectors conduct inspections and investigations in a variety of circumstances, including electrical

installations in private premises, workplaces and network operators' transmission and distribution facilities.

- Single inspectorate for electrical safety and licensing - Queensland; Tasmania; Western Australia; Victoria
- Separate but with some cross overs of delegations – Australian Capital Territory;
- Separate inspectorates for each of the regulated aspect of electricity. For example, in New South Wales; South Australia;

Appendix 5 – Interstate Classes of Licences

Australian Capital Territory – Classes of Licences

Licences are issued under the *Construction Occupations (Licensing) Act 2002*. That Act regulates a range of practitioners in occupations that provide “construction services”. The occupations include builders, gasfitters, plumbers as well as “electricians”. “Electrician” is defined as an entity that provides “electrical wiring services. The meaning of “electrical wiring services” is linked to the definition of “electrical wiring work” as contained in the *Electricity Reform Act 2000 1971*. “*Electrical wiring work*” is defined as follows:

“(A) means the installation, replacement, augmentation, curtailing,

Maintenance, repair, or alteration of the location of all or part of,

An electrical installation, other than—

(i) an electrical installation that operates at extra low voltage;

or

(ii) telecommunications cabling or equipment that operates at a voltage not greater than 90V a.c.; but

(b) does not include—

(i) plugging a plug into a socket outlet, or unplugging it; or

(ii) fitting a lamp to a lighting outlet or removing it; or

(iii) fitting, removing or replacing a fuse or fuse wire if the fuse or wire cannot sustainedly conduct more than 30A.”

The Act provides that the regulations can divide an occupation into classes. The Act Regulations divide the occupation of “electrician” into nine classes.

The categories of licences are:

- **Electrical contractor licence**
 - **Electrician:** Unrestricted electrician licence – electrical
 - **Electrical fitter:** not required to be licensed
 - **Cable jointers:** not required to be licensed
 - **Restricted** – refrigeration and air-conditioning equipment
 - **No declared equivalent to “Restricted** – instrumentation and control equipment”
 - **Restricted** – declared equivalent to NT specialist commercial/industrial equipment
 - **Restricted** – declared equivalent to NT pre-assembled neon signs
 - **Restricted** – declared equivalent to NT water plumbing and equipment
 - **Restricted** – declared equivalent to NT gas equipment
 - **Restricted** – declared equivalent to NT pre-assembled neon signs
 - **Restricted** – declared equivalent to NT self-propelled high voltage earth moving equipment
 - **Restricted** – no licensing – no declared equivalent to NT domestic appliances and equipment
 - **Restricted** – declared equivalent to NT disconnection and reconnection
-

- **Restricted** – no licensing – no declared equivalent to NT plug and cord connected equipment

New South Wales – Classes of Licences

Licences are issued under the *Home Building Act 1989*. That Act provides for the licensing of contractors and tradespersons who provide “electrical wiring work” (as defined in the *Gas and Electricity (Consumer Safety) Act 2017*. The definition is:

“electrical wiring work means the physical work or installing, repairing, altering, removing or adding to an electrical installation or the supervising of that work”.

In turn electrical installation is defined as meaning:

“electrical installation means any fixed appliances, wires, fittings, meters, apparatus or other electrical equipment used for (or for purposes incidental to) the conveyance, measuring, control and use of electricity in a particular place, but does not include any of the following:

(a) subject to any regulation made under subsection (4)—any electrical equipment (other than a meter) used, or intended for use, in the generation, transmission or distribution of electricity that is:

(i) owned or used by an electricity supply authority, or

(ii) Located at a place that is owned or occupied by such an authority,

(b) Any electrical article connected to, and extending or situated beyond, any electrical outlet socket,

(c) Any electrical equipment in or about a mine,

(d) Any electrical equipment operating at not more than 50 volts alternating current or 120 volts ripple-free direct current,

(e) Any other electrical equipment, or class of electrical equipment, prescribed by the regulations.”

The licensing process is governed by the *Licensing and Registration (Uniform Procedures) Act 2002*.

The categories of licences are:

- **Electrical contractor licence** – electrical wiring work, endorsed
- **Electrician:** Qualified supervisor certificate – electrical
- **Electrical fitter:** not required to be licensed
- **Cable jointers:** not required to be licensed
- **?line workers:** not required to be licensed?
- **Restricted** – refrigeration and air-conditioning equipment
- **Restricted** – instrumentation and control equipment
- **Restricted** – declared equivalent to NT specialist commercial/industrial equipment
- **Restricted** – no licensing – no declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT water plumbing and equipment
- **Restricted** – declared equivalent to NT gas equipment
- **Restricted** – no licensing – no declared equivalent to NT self-propelled high voltage earth moving equipment

- **Restricted** – declared equivalent to NT domestic appliances and equipment
- **Restricted** – declared equivalent to NT disconnection and reconnection
- **Restricted** – no licensing – no declared equivalent to NT plug and cord connected equipment

Queensland – Occupational Licensing

Licences are issued under the *Electricity Reform Act 2000 2002*

The categories of licences are:

- **Electrical contractor licence**
- **Electrician:** Electrical mechanic licence or electrical fitter/mechanic licence
- **Electrical fitter:** Electrical fitter licence
- **Cable jointers:** Electrical jointer licence – endorsed open
- **Line workers:** Electrical linesperson endorsed transmission and/or electrical linesperson licence–endorse distribution and/or electrical linesperson endorse traction
- **Restricted** – refrigeration and air-conditioning equipment
- **Restricted** – instrumentation and control equipment⁴²
- **Restricted** – declared equivalent to NT specialist commercial/industrial equipment
- **Restricted** – declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT water plumbing and equipment
- **Restricted** – declared equivalent to NT gas equipment
- **Restricted** – no licensing – no declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT self-propelled high voltage earth moving equipment
- **Restricted** – declared equivalent to NT domestic appliances and equipment
- **Restricted** – no licensing – no declared equivalent to NT disconnection and reconnection
- **Restricted** – declared equivalent to NT plug and cord connected equipment

South Australian – Classes of Licences

Licences are issued under the Plumbers Gasfitters and Electricians Act 1995.

A licence is required for persons who perform electrical work for others. Electrical work is defined as meaning the installation, alteration, repair or maintenance of an electrical installation and includes work prescribed by regulation. The legalisation provides for an electrical contractors licence and for restricted licences that limit what work can be done. The conditions are imposed by the Commissioner.

Electrical workers (i.e. individuals who personally carry on electrical work must be registered by the Commissioner.

The Act does not appear to provide for automatic recognition of interstate licences however regulations can be made providing for exemptions.

The categories of licences are:

- **Electrical contractor licence**
- **Electrician:** Electrical workers registration – any electrical work
- **Electrical fitter:** Restricted electrical workers registration – installation and maintenance of overhead conductors and cables and/or restricted electrical workers registration – installation and maintenance of underground polymeric cables and/or restricted registration – installation and maintenance of underfund paper-lead cables
- **Cable jointers:** not required to be licensed
- **Line workers:** Restricted electrical workers registration – installation and maintenance of underground polymeric cables and restricted electrical workers registration – installation and maintenance of underground paper-lead cables
- **Restricted** – refrigeration and air-conditioning equipment
- **Restricted** – instrumentation and control equipment
- **Restricted** – declared equivalent to NT specialist commercial/industrial equipment
- **Restricted** – no licensing – no declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT water plumbing and equipment
- **Restricted** – no licensing – no declared equivalent to NT gas equipment
- **Restricted** – declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT self-propelled high voltage earth moving equipment
- **Restricted** – declared equivalent to NT domestic appliances and equipment
- **Restricted** – declared equivalent to NT disconnection and reconnection
- **Restricted** – no licensing – no declared equivalent to NT plug and cord connected equipment

The Licensing Body is the Commissioner for Consumer Affairs.

The Disciplinary Body is Commissioner for Consumer Affairs. The Commissioner may impose disciplinary sanctions or may refer matters to the Administrative and Disciplinary Division of the District Court.

Appeals against decisions of the Commissioner are handled by the Administrative and Disciplinary Division of the District Court.

Prosecutions are the responsibility of the Commissioner or persons who have the consent of the Minister.

The basic period by when prosecutions must be commenced is two years unless the offence is one for which an expiration notice have been issued (in which case the period is six months).

Tasmania – Classes of Licences

Licences are issued under the *Occupational Licensing Act 2005*. The Act regulates “electrical work: as defined in Part 1 of Schedule 2 of that Act. That work is defined as:

1. Work on the installation, repair, alteration or removal of an electrical circuit or associated fittings, equipment or accessories.
2. Work on the installation, repair, alteration or removal of electrical infrastructure including lines and wires for the generation, transmission or distribution of electricity and also including supporting and protective structures relating to any such equipment, lines or wires.
3. Work that is, by determination of the Regulator as defined in the Electricity Supply Industry Act 1995 to be regarded as specialist work.

The Act provides for contractor’s licences and practitioner’s licences. The Administrator of Occupational Licensing may divide the type of licences into class for prescribed work. The Administrator deals with licensing applicants with the Administrator’s decisions being reviewed by the Magistrates Court (Administrative Appeals Division).

The categories of licences are:

- **Electrical contractor licence**
- **Electrician:** Electrical technicians/Electricians licence
- **Electrical fitter:** not required to be licensed
- **Cable jointers:** not required to be licensed
- **?line workers:** not required to be licensed?
- **Restricted** – refrigeration and air-conditioning equipment
- **Restricted** – instrumentation and control equipment
- **Restricted** – declared equivalent to NT specialist commercial/industrial equipment
- **Restricted** – no licensing – no declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT water plumbing and equipment
- **Restricted** – declared equivalent to NT gas equipment
- **Restricted** – declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT self-propelled high voltage earth moving equipment
- **Restricted** – no licensing – no declared equivalent to NT domestic appliances and equipment
- **Restricted** – declared equivalent to NT disconnection and reconnection
- **Restricted** – no licensing – no declared equivalent to NT plug and cord connected equipment

Victoria – Classes of Licences

Licences are issued under the *Electricity Reform Act 2000 1998*.

The legislation regulates electrical contracting. Registrations relate to classes of electrical contracting as specified in the regulations.

Employees of registered contractors must be licensed as electrical installation works or an apprentice. The employer must maintain their own register of such employees with that register being able to be accessed

by Energy Safety Victoria. For prescribed classes of electrical work the worker must be registered in respect of that class of work.

The legislation does not appear to provide for the automatic recognition of interstate licences or registrations albeit regulation 11 facilitates Energy Safety Victoria issuing licences for contractors based on interstate or New Zealand licences or qualifications.

The categories of licences are:

- **Registered Electrical contractor licence**
- **Electrician:** Electricians licence
- **Electrical fitter:** not required to be licensed
- **Cable jointers:** not required to be licensed
- **Restricted** – refrigeration and air-conditioning equipment
- **Restricted** – instrumentation and control equipment
- **Restricted** – declared equivalent to NT specialist commercial/industrial equipment
- **Restricted** – declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT water plumbing and equipment
- **Restricted** – declared equivalent to NT gas equipment
- **Restricted** – declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT self-propelled high voltage earth moving equipment
- **Restricted** – declared equivalent to NT domestic appliances and equipment
- **Restricted** – declared equivalent to NT disconnection and reconnection
- **Restricted** – no licensing – no declared equivalent to NT plug and cord connected equipment

The Licensing Body is Energy Safe Victoria.

The Disciplinary Body is Energy Safe Victoria.

The basic period by when prosecutions must be commenced is 12 months.

Western Australia – Classes of Licences

Licences are issued under the *Electricity Act 1945*. Most of the detail of the licensing scheme is contained in the Electricity (Licensing) Regulations 1991. It relates to “electrical work”. The three main classes of licences are “electrician”, “electrician’s training” and “restricted”. Licences can be subject to conditions and restrictions.

Electrical workers are required to be licensed.

The categories of licences are:

- **Electrical contractor licence**
- **Electrician:** “A” grade electrical workers licence – endorsed as electrical mechanic or “A” grade electrical workers licence – endorsed as electrical fitter/mechanic Qualified supervisor certificate – electrical

- **Electrical fitter:** A grade electrical workers licence – endorsed as electrical fitter
- **Cable jointers:** not required to be licensed
- **?line workers:** not required to be licensed?
- **Restricted** – refrigeration and air-conditioning equipment
- **Restricted** – instrumentation and control equipment
- **Restricted** – declared equivalent to NT specialist commercial/industrial equipment
- **Restricted** – no licensing – no declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT water plumbing and equipment
- **Restricted** – declared equivalent to NT gas equipment
- **Restricted** – declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT self-propelled high voltage earth moving equipment
- **Restricted** – declared equivalent to NT domestic appliances and equipment
- **Restricted** – declared equivalent to NT disconnection and reconnection
- **Restricted** – declared equivalent to NT plug and cord connected equipment
- **Cable jointers:** Electrical jointer licence – endorsed open
- **Line workers:** Electrical linesperson endorsed transmission and/or electrical linesperson licence – endorse distribution and/or electrical linesperson endorse traction
- **Restricted** – refrigeration and air-conditioning equipment
- **Restricted** – instrumentation and control equipment
- **Restricted** – declared equivalent to NT specialist commercial/industrial equipment
- **Restricted** – declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT water plumbing and equipment
- **Restricted** – declared equivalent to NT gas equipment
- **Restricted** – no licensing – no declared equivalent to NT pre-assembled neon signs
- **Restricted** – declared equivalent to NT self-propelled high voltage earth moving equipment
- **Restricted** – declared equivalent to NT domestic appliances and equipment
- **Restricted** – no licensing – no declared equivalent to NT disconnection and reconnection
- **Restricted** – declared equivalent to NT plug and cord connected equipment

Appendix 6 – Interstate Regulation of Appliances

Australian Capital Territory (ACT) – Safety of Electrical Appliances

Section 12 of the *Electrical Safety Act 1971*, makes it an offence, in relating to the initial sale of a particular product in the ACT, sell “prescribed” articles if a declaration of compliance is not registered under ACT law or under a corresponding law. It is also an offence to sell an appliance that does not comply with the standard.

There are also offence to sell or install the offence relates to whether the products comply with the relevant standard non-prescribed article of electrical equipment⁴³.

There are also offence so selling defective equipment⁴⁴.

New South Wales (NSW) – Safety of Electrical Appliances

Part 4 (Unsafe electrical articles and gas appliances) of the NSW Gas and Electricity (Consumer Safety) Act 2017 prohibits the sale of unsafe electrical articles. Electrical articles is defined as electrical article means any appliance, wire, fitting, cable, conduit, meter, insulator, apparatus, material or other electrical equipment intended or designed for use in, or for the purposes of, or for connection to, any electrical installation.

However section 32 (Effect of Part on Fair Trading Act 1987) states that the provisions of Part 4 are in addition to, and not in derogation of, any provision of the Fair Trading Act 1987 or any regulation made under that Act. Suggesting that consumer law still holds for electrical components etc but not for electrical work.

Tasmania – Safety of Electrical Appliances

The Tasmanian Electricity Industry Safety and Administration Act 1997 defines an electrical article as –

- (a) an electrical appliance; or
- (b) an article of electrical equipment;

Part 4 of that Act deals with the regulation of electrical articles. It includes:

s49. Approval of electrical articles

- (1) An electrical article to which this Part applies is approved if –
 - (a) it is approved by the Secretary under this Part; or
 - (b) it is approved, registered or certified by an external authority.
- (2) An external authority is –
 - (a) an authority of another State or of New Zealand that has power to approve, register or certify electrical articles; or

⁴³ See Part 4, *Electrical Safety Act 1971*

⁴⁴ See Part 5, *Electrical Safety Act 1971*

(b) an authority or entity approved by the Secretary as an external authority for the purposes of this section.

(3) The Secretary may, by notice in the Gazette –

(a) approve an authority or entity as an external authority for the purposes of this section; or

(b) vary or revoke a previous approval.

s54. Sale of electrical articles

A person must not in the course of a business sell an electrical article to which this Part applies unless –

(a) the article is approved as required under this Part; and

(b) the article is marked as required under this Part; and

(c) the article complies with the relevant standard for the article.

Penalty: Fine not exceeding 50 penalty units.

and

- s55. Sale of second-hand electrical articles

A person must not in the course of a business sell second-hand electrical articles unless a label is attached –

(a) warning that the article has not been tested to ensure that it can be safely operated; or

(b) certifying that the article has been tested by a competent person and has been found to be safe.

Penalty: Fine not exceeding 50 penalty units

Queensland – Safety of Electrical Appliances

The Queensland legislation is Part 2A and Part 7 of their *Electricity Safety Act 2002* and Regulation respectively. The legislation captures electrical equipment through s48B:

48B Meaning of in-scope electrical equipment

(1) *In-scope electrical equipment is low voltage electrical equipment that is designed, or marketed as suitable, for household, personal or similar use.*

(2) *It is immaterial whether the low voltage electrical equipment is also designed or marketed to be used for commercial or industrial purposes.*

Not only does Queensland legislation contains various offences regarding the selling and labelling of various electrical products; s48D of the *Electricity Safety Act 2002* requires the Regulator to establish and maintain a national register of responsible suppliers and in-scope electrical equipment.

South Australia – Safety of Electrical Appliances

The *Energy Products (Safety and Efficiency) Act 2000* contains various offences regarding the selling and labelling of various electrical products.

Victoria – Safety of Electrical Appliances

Victoria does something similar (to Tasmania) in their *Electricity Safety Act 1998*.

Western Australia – Safety of Electrical Appliances

The *Electricity Act 1945* contains various offences regarding the selling and labelling of various electrical products and enables the Director of Energy Safety to approve the electrical appliance, without an examination or test of the electrical appliance, where the appliance has been approved by a duly constituted authority in another State of the Commonwealth.

Appendix 7 – Interstate Electrical Installations

Australian Capital Territory (ACT)

The ACT *Electricity Safety Act 1971* defines an article of electrical equipment means—

- a) a wire, cable, fitting, meter, insulator, switchboard, or apparatus designed or intended for use in an electrical installation; or
- b) an appliance, fitting or apparatus operated by electricity and the cable and other things required for its connection to an electrical installation.

It goes on to define an electrical installation as electrical wiring or cable used or for use in carrying or controlling electricity (other than electricity with a voltage of not more than 50V a.c. or 120V ripple-free d.c.), including the following:

- i. a wiring system, switchgear, control gear, generator, electrical accessory, electrical appliance, or fitting, that is used or for use in the conversion, storage, transmission, distribution, generation or use of electrical energy and connected to wiring or cable;
- ii. a switch, fuse, plug, socket outlet, lighting outlet, adaptor, ceiling rose or other device associated with wiring, a switchboard, or an appliance, mentioned in subparagraph (i);
- iii. a consuming device in which electricity is converted into heat, motion or another form of energy, or is substantially changed in its electrical character;

support for electrical wiring or cable.

New South Wales (NSW)

In NSW the Gas and Electricity (Consumer Safety) Act 2017 defines electrical article as any appliance, wire, fitting, cable, conduit, meter, insulator, apparatus, material or other electrical equipment intended or designed for use in, or for the purposes of, or for connection to, any electrical installation. It goes on to define electrical installation as any fixed appliances, wires, fittings, meters, apparatus or other electrical equipment used for (or for purposes incidental to) the conveyance, measuring, control and use of electricity in a particular place, with some exclusions including for electricity supply authority's, mines and any electrical article connected to, and extending or situated beyond, any electrical outlet socket.

The Act captures 'high risk battery articles' at section 6 - High risk battery articles subject to Act. It states:

(1) The Secretary may, by order published in the Gazette, declare a battery article, or a battery article of a class, specified or described in the order to be a high risk battery article for the purposes of this section.

(2) Except as otherwise provided by this Act or the regulations:

- (a) this Act applies to a high risk battery article in the same way that it applies to an electrical article, and
- (b) accordingly, a reference in this Act to an electrical article is taken to include a reference to a high risk battery article.

(3) The Secretary may combine an order under this section with an order under section 12 [Declared electrical articles] that relates to the same article.

(4) In this section:

battery article means:

- (a) a rechargeable battery or any of its components, or
- (b) an article that incorporates a rechargeable battery as a power source for the article.

Queensland

In Queensland the *Electrical Safety Act 2002*, defines Electrical Equipment as any apparatus, appliance, cable, conductor, fitting, insulator, material, meter or wire that—

- a) is used for controlling, generating, supplying, transforming or transmitting electricity at a voltage greater than extra low voltage; or
- b) is operated by electricity at a voltage greater than extra-low voltage; or
- c) is part of an electrical installation located in an area in which the atmosphere presents a risk to health and safety from fire or explosion; or
- d) is, or is part of, a cathodic protection system.

It defines an electrical installation as a group of items of electrical equipment that—

- a) are permanently electrically connected together; and
- b) can be supplied with electricity from the works of an electricity entity or from a generating source; and
- c) do not include items that are works of an electricity entity.

South Australia

The South Australian definition of electrical installation in the *Electricity Act 1996* is a set of wires and associated fittings, equipment and accessories installed in a place for the conveyance, control, measurement or use of electricity that is, or is to be, or has been, supplied for consumption in the place, including anything declared by regulation to be or form part of an electrical installation, but does not include—

- (a) electricity infrastructure owned or operated by an electricity entity; or
- (b) any wires, fittings, equipment or accessories connected to and beyond any electrical outlet at which fixed wiring terminates (other than any such outlet used to connect sections of fixed wiring).

This is the parent definition adapted for use in the Northern Territory.

Tasmania

The Tasmanian *Electricity Industry Safety and Administration Act 1997* uses a similar definition to that in the Territory in that it defines electrical installation as a set of wires and associated fittings, equipment and accessories that is, or is to be, connected to a system for the transmission or distribution of electricity. However the *Occupational Licensing (Electrical Work) Regulations 2008* defines electrical work as not only work on electrical circuits or installations but also work on a battery, or other electricity storage system, that is –

- i. installed, stationary or fixed in position; and
- ii. for the purpose of supplying electricity to an electrical installation –

or that is work on fittings, equipment, or accessories, associated with such a battery or other electricity storage system.

Victoria

The Victorian Electricity Safety Act 1998 defines electrical equipment as any appliance, wire, fitting, cable, conduit or apparatus that generates, uses, conveys or controls (or that is intended to generate, use, convey or control) electricity. It goes on to define electrical installation as electrical equipment that is fixed or to be fixed in, on, under or over any land.

Western Australia

In Western Australia the *Electricity Act 1945* defines an installation as including all wiring, wiring enclosures, switch gear, control and protective gear, appliances, and other components permanently connected to or associated with the wiring, on premises to which electricity is or is intended to be supplied through distribution works, and where electricity is supplied from a private generating plant includes that plant. It defines apparatus as any apparatus, equipment, plant, or appliance in which electricity is capable of being, or is, or is intended to be transmitted, distributed, used, consumed or converted and includes any meter, fitting, or connection.

This definition is expanded upon in the *Electricity (Licensing) Regulations 1991* where private generating plant is defined as generating works that are for the generation of electricity exceeding 50 volts alternating current or 120 volts ripple free direct current including —

- a) generating works that are for the self-propulsion or other motivation of mobile equipment; and
- b) most generating works constructed or operated under an exemption order made under the *Electricity Industry Act 2004*; and
- c) generating works forming an electrical installation of a consumer (such as fixed generating plant, a mobile or portable generator, solar panel, wind powered generator, fuel cell, inverter or an energy storage device, such as a battery or fly-wheel); and
- d) all works, electrical equipment and wiring ancillary to such generating works.

