NSW GOVERNMENT | Customer Service

Statutory Review

Gas and Electricity (Consumer Safety) Act 2017

March 2023

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1 Glossary of terms

Term	Description
ACCC	Australian Competition and Consumer Commission.
ACL	Australian Consumer Law.
AEMC	Australian Energy Market Commission is an independent statutory body that sets the rules for the National Energy Market
AS	Australian Standards are technical and commercial standards prepared and published by Standards Australia. A Standard prescribed in any legislation must be complied with by any person carrying out the specified work to which the Standard applies.
AS/NZS	Australian/New Zealand Standards are technical and commercial standards prepared and published by Standards Australia. A Standard prescribed in any legislation must be complied with by any person carrying out the specified work to which the Standard applies.
Building Bill	Proposed legislation governing building licences which will replace the *Home Building Act 1989*.
BCE Bill	Building Compliance and Enforcement Bill is proposed legislation governing compliance and enforcement of the building and construction industry.
CCEW	Certificate of Compliance for Electrical Work is referred to in the G&E Regulation as the *safety and compliance test.* A CCEW must be conducted on completion of electrical installation work and submitted to NSW Fair Trading, the customer and the distributor within seven days of completing the test.
Distribution system	A distribution system means— (a) the electricity power lines and associated equipment and electricity structures used to convey and control the conveyance of electricity— i) to the premises of wholesale and retail customers, up to the connection point for the premises, whether or not the connection point is on the building or land comprising the premises, or (ii) to, from and along the rail network electricity system operated by, for or on behalf of Sydney Metro, Sydney Trains, Transport Asset Holding Entity of New South Wales or Transport for NSW, or (b) a regulated stand-alone power system.
EESS	Electrical Equipment Safety System is as a national scheme, developed with the intent of providing national consistency, uniformity and certainty of premarket sale requirements for electrical articles.
ELV	Extra low voltage equipment refers to electrical equipment that operates at less than 50v AC or 120v ripple-free DC.
Electrical Regulatory Authorities Council	Informal group made up of representatives of the regulatory authorities responsible for electrical safety, supply and energy efficiency in the Commonwealth, the States and Territories and New Zealand, and includes NSW Fair Trading.

ESA	Electricity Supply Authority means a person or body engaged in the distribution of electricity to the public or in the generation of electricity for supply, directly or indirectly, to the public whether by statute, franchise agreement or otherwise.
G&E Act **G&E Regulation**	*Gas and Electricity (Consumer Safety) Act 2017.* Gas and Electricity (Consumer Safety) Regulation 2018.
GS Act **GS Regulation**	*Gas Supply Act 1996.* Gas Supply (Safety and Network) Regulation 2022.
HB Act	*Home Building Act 1989.*
IEC	The International Electrotechnical Commission, headquartered in Geneva, Switzerland, is the organization that prepares and publishes international Standards for all electrical, electronic and related technologies.
IPART	Independent Pricing and Regulatory Tribunal is an independent pricing regulator for water, public transport, local government and licence administrator of water, electricity and gas. IPART is established under the *Independent Pricing and Regulatory Tribunal Act 1992*.
MDR Act **MDR Regulation**	*Motor Dealers and Repairers Act 2013.* Motor Dealers and Repairers Regulation 2014.
NEM	National Electricity Market facilitates the exchange of electricity between generators and retailers and is managed by Energy Ministers who are the key decision maker with policy and governance responsibility.
REAS	Recognised External Approval Scheme refers to any scheme for the approval or certification of models of electrical articles under the G&E Act, as declared by the Minister by order published in the Gazette
Standing Committee of Officials	A governance forum, established under an Inter-governmental agreement, responsible for managing and coordinating the day-to-day administration and operation of the EESS.
The Department	The Department of Customer Service.
The Minister	The Minister for Better Regulation and Fair Trading.
The Regulator	NSW Fair Trading.
The Review	The review of the *Gas and Electricity (Consumer Safety) Act 2017* carried out in accordance with section 77 of the Act
The Secretary	The Secretary of the Department of Customer Service.
WHS Regulation	Work Health and Safety Regulation 2017.

2 Executive Summary

The *Gas and Electricity (Consumer Safety) Act 2017* (G&E Act) and the Gas and Electricity (Consumer Safety) Regulation 2018 (G&E Regulation) provide the regulatory framework for consumer safety protections and requirements for gas and electricity sources in NSW. The primary objective of the G&E Act is to protect consumers by ensuring electrical and gas appliances and installations are safe for use and electrical, medical gas, gasfitting and autogas work is conducted by appropriately qualified persons. The G&E Act also provides compliance and enforcement powers to investigate and prohibit unsafe gas appliances and electrical articles for consumer safety.

The G&E Act and G&E Regulation is administered by the Minister for Better Regulation and Fair Trading (the Minister). Section 77 of the G&E Act requires that the Act be reviewed to assess whether its policy objectives remain valid and whether its terms remain appropriate for securing those objectives. The outcome of the review is due to be tabled in both Houses of Parliament by 9 May 2023.

To assist in conducting the review, the Department of Customer Service (the Department) reached out to key stakeholders in July 2022 to identify any potential improvements or amendments to the G&E Act. The feedback received through this process assisted in the development of a discussion paper which was released to targeted stakeholders in November 2022. A total of 52 submissions were received from external stakeholders with a further nine submissions received from internal and interagency stakeholders. These submissions have been analysed and have made a valuable contribution to the review. We thank those in the industry and consumer representatives who took time to provide their feedback for the review.

The review finds that the objectives of the G&E Act remain valid, and the regulatory framework continues to be largely appropriate. Feedback from consultation raised various issues including advances in technology not being captured by the G&E Act; the impact on the industry from unclear definitions; the limited use of remote re-energisation and de-energisation of smart meters; the compliance and safety of electrical appliances; reporting and data collection of accidents; and regulatory gaps around the generation of supply.

The review finds that there are opportunities to ease the regulatory burden while maintaining the standards of conduct and consumer protection and continuing to meet the objectives of the G&E Act. Following consideration of stakeholder feedback and an analysis of the issues identified, the review makes 28 recommendations. The recommendations seek to strengthen the G&E Act's effectiveness and maintain existing provisions where they remain appropriate.

3 Recommendations

Electrical work

Definitions for electrical work

1. Amend the G&E Act to address inconsistencies between the definitions in the Act and the WHS Regulation related to the scope of electrical work and capture generation and emerging energy storage sources.

2. Introduce a regulation making power in the G&E Act to enable other energy generating sources to be captured or excluded under the definitions for electrical installation and electrical equipment.

Electrical licences

3. Retain the current exemption in the G&E Act which provides that employees of electricity supply authorities (ESAs) and mines are not required to hold a licence under the *Home Building Act 1989* (HB Act).

4. Amend the G&E Act to enable ESAs limited access to work on a customer's switchboard in cases of emergency.

Remote de-energisation and re-energisation of smart meters

5. Undertake a review of the *Guidelines for Development of Safety Management Plans for Remote De-energisation and Re-energisation of Small Customers Premises by Electricity Retailers and Metering* commencing September 2023 and provide recommendations to the Secretary of the Department of Customer Service for increasing the adoption of safety management plans and the safe implementation of remote de-energisation and re-energisation of smart meters in NSW.

   The review should consider alternative options, such as digital solutions, to encourage greater uptake of remote services and resourcing requirements to ensure the safe undertaking of remote services.

Reporting defective installations and accidents and publishing data

6. Introduce requirements in the G&E Act for licensed tradespersons to report all defective electrical or gas installations to the occupier and all serious defects to the Secretary within 24 hours. The definition of serious defect for reporting obligations will be developed in consultation with internal and industry stakeholders.

7. Amend the definition of serious accident to include temporary disability and impose a responsibility for the notification of serious electrical and gas accidents on a third party such as first responders, ESAs or other person responsible for the work involved in the incident where the accident occurs at a residential premises or the owner or occupier of the premises is the injured party.

8. Amend the G&E Regulation to enable written direction notices to be issued to rectify defective electrical or gas installations or work if the work has been completed more than two years ago.

Extra low voltage (ELV) equipment

9. Maintain the current regulatory framework and not capture all ELV equipment within the scope of the G&E Act, limiting regulation to high-risk ELV equipment only.

10. Expand the scope of section 6 of the G&E Act to enable the Secretary to declare any ELV equipment as high-risk where needed.

Gas work

Definition of gas

11. Amend the definition of *gas* in the G&E Act to capture hydrogen and hydrogen blended gases. The percentage of hydrogen blend should be set by Regulation.

Definition of gasfitting work

12. Amend the definition of *gasfitting work* in the G&E Act to clarify when licensed gasfitters are required.

Autogas

13. Move the current requirements for the licensing of autogas for motor vehicles from the G&E Act to the *Motor Dealers and Repairers Act 2017* (MDR Act) and prescribe any additional powers for autogas installations in the MDR Act if required.

14. Amend the G&E Act and Regulation to require the testing and maintenance requirements for autogas installation to be carried out by a competent person for vessels and machines and a person that holds a licence under the MDR Act for vehicles. The definition of 'competent person' should be developed in consultation with internal and industry stakeholders.

Appliances

Electrical appliances

15. Amend the G&E Act to enable sell-through provisions for electrical articles where:

a. the electrical article has been tested and certified as compliant with the relevant standard at the point of import or supply, and

b. the supplier of the electrical article provides evidence of the date of importation or manufacture to the retailer or consumer.

16. Amend the G&E Act to include a power for the Secretary to request evidence of the date of importation or manufacture of electrical articles sold in NSW.

17. Amend the G&E Act to include a power for the Secretary to issue written direction notices to sellers, including e-commerce platforms, to remove or take down any prohibited electrical article from their platform or catalogue.

18. NSW to provide in-principle support for joining the Electrical Equipment Safety System (EESS), subject to the following issues being resolved:

    a. certificates of compliance issued by NSW Fair Trading or by an NSW Recognised External Approval Scheme (REAS) to be recognised in all other states and territories,
    b. funding received by NSW for testing to be retained by NSW. Funds received as part of the EESS registration framework for the operation of the scheme to be retained by the relevant state, and
    c. clear oversight on the governance of the scheme at a Ministerial level.

Type A and Type B Gas Appliances

19. Include definitions of Type A and Type B gas appliances in the G&E Act.

20. Introduce a regulation making power to prescribe any requirements such as relevant standards or certification requirements for Type A and Type B gas appliances and make any subsequent amendments to the G&E Regulation if required.

21. Consider introducing an additional licence class for gasfitting work on Type B gas appliances as part of the review of the HB Act.

Servicing gas appliances

22. Introduce a requirement in the G&E Act for the service, repair or maintenance work on gas appliances to be carried out by a ‘competent person’ and include a regulation making power to prescribe relevant standards for the repair work. An offence should be prescribed for failure to comply with the standards and make any subsequent amendments to the G&E Regulation if required. The definition of ‘competent person’ should be developed in consultation with internal and industry stakeholders.

Enforcement and audits

Increasing inspection capability

23. The G&E Act is not to be amended to allow the outsourcing of inspector work.

Installing prohibited appliances

24. Amend the G&E Act to expand the existing scope of the offence relating to the sale of a prohibited electrical or gas appliance under section 31(1) of the Act to also apply to the installation of the appliance. Make any subsequential amendments to section 28 of the Act to make clear that the notice prohibits both sale and installation of the appliance.

Requesting Documentation

25. Amend the G&E Act to include a power for authorised officers to issue written directions to request information, records or both as the officer may require for an authorised purpose.

Written Direction Notices

26. Amend the G&E Act to include a power for authorised officers to issue written direction orders and a review process for these powers where an electrical or gas installation or the use of an electrical or gas appliance has caused or has the potential to cause a safety risk.

27. Amend the G&E Act to include a penalty for each day the offence of using an appliance or installation that is subject to a written direction notice continues.

Penalties and offences

28. Amend the G&E Act to standardise maximum penalty amounts for offences to align with the tiers proposed under the Building Bill 2022 (Building Bill) and the Building Compliance and Enforcement Bill 2022 (BCE Bill).

4 Introduction

Overview of the Act and objectives

On 3 May 2017, the G&E Act was passed by Parliament. The G&E Act repealed the *Electricity (Consumer Safety) Act 2004*, the Gas Supply (Consumer Safety) Regulation 2012 and incorporated section 83A of the *Gas Supply Act 1996* (GS Act) into one piece of legislation. Amalgamating these statutes recognised the connections which exist between these two important sectors of the industry.

The objectives of the G&E Act are:

1. to **provide consumer protection** for those who purchase electrical articles and gas appliance by ensuring models are approved or certified and they meet specifications and requirements for sale and disposal,

2. to **establish appropriate Standards and requirements** for electrical installation work, medical gas installations, gasfitting and autogas work,

3. to **provide enforcement mechanisms** to investigate and prohibit the unsafe use and installation of gas appliances and electrical articles, and

4. to **protect property and people** through established requirements for the notification of serious electrical, gas and autogas accidents.

The G&E Act provides protections for consumers and the industry, balancing necessary safety and protective measures with flexible and modern regulatory practices. It does this by establishing a scheme for the licensing and regulation of electrical installation work, medical gas installations, gasfitting and autogas work. It also provides the specifications and requirements for the sale and disposal of electrical articles and gas appliances The G&E Act applies penalties and deterrents to ensure compliance and to minimise unlawful conduct and behaviour within the electrical industry.

Requirement for the review

The G&E Act and G&E Regulation are administered by the Minister. Section 77 of the G&E Act requires the Minister to undertake a review as soon as possible after the period of five years from the commencement of the Act. The review is to determine whether the G&E Act's policy objectives remain valid, and its terms are appropriate for securing those objectives. A report on the outcome of the review must be tabled in both Houses of the NSW Parliament within 12 months of the commencement of the review, that is, by 9 May 2023.

Consultation

To commence the review of the G&E Act, the Department conducted a discovery phase in July 2022 which involved reaching out to key internal, interagency and external stakeholders to identify any potential improvements or amendments to the G&E Act.

Prior to this, in 2021, the Department initiated a project to enhance supervision practices in the electrical industry after concerns were raised by NSW Fair Trading and SafeWork NSW inspectors. As part of this project, the definitions related to electrical work were also reviewed due to inconsistencies in legislation. A survey of those involved in electrical work was conducted in July 2021 with 796 anonymous responses received. Internal consultation was also conducted in analysing the feedback received.

The feedback received from the discovery phase and the electrical work survey results informed the development of a discussion paper on potential proposals to reform the G&E Act. On 2 November 2022, the Department released the discussion paper to targeted stakeholders for feedback. The discussion paper explored specific elements of the regulatory framework established by the G&E Act but also welcomed comments on any other general matters relevant to improving the operation of the Act.

The consultation was held for four weeks, with an extension of time granted to nine stakeholders at their request. The Department received a total of 52 submissions from external stakeholders with a further nine submissions received from NSW Government stakeholders. During the consultation period, the Department also met directly with distribution network operators (Ausgrid, Essential Energy and Endeavour Energy), the National Electrical and Communications Association (NECA), the Clean Energy Regulator, the Australian Competition and Consumer Commission (ACCC).

All submissions received during this consultation were reviewed and considered as part of the statutory review of the G&E Act.

A list of submissions received to the review are at Appendix A.

5 NSW Gas and Electricity framework

There are various laws that govern gas and electricity appliances, installation and infrastructure, and licensing for people carrying out electrical and gas work and autogas installations.

Gas and Electricity (Consumer Safety) Act 2017 (G&E Act)

The Minister is responsible for the G&E Act. The purpose of the G&E Act is to protect consumers by providing for the safe use of gas and electricity as well as prescribe and enforce minimum safety standards for gas and electrical equipment and installations.

The G&E Act safeguards consumers against some types of rechargeable batteries and products and captures compliance and enforcement powers for authorised officers.

Work Health and Safety Regulation 2017 (WHS Regulation)

The Minister for Work Health and Safety is responsible for the WHS Regulation. Part 4.7 of the WHS Regulation provides for general electrical safety in workplaces and when carrying out or using energised electrical work.

The WHS Regulation places certain responsibilities on a person conducting a business or undertaking to ensure that the electrical equipment and installation are safe, and work is carried out by qualified persons.

Home Building Act 1989 (HB Act)

The Minister is responsible for the HB Act which provides the framework for the licensing of building and construction trades and the regulation of building work including contracting, insurances and warranties.

The licensing requirements for electricians are captured under section 14 of the HB Act by linking to the definition of electrical wiring work under the G&E Act. This definition refers to the physical work of installing, repairing, altering, removing or adding to an electrical installation or the supervising of that work.

The Department is currently consulting on a proposed Building Bill which will modernise building legislation, including:

- replacing the HB Act
- replacing the *Plumbing and Drainage Act 2011,* and
- transferring and consolidating duty of care provisions from the *Design and Building Practitioners Act 2020* and the *Environmental Planning and Assessment Act 1979*.

Motor Dealers and Repairers Act 2013 (MDR Act)

The Minister is responsible for the MDR Act. The MDR Act establishes appropriate standards of conduct and transparency for motor dealers, motor vehicle repairers and motor vehicle recyclers.

The Motor Dealers and Repairers Regulation 2014 (MDR Regulation) prescribes the licensing framework including the qualifications required for persons carrying out repair work on vehicles. This includes mechanics for liquefied natural gas, liquified petroleum gas and compressed natural gas which are required for autogas installations under the G&E Act.

Electricity Supply Act 1995 (ES Act)

The Minister for Energy is responsible for the ES Act. The ES Act covers the powers and duties for distribution and transmission operators to erect and maintain a distribution or transmission system and the licensing framework required to operate the system.

Gas Supply Act 1996 (GS Act)

The Minister for Energy is responsible for the GS Act. The GS Act regulates gas reticulation and gas supply, facilitates the continuity of supply of natural gas to customers and promotes the safe use of gas.

It includes the duties and responsibilities for authorised reticulators and licensed distributors for the distribution or reticulation of gas through gas pipelines and associated equipment.

6 Findings of the review

As a result of the feedback received from the discussion paper and further research and consultation, the review proposes the following recommendations. Details of the issue are provided below with summarised stakeholder feedback provided. The findings explain the reasoning on the decisions made and appropriate action to be taken for progressing the recommendation.

6.1. Electrical Work

Definitions for electrical work

Context

Both the G&E Act and the WHS Regulation provide definitions relevant to electrical work that apply to licensed electricians. The definition of electrical wiring work in the G&E Act determines the activities that are to be performed by or under the supervision of a licensed electrician. The WHS Regulation prescribes definitions relevant to authorised electricians carrying out electrical work in workplaces and for energised electrical work. The discussion paper circulated to stakeholders as part of the review identified that differences in the definitions may be causing unnecessary confusion and adverse impacts for regulators and industry in ensuring compliance with licensed electrical work requirements. Consistent definitions of what is and is not electrical work was proposed to ensure NSW Fair Trading and SafeWork NSW are assessing the same requirements. Feedback provided during the consultation indicated that the definitions in the G&E Act were too vague and open to misinterpretation.

One of the proposals in the discussion paper was to address the differences in the definition of *electrical installation* in the G&E Act and align it with the WHS Regulation. It also proposed to adopt the terms *testing* and *maintaining* in the definition which are current requirements captured in the G&E Regulation. The discussion paper proposed that the definition of *electrical wiring work* would be removed and merged into the existing definition of *electrical installation work*. Further, the discussion paper proposed a new definition of *electrical equipment* would be included in the G&E Act for consistency with the WHS Regulation and provide clarity for a term that was used throughout the legislation but not defined.

The discussion paper also highlighted that the scope of the definitions relevant to electrical work did not effectively cover all electrical work carried out by a licensed person. Since the first enactment of the G&E Act, there have been advances in technology seeing the growth of stand-alone generation of electricity using solar and wind farms and the uptake of battery storage. Accordingly, there is a gap in the current legislative framework that does not capture the generation of supply which enables a person who is not a licensed electrician to carry out this electrical work. The discussion paper proposed the definition of *electrical installation* be expanded

to incorporate electricity supplied from a private generating source but excluding generating works owned or operated by an ESA used as part of their distribution network.

The Electrical Safety Office and Workplace Health and Safety Queensland conducted an audit of electrical safety incidents across Queensland solar farms. The investigation identified that one of the risks associated with electrical work on solar farms was unlicensed workers carrying out electrical work. The report also found workers in wind farms are exposed to serious electrical risks that can cause critical injuries, and in some cases death. Victoria, Queensland and ACT include generation in the definition of electrical installation however, network operators are excluded from the definition.

The discussion paper also addressed a long-standing debate in the industry regarding whether a licensed electrician is required to carry out the electrical work on the housing component of a caravan or recreational vehicle.

Stakeholder views

The feedback received was generally supportive of amending the definitions with suggestions of alignment with relevant Australian Standards and other potential changes for clarification.

There was some concern about capturing *testing* and *maintaining* in the definition of electrical installation work. Feedback suggested there may potentially be unintended consequences such as capturing permanently installed computers or printers which would then require maintenance to be carried out by a licensed electrician. Clarification was also requested on the impact on someone who is not a licensed electrician to carry out testing of electrical equipment and residual current devices under the WHS Regulation. ESAs also questioned how this may impact their ability to test the distribution network supply at a customer's switchboard.

The proposed definition for *private generating source* was supported by stakeholders with further suggestions to consider capturing the generation carried out by ESAs as part of the ES Act. It was suggested that the term *generating work* which was proposed in the discussion paper as part of the definition of *private generating source* should be defined in the G&E Act. Clarification was also requested on the scope of batteries and the potential to exclude items such as uninterruptible power sources, mobile generators and electric vehicles that may be capable of supplying stored energy back into an electrical installation in the future.

Findings

The review found that there are opportunities to refine, provide clarification and future proof the existing definitions related to electrical work in the G&E Act. Feedback should be considered and further consultation with industry in fine tuning the definitions of electrical installation, electrical installation work and electrical equipment to ensure there are no unintended consequences.

The intention of including *maintenance* and *testing* in the definition of electrical installation work was to reflect the current requirement for the maintenance and testing of electrical installations

prescribed in the G&E Regulation. The definition proposed in the discussion paper unintentionally linked maintenance and testing to electrical equipment. In addressing the concerns raised, the proposal for amending the definition of electrical installation work will be revised to ensure that maintenance and testing only apply to electrical installations, and not equipment.

By capturing private generation in the G&E Act people carrying out electrical work on a solar or wind farm or installing emerging technologies, such as energy storage systems (e.g. fuel cells), will be required to hold or be supervised by a person holding the appropriate licence under the HB Act. This will also allow the prescription of relevant certification requirements to apply to any emerging products. Persons employed by an ESA and carrying out generating works used as part of their distribution network will not need to be licensed.

While there has been some confusion in who can carry out electrical work on the housing component of a caravan or recreational vehicle (RV), it is proposed that clearer communication is released by NSW Fair Trading that this work must be carried out by a licensed electrician.

A note will also be included as part of the definition of electrical installation work in the Act to capture electrical wiring of transportable structures and vehicles, such as caravans and RV's, covered by AS/NZS 3001.2 *Connectable electric installations and supply arrangements, Part 2: Connectable electrical installations*.

This will require a licenced electrician to carry out the electrical wiring work to the housing part of a caravan or RV. It would not include work on 12-volt battery system used for items such as low wattage lights, water and toilet pumps. This will maintain efficiencies in local manufacturing and repairs and minimise costs being passed onto consumers.

It has been questioned whether electrical or gas work on a caravan or RV requires the same qualifications, skills and knowledge as to carry out work on a fixed house. As transportable structures and vehicles become more sophisticated and as new technology develops, they are increasingly becoming like modern homes, for example, the 'Tiny Home' movement. The review was not presented with evidence that this type of work was measurably less risky or complex than other types of electrical work that requires a licensed electrician.

Recommendations

1. Amend the G&E Act to address inconsistencies between the definitions in the G&E Act and the WHS Regulation related to the scope of electrical work and capture generation and emerging energy storage sources.

2. Introduce a regulation making power in the G&E Act to enable other energy generating sources to be captured or excluded under the definitions for electrical installation and electrical equipment.

Electrical licences

Context

In the G&E Act, the definition of *electrical installation* does not include the generation, transmission or distribution of electricity that is owned or used by an ESA or located at a place that is owned or occupied by such an authority. Further, it does not include any electrical equipment in, or about a mine. This means that employees of ESAs and mines are not required to hold a licence to do work that would otherwise be electrical work under the HB Act. It the ESA or mine operator's responsibility for ensuring that employees are suitably qualified and experienced to carry out this work as part of their duties.

Electrical work on a mine is currently covered by the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and supporting regulation. The legislation provides that the statutory function of a qualified electrical tradesperson is to supervise the installation, commissioning, maintenance and repair of electrical plant and installations at the mine.

ESAs are governed by the ES Act and are responsible for the electricity power lines and associated equipment up to the connection point of a customer's premises. An authorised officer of an ESA can only enter a customer's premises to carry out preliminary investigations relating to a proposed installation or extension of electricity works and to read an electricity meter. This power of entry and authority to do work does not capture repairs or testing of a customer's switchboard.

In addition, the G&E Act requires a person to hold a licence for electrical wiring work under the HB Act to complete a safety and compliance test when work is carried out on a customer's switchboard. As ESA workers are not required to hold a licence, they are not permitted to carry out this work.

Stakeholder views

The discussion paper sought feedback about retaining the current exemptions for ESAs and mines which received strong support from the majority of stakeholders. Those stakeholders considered that existing legislative requirements places obligations on operators to ensure that people conducting work are trained, competent and authorised for the task.

However, a few submissions were opposed to the current exemption with a preference for a common electrical licence governance model to apply across sectors of industry, regardless of employment arrangement. This would ensure all electrical workers performing electrical work are required to be licensed regardless of the industry they work in.

ESAs also sought clarification for their non-licensed workers to be able to conduct work that requires access to a customer switchboard for the purpose of testing and fault and emergency work. ESAs believe that a customer's switchboard is part of the network equipment that forms part of the distribution system which is critical to the operation of their network. Carrying out certain

work on a customer's electrical installation enables them to provide services to their customers and maintain their network.

Findings

Mines

Under the *Work Health and Safety (Mines and Petroleum Sites) Act 2013*, the individual carrying out electrical work on a mine must hold either a supervisor certificate for electrical wiring work, or a proficiency certificate in an electrical trade or be continuously employed as an electrical tradesperson at a mine. The operator of a mining or petroleum site must also have a safety management system in place designed to ensure safe operations of the network and the health and safety of workers and other people are not put at risk. The safety management plan incorporates resource planning and identifying the skill sets and numbers of personnel needed to manage the operations of the network.

The Mining and Petroleum Competence Board oversee the development of competence standards for people exercising functions at a mine or petroleum sites which covers persons carrying out electrical work. The Board also advises the Secretary of the Department of Regional NSW on the training, qualifications, experience, knowledge or skills required to exercise statutory functions.

The existing legislation that covers electrical work on a mine ensures people are competent and have the skills to be able to carry out electrical work. There is also sufficient management of the site operations to ensure the safety of workers and the public.

A report published on electrical injuries by the Australian Institute of Health and Welfare found that from 2014 to 2016, 1,100 people were hospitalised and 55 deaths were a result of electrical injury.[1] Over the two-year period, 11 electrical injuries were recorded (or 2.2 per cent) in the mining industry.

The review recommends that licensing requirements should not be imposed on people working in mines and the current exemption should remain in the G&E Act.

ESAs

Operators for distribution systems are covered by the ES Act and are regulated businesses and required to hold a licence. The Independent Pricing and Regulatory Tribunal (IPART) reports to the Minister on the network operator's compliance to licence conditions and makes recommendations to the Minister in relation to granting, varying, transferring or cancelling a licence.

ESAs are required to develop and maintain a comprehensive safety management system (SMS) that complies with *AS5577 - 2013 Electricity network safety management system*. The SMS includes an obligation on the ESAs to confirm that people conducting electrical work are trained, competent and authorised for the task.

[1] *Australian Institute of Health and Welfare, Electrical injuries: hospitalisation and deaths, 2014-2016*

ESAs are also required to comply with the Electricity Network Reporting Manual – Incident Reporting issued by the IPART. Any serious electrical works accidents must be reported to SafeWork and IPART. A serious accident is defined as an accident in which electricity works are involved and as a consequence of which a person dies or suffers permanent disability, is hospitalised, receives treatment from a health practitioner or is unable to attend work for any period of time. This provides IPART with the oversight to ensure that network operators are actively maintaining a safe working environment.

IPART published the *Annual Compliance Report - Energy Network Operator Compliance during 2021-22*[2] which indicates that across all of the energy network operators there have been 37 reported incidents during the period. This equates to 24 per cent of the total of 153 reported incidents. The incidents reported includes arc flash, electric shock/burn, breach of safe approach distance and unintended contact with energised assets. Energy network operators take action in respect of incidents with toolbox talks undertaken and safety brief communicated to all staff. Workers injured by arc flashes were stood down post incident and returned to active duties following disciplinary actions and competency assessments. Major flood events and vegetation have impacted the reported incidents in this financial year.

Each of the ESAs have authorisation frameworks that define the qualifications and training requirements for the various electrical workers they employ. Some are required to hold an electrical supervisor licence, but others (such as linesmen/cable jointers) have no equivalent licence in the HB Act. The review found that there is insufficient evidence to change the current approach at this time and additional licenses are not necessary as the authorities issued by the ESAs are sufficient.

Other jurisdictions are seeking to be more closely align with the NSW position. Western Australia and Tasmania are the only states that have included ESAs within the scope of their definitions of electrical installation. All other states and territories exclude them. Although ESAs are not excluded under Tasmania's current legislation, the Electricity Safety Bill 2022 proposes to exclude them from the definition of electrical installation. If this Bill passes, Western Australian would be the only state that includes ESAs in the definition of electrical installation.

The review considered the feedback received that the G&E Act should be amended to provide limited access for authorised officers of ESAs to carry out electrical work on a customer's switchboard. This was based on the concerns raised around recent flooding events which required emergency restoration of power to customers.

The review recommends providing the ability for ESAs to carry out emergency work on a customer's switchboard. The testing of a customer's switchboard, such as new connection, should continue to be conducted by a licensed electrician which would require the lodgement of safety and compliance testing on those installations.

[2] *IPART Annual Compliance Report – Energy network operator compliance during 2021-22, October 2022*

Recommendations

3. Retain the current exemption in the G&E Act which enables employees of ESAs and mines to not be required to hold a licence under the HB Act.
4. Amend the G&E Act to enable ESAs limited access to work on a customer's switchboard in cases of emergency.

Remote de-energisation and re-energisation of smart meters

Context

Smart meters (also known as digital or advanced meters) are a key component of modern energy networks – creating a more connected, affordable, and efficient energy system and enabling new technologies. Smart meters account for almost 100 per cent of domestic meters in Victoria, 90 per cent in New Zealand, over 80 per cent of meters in 16 countries in the European Union, and 69 per cent of domestic meters in the United States. In NSW, smart meters account for around 31 per cent of all meters installed.

Remote services are a key benefit of smart meters. For example, remote de-energisation and re-energisation of smart meters allow a premises to be energised or de-energised without a technician visiting the premises. This creates efficiencies and saves money for both retailers and customers.

The regulation of remote de-energisation and re-energisation of smart meters sits under the G&E Regulation rather than the Act. It has been included in this review due to interest from industry in increasing the safe implementation of remote de-energisation and re-energisation of smart meters in NSW. Section 38AB of the Act requires that a retailer or metering provider has undertaken appropriate training in the installation of advanced meters, including de-energisation and re-energisation of electrical installations.

Under the G&E Regulation, to perform remote de-energisation and re-energisation retailers and metering providers must have a safety management plan that complies with the *Guidelines for Development of Safety Management Plans for Remote De-energisation and Re-energisation of Small Customers Premises by Electricity Retailers and Metering Providers* (the guidelines). The guidelines were produced by NSW Fair Trading and aim to ensure retailers and metering providers undertake remote de-energisation and re-energisation services safely.

NSW Fair Trading released the guidelines in 2020. Since its release, only 11 of around 30 retailers operating in NSW have a safety management plan to enable remote de-energisation and re-energisation. The guidelines require retailers and metering providers to develop safety management plans lodged with NSW Fair Trading and reviewed every two years.

Since December 2017, national rules have required all new and replacement meters in the National Electricity Market (NEM) to be smart meters. In NSW, at the current rate of smart meter installation, full deployment of smart meters may not occur until after 2040.

In 2022, the Australian Energy Market Commission (AEMC) conducted a review of the regulatory framework for metering services.[3] The objective was to progress the deployment of smart meters in the National Electricity Market (NEM). The primary recommendation of the review was to achieve 100 per cent smart meter coverage in the NEM by 2030.

The AEMC commissioned a cost benefit analysis as part of its review.[4] The analysis estimates that the accelerated roll out will deliver net benefits of $507 million across NSW, ACT, Queensland, and South Australia. The ability to de-energise and re-energise smart meters remotely is one of the three primary benefits of accelerating the rollout of smart meters across the NEM. Savings from remote de-energisation and re-energisation, remote smart meter reading, and special reading as a result of the rollout by 2030 are valued at $55 million per year in NSW.

Victoria has had widespread adoption of remote de-energisation and re-energisation of smart meters since at least 2015.

Stakeholder views

The discussion paper sought feedback on the barriers to undertaking remote re-energisation and de-energisation of smart meters in NSW.

Energy retailer and metering provider stakeholders noted most smart meter de-energisations and re-energisations in NSW continue to be conducted manually rather than remotely due to the `onerous` nature of the requirements in the guidelines. These stakeholders suggested that the guidelines have not achieved the optimum balance in protecting consumer safety, promoting positive customer experience, and establishing efficient operational processes. Stakeholders requested changes to the guidelines which they suggested would likely lead to greater uptake of remote services.

For example, the requirement for the customer to be on-site to answer questions during the remote re-energisation process was identified as a particular barrier. This is often difficult to achieve as the customer may be moving from a distant location or may not otherwise be able to be at the premises. Stakeholders suggested that the use of technology, such as a digital app, could be used by customers to complete a safety checklist, thus removing the requirement to be on-site at the time of re-energisation.

Stakeholders noted the current process leads to a poor customer experience, with multiple phone calls being required if the customer is not on site, or where the customer does not know answers to the required questions such as whether new appliances had been installed or whether electrical work had been undertaken post the de-energisation. This creates delays for customers in getting

[3] AEMC, *Review of the Regulatory Framework for Metering Services: Draft Report*, 2022

[4] Oakley Greenwood, *Costs and Benefits of Accelerating the Rollout of Smart Meters*, 2022

their energy connected. In addition, stakeholders expressed that the prescriptive nature of the guidelines made implementation challenging and expressed preference for an outcomes-focused approach.

A further concern related to the discrepancy in requirements for an onsite inspection prior to the re-energisation of premises. The requirement is 6 months for premises that have been remotely de-energised, compared to 12 months for premises that have been manually (rather than remotely) de-energised. Stakeholders requested parity.

Finally, stakeholders noted that the obligations in NSW are not imposed in Victoria, where remote services have been the default option since 2015 without safety incident.

Findings

Retailers and metering providers who provided feedback to this review indicated there is low use of remote energisation services in NSW, even among retailers who have a safety management plan.

NSW Fair Trading electrical inspectors raised concerns about maintaining customer safety if the guidelines were to be amended. The primary concerns of NSW Fair Trading relate to risks associated with live wires in premises, short circuits or overloads, and items left in a hazardous state. Some of these electrical risks are regulated by the Work Health and Safety Act and Regulation.

Consultation with the Victorian regulator, Energy Safe Victoria, indicates there have been no safety incidents related to remote de-energisation and re-energisation of smart meters in Victoria since smart meters were installed across the state in 2015. In Victoria there are specifications for all smart meters installed that ensures they will automatically disconnect if a load is detected upon remote re-energisation.

More research is required to understand why retailers and metering providers have not adopted safety management plans in NSW, and to determine whether it would be possible to amend the guidelines to encourage greater uptake of remote de-energisation and re-energisation while maintaining customer safety.

The AEMC's review of metering services will see a universal coverage of smart meters in NSW, and without remote services being undertaken a significant benefit of smart metering will not be realised.

Most retailer and metering providers' safety management plans are due for re-submission in the next 6-12 months. It is recommended that a review of the guidelines be completed in the next 12 months to align with this timeframe.

The review's aim would be to provide recommendations for increasing the adoption of safety management plans and encouraging safe implementation of remote de-energisation and re-energisation. The review could consider evidence from comparable jurisdictions such as Victoria and New Zealand.

Recommendation

5. Undertake a review of the *Guidelines for Development of Safety Management Plans for Remote De-energisation and Re-energisation of Small Customers Premises by Electricity Retailers and Metering* commencing by September 2023 and provide recommendations for increasing the adoption of safety management plans and the safe implementation of remote de-energisation and re-energisation of smart meters in NSW.

   The review should consider alternative options such as digital solutions to encourage greater uptake of remote services and resourcing requirements to ensure the safe undertaking of remote services.

Reporting defective installations and accidents and publishing data

Context

Currently, under the G&E Act, if a defective installation is identified by a person carrying out medical gasfitting work, the person must provide written notice to the owner and/or occupier of the premises as soon as practicable after discovering the defect. They must also notify the Secretary of the Department of Customer Service (the Secretary) within 24 hours of discovering the defect. Failure to provide notice is an offence.

The discussion paper sought feedback about extending these requirements to electrical and gas installations, with the risk of defective installations potentially causing a threat to life. Imposing this requirement on electrical installations would provide further protections for homeowners, occupiers and others working on the electrical installation.

The G&E Act also contains reporting requirements for serious accidents, being an accident that involves an electrical or gas appliance or an electrical or gas installation that results in a person's death or permanent disability, or where a person is hospitalised, receives treatment from a registered health practitioner or is unable to attend work for any period of time.

Currently the 'occupier of the place' where an accident occurs is required to notify the Secretary within seven days of the accident.

The discussion paper proposed amending the G&E Act to require that the accident should be reported within 24 hours to be consistent with the requirements for medical gas accidents. In addition, it proposed changing the person responsible for reporting these serious accidents.

The discussion paper suggested amending the G&E Act to place the responsibility of reporting onto third parties such as network operators or first responders. In Victoria, the onus for reporting serious electrical accidents rests on the electricity supplier if it is related to the network, the fire

control authority attending or investigating the incident or any other person responsible for the work involved in the incident. The discussion paper proposed adopting a similar approach in NSW.

Noting the proposal to impose an obligation of qualified and competent persons to report a serious electrical or gas incident, the discussion paper also sought feedback on whether *serious accident* should be expanded to include temporary disability or shock or injury from electricity. This proposal was included as industry feedback suggested that a temporary disability would be a significant outcome of an accident that should be reported to the Secretary. In addition, the difference between a permanent and temporary disability may not be capable of being understood until the person has (or has not) fully recovered. This could result in a reportable incident under the current definition of *serious electrical accident* or *serious gas accident* only being made many years after the incident occurred, rendering the report all but pointless for investigative purposes.

Minor shocks were also suggested as it can have varying outcomes depending on many factors such as the site of the electric shock as well as the physical condition of the person who receives the shock.

The publication of data, including serious accidents and outcomes of compliance investigations, was proposed in the discussion paper in response to representations from ESAs and industry associations highlighting the benefits of data being made available to the industry. It is a powerful tool that can be used to identify issues, improve knowledge and uplift the overall quality of work with the data being useful in educating licence holders and adopting lessons for future jobs.

Stakeholder views

The majority of stakeholders supported introducing a requirement for a licensed tradesperson to report defective installations even if they weren't responsible for the work. Some supported the proposal with the condition that the reporting should be in a digital format to meet the suggested timeframes. Others felt the timeframes for reporting to the Secretary should be extended to five business days.

Stakeholders supported reporting defective installations to the owner or occupier. Feedback suggested that the task of reporting all defects to the Secretary would be too onerous and only serious defects should be reported or if the defect was repaired within a certain timeframe, then the obligation to report should not apply. Although imposing penalties was supported, it was suggested that this should also only apply for serious defects. Further, there was some concern about imposing penalties where the person who failed to report was not responsible for the defective work.

The feedback received on changes to the reporting of serious electrical and gas accidents was mixed. Half of the respondents did not support the proposal reasoning that it duplicated the ACCC mandatory reporting system. Stakeholders supported the move of responsibility to report accidents from the owner or occupier to the emergency responder or utility provider. The support for reporting within 24 hours was on condition that a digital solution was available or consider

expanding the timeframe to five business days. Changing the definition of serious accident to include temporary disability and minor shocks was also supported by half of the respondents.

The majority of stakeholders supported the publication of incidents and compliance investigation data by NSW Fair Trading on conditions that the privacy of individuals was protected. Those that did not support the proposal believed the publication of data would discourage transparency and cooperation of suppliers for fear of public shaming.

Findings

Data shows that almost 33 per cent of electrical accidents,[5] and 62 per cent of gas accidents,[6] occur in a domestic environment. Accordingly, there is a high likelihood that the occupier of the place, or home, may in fact be the injured party and is unlikely to be able to report the accident within the required timeframe. Placing these responsibilities on the affected party can potentially result in serious accidents going unreported.

The review found that an occupier, being the owner or a tenant, who is not ordinarily subject to the G&E Act may not be aware of the requirement to report an accident. This defeats the purpose of notification requirements under this Act. Failure to report can in turn impact NSW Fair Trading's ability to investigate accidents and bring action against substandard players in the industry.

Stakeholders that did not support the reporting of serious accidents felt that it replicated current processes carried out by the ACCC. Feedback received from the ACCC stated that the Electrical Regulatory Authorities Council publishes data collected by regulators in annual accident and fatality reports online. The data provides for high level trend analysis of deaths and asset type by jurisdiction but lacks the clarity needed to inform national-level compliance activities by consumer good or supplier and identification of emerging risks.

The review agreed with the reasoning provided by stakeholders and supports amending the definition of serious accident to include temporary disability. However, it is not proposed that minor electric shocks would be included in the definition of serious electrical accident. The proposal to report every minor electric shock, although supported by stakeholders, would likely be overly burdensome on the industry and the Regulator. If the shock results in hospitalisation or requires medical treatment this would be considered a serious accident and is already captured by the G&E Act.

The review recommended that the G&E Act be amended to include the same requirements to apply for reporting defective electrical and gas installations as applies to medical gas installations, including the same penalty. This amendment will require that all defects discovered by a person working on the electrical or gas installation (i.e., licensed electricians or gasfitters) to be reported to the owner and occupier as soon as it is discovered. Serious defects will be required to be reported to the Secretary within 24 hours of the discovery. This has the potential to educate the industry and

[5] Australian Institute of Health and Welfare, Electrical injuries: hospitalisations and deaths 2014-15 and 2015-16

[6] GTRC, Serious Gas Accident Data Report Australia & New Zealand Financial Years 2010 – 2020

improve the quality of work in NSW. The definition of serious defect will need further consideration and should be developed in consultation with internal and industry stakeholders.

Reporting defects to the Secretary will enable NSW Fair Trading to be made aware of serious defective installations and take prompt compliance action. To ensure the owner takes action to rectify the defect, the G&E Regulation provides the power for an authorised officer to issue a written direction to rectify the defective installation or work. Currently this is limited to two years after the work has been completed. The review found that this limitation should be removed to protect and ensure the safety of consumers.

The review recommends that NSW should follow the lead taken by Queensland, Western Australia and New Zealand regulators in the publication of data where such information is made public as soon as is practicable so that bad practices can be identified, and good practices encouraged.

It is proposed that a digital platform will be developed by NSW Fair Trading to reduce the burden of the reporting requirements and to ensure relevant data is promptly made available to the industry on incidents.

Recommendations

6. Introduce a requirement in the G&E Act for licensed tradespersons to report all defective electrical or gas installations to the occupier and serious defects to the Secretary within 24 hours. The definition of serious defect for reporting obligations should be developed in consultation with internal and industry stakeholders.

7. Amend the definition of serious accident to include temporary disability and impose a responsibility for the notification of serious electrical and gas accidents on a third party such as first responders, ESAs or other person responsible for the work involved in the incident where the accident occurs at a residential premises or the owner or occupier of the premises is the injured party.

8. Amend the G&E Regulation to enable written direction notices to be issued to rectify defective electrical or gas installations or work if the work has been completed more than two years ago.

Extra low voltage (ELV) equipment

Context

ELV equipment refers to electrical equipment that operates at less than 50v alternating current or 120v ripple-free direct current and has reduced electricity supply voltage. It is typically used in

houses, outdoor settings, swimming pools, and portable appliances for outdoor use to eliminate the risk of electric shock. Systems such as telecommunication and data transmission, CCTV and fire alarms also operate on ELV. The reduced electricity current to such equipment makes it inherently low risk and is therefore excluded from the definition of electrical installation and the scope of the G&E Act.

Over recent years, there has been a rise in the number and variety of ELV equipment. Despite currently falling outside of the ambit of “electrical installation” under the G&E Act, some equipment such as high energy density batteries have been found to be particularly high-risk. Victoria regulate ELV equipment under their electricity safety legislation by requiring all ELV equipment to comply with the relevant Australian Standards.

The discussion paper sought feedback on a proposal to regulate all ELV equipment in NSW. The Victorian framework was suggested as a pre-existing regulatory framework which could potentially encourage a nationally consistent approach in regulating ELV equipment.

The discussion paper also sought feedback on a proposal to amend the G&E Act to include a power for the Secretary to declare certain ELV equipment if it was determined that they were high-risk. This would bring such ELV equipment within the scope of the G&E Act, requiring this equipment to be treated the same as other articles in the Act. This provision would be similar to the current requirements for high-risk rechargeable batteries under the G&E Act.

Stakeholder views

The majority of stakeholders opposed the proposal to regulate all ELV equipment under the G&E Act. The main reason was that ELV equipment inherently poses very low safety risk and the regulatory burden of bringing it under the G&E Act would not be proportionate to the risk.

Further concerns were raised about the unintended consequences of bringing various equipment such as telecommunications equipment under the G&E Act. Stakeholders suggested that telecommunications equipment is well regulated by the Australian Communications and Media Authority and bringing ELV into the scope of the G&E Act would not only duplicate that existing regulatory framework but also impose additional regulatory obligations on the telecommunications industry in terms of who can do the work and additional certification requirements.

It was further submitted that this proposal would result in consumers having to pay higher costs for having licensed electricians to look at every small electrical equipment that carries little to no safety risk.

The majority of stakeholders supported the proposal to amend the G&E Act to include a power for the Secretary to declare certain ELV equipment as high-risk, bringing this equipment under the G&E regulatory regime.

Some stakeholders also recommended that high-risk ELV equipment should be determined in line with the Electrical Equipment Safety System (EESS) risk levels and then brought into AS/NZS

4417.2: *Regulatory compliance mark for electrical and electronic equipment*. Under the EESS scheme, electrical equipment is classified into different risk levels. Each level has different certification and registration requirements, with stricter requirements around high-risk or Level 3 equipment. However, it is pertinent to note that under the EESS scheme, ELV equipment is classified as out of scope and is therefore not included in the risk determination matrix.

Findings

Regulating ELV equipment could bring many industries into the scope of the G&E Act due to the expanse of ELV equipment. This would unintentionally impose additional regulatory burden, such as electrical licensing requirements, on industries in the communications industry. This regulatory burden could hamper the operation of various industries in NSW, reducing the services available to customers. Therefore, in the absence of risk posed by such equipment, the cost of regulating all ELV equipment under the G&E Act may outweigh any benefits.

Victoria is the only jurisdiction in Australia where ELV equipment is regulated under electrical safety legislation. Under the Victorian legislation, the onus of ensuring safety lies solely on the supplier or manufacturer and they are required to ensure ELV equipment complies with *AS/NZS 3820 Essential safety requirements for electrical equipment* or the relevant AS/NZS or International Electrotechnical Commission (IEC) Standard for the equipment.

However, relevant standards (AS/NZS or IEC) are not in place for a large number of ELV equipment. In the absence of a relevant standard, each jurisdiction may prescribe different regulatory guidelines, potentially resulting in national inconsistency if all jurisdictions were to regulate ELV equipment. This would frustrate the intent of the proposal to regulate ELV equipment.

Therefore, owing to the overall low risk of ELV equipment in general, the review recommends not to regulate all ELV equipment in NSW, considering the disproportionate cost of the regulatory burden to the low risk posed by ELV equipment.

However, it is noted that some ELV equipment using higher energy density supplied from internal batteries or specific rechargeable battery packs can pose a fire risk. While this equipment is considered ELV, it may pose a higher risk due to the high energy density and may require regulatory intervention.

The review recommends amending section 6 of the G&E Act to extend the scope of power for the Secretary to be able to declare any ELV equipment as high-risk, should the need arise. This would allow for the pre-sale regulation of such ELV equipment that has been identified as high-risk but puts the obligation for satisfying this threshold on the regulator rather than individual operators.

In addition, the Secretary will be able to issue prohibition of sale orders against unsafe ELV equipment, if declared as high-risk. This will help limit the regulation of ELV equipment to a risk focused case-by-case basis.

Recommendations

9. Maintain the current regulatory framework and not capture all ELV equipment within the scope of the G&E Act, limiting regulation to high-risk ELV equipment only.
10. Expand the scope of section 6 of the G&E Act to enable the Secretary to declare any ELV equipment as high-risk where needed.

6.2. Gas work

Gas definition

Context

The NSW Hydrogen Strategy (the Hydrogen Strategy) was released in 2021 by the previous NSW Government to support the National Hydrogen Strategy, endorsed by Energy Ministers on 22 November 2019. At the inaugural Energy and Climate Ministers Council meeting on 24 February 2023 representatives of all Australian governments agreed to review the National Hydrogen Strategy.

The previous government set a stretch target under the Hydrogen Strategy to achieve 10 per cent green hydrogen blending by volume across existing gas networks by 2030. This is intended to provide NSW gas customers with a cleaner form of energy and help the green hydrogen sector to scale-up.

The Hydrogen Strategy supports the development of a commercial hydrogen industry in NSW. Hydrogen is a fuel that can be produced from a variety of resources. When generated by renewable energy, it is known as 'green hydrogen.'

The recent remake of the Gas Supply (Safety and Network) Regulation 2022 (GS Regulation) supported the Hydrogen Strategy by including requirements to ensure the safe injection of green hydrogen–natural gas blends into the distribution network.

The definition of *gas* in the G&E Act currently does not include hydrogen. The discussion paper proposed to expand the definition of gas in the G&E Act to include:

(a) hydrogen gas that is not mixed with another gas

(b) a mixture of hydrogen gas and either natural gas or liquefied petroleum gas.

Stakeholder views

Amending the definition of gas to include blended gases including hydrogen

The majority of submissions supported amending the definition of gas to capture blended gases including hydrogen. Stakeholders recommended that the legislative framework include regulations covering the safe injection of green hydrogen-natural gas blends into the distribution network, including domestic gas appliances.

Submissions noted that blending hydrogen into existing gas networks would allow for the certification of hydrogen appliances to occur under the G&E Act, consistent with current requirements for gas appliances. Some submissions noted that changing the definition will support the transition to net zero carbon.

Two submissions opposed amending the definition to include blended gases. These submissions expressed concern over whether blends can be safely incorporated into the existing gas network without impacting the transmission network or consumer appliances. Another concern was that introducing hydrogen would have a negative impact on the overall sustainability goals of NSW.

Amending the definition of gas to include 100 per cent hydrogen

Most stakeholders supported the proposal that the definition of gas be amended to capture the use of 100 per cent hydrogen, as this will facilitate gas industry's transition to net zero carbon.

One submission noted that 100 per cent hydrogen-utilising products are being developed, and the regulatory framework should be updated to accommodate them. This would mitigate the risk of the regulations being outpaced by the product market, and avoid any lag caused by waiting for the next five yearly statutory review to update the definition.

Some stakeholders opposed the amendment to the definition of gas, noting that hydrogen has different properties from existing gases covered by the G&E Act (for instance needing to be compressed at a higher pressure and being more prone to leakage). A further concern related to customers having appliances incapable of receiving 100 per cent hydrogen.

One submission noted that any policy to explore the development and use of 100 per cent hydrogen for consumers will require the development of a set of standards, safety procedures and regulations.

Changes required to safely accommodate and regulate 100 per cent hydrogen gas appliances

Suggested changes to the regulatory framework included safety focused regulations to cover the production, distribution and utilisation of appliances and updates based on the safe inclusion limits. Currently, a 10 per cent blend is evidenced to be safe, and when there is evidence to support a greater inclusion, the G&E Act could be updated accordingly.

Appliance retailer feedback suggested that no changes are required to safely accommodate and regulate 100 per cent hydrogen gas appliances (aside from the inclusion of blended gases and 100 per cent hydrogen).

Findings

The review found that there was general support for amending the definition of gas to capture hydrogen gas which would enable hydrogen blending into existing gas networks. While hydrogen has different properties from natural gas, it is understood that low level blends of hydrogen can be used in most existing gas appliances so there should be no impact to consumers. The amendment will align with other legislative requirements including the GS Act, as well as the strategic direction of the Hydrogen Strategy.

As technology advances and gas appliances are developed to use larger quantities of hydrogen, they will need to be appropriately certified to ensure they comply with the relevant safety standards. Capturing hydrogen gas in the G&E Act would allow for the future certification of hydrogen appliances to occur under the G&E Act consistent with the current requirements for gas appliances. It would also ensure that any hydrogen appliances sold in NSW are appropriately certified.

The review supported the feedback received which raised concerns about the proposed proportion of blend of hydrogen through the gas pipeline. In particular the concern around the lack of evidence that higher levels of hydrogen blended with natural gas or unblended can be safely utilised in current appliances which are yet to be adequately tested. While 100 per cent hydrogen was not fully supported, the review recommends future proofing the G&E Act by providing a power for the G&E Regulation to prescribe the percentage of hydrogen that can be determined by the Minister. As evidence of safe use and impacts to consumers becomes available, the Minister will ensure that any changes to the composition of the blend is evidence based and subject to further consultation.

Further research is required to determine whether residential and small business gas appliances that are currently being sold can continue to operate safely with a 20 per cent hydrogen blend, or greater. Until Australian Standards have been published and any additional training requirements have been determined for installing and repairing hydrogen gas appliances, it is expected there will be no changes to licensing requirements. The Department will monitor and reassess licensing requirements as the hydrogen industry continues to grow.

Recommendation

11. Amend the definition of *gas* in the G&E Act to capture hydrogen and hydrogen blended gases. The percentage of hydrogen blend is to be determined in the G&E Regulation.

Gasfitting work definition

Context

Gasfitting work is currently defined in the G&E Act to ensure that a licensed gas fitter will carry out the installation of appliances such as gas stoves, gas ovens and gas water heaters.

The definition allows certain household items which can be connected or disconnected using a 'quick connect' device, to be connected or disconnected by unlicensed persons. For example, this includes BBQs, space heaters and gas bottles.

The Department has received feedback that the exception in the definition requires further clarification so that there is no unintentional exclusion of gas appliances that should be connected or disconnected by a licensed person. For example, even though some gas appliances, such as gas ovens, are designed to be readily detachable, the complexity of the equipment requires their connection or disconnection to be performed by licensed professionals.

Stakeholder views

The discussion paper sought feedback on a proposal to change the definition to clarify the licensing requirements for gasfitting work.

The proposal was to exclude appliances that are designed to be readily detachable from the installation by physical force or otherwise, such as the disconnection of gas bottles or room heaters.

Stakeholders supported clarifying the definition of gasfitting work in the G&E Act to exclude work that is intended to be carried out by consumers, such as gas bottles, room heaters and portable barbecues.

However, submissions commented that the exact wording in the discussion paper was not clear. In particular, the term 'by physical force or otherwise' was considered unnecessary. Some submissions suggested adding 'without the use of a tool' to further clarify the definition.

Findings

The review found that there were opportunities to clarify the definition of *gasfitting work* to make it clear the types of gas appliance that are designed to be readily detachable from the installation, such as gas bottles or room heaters, can continue to be carried out by an unlicensed person. The clarification will highlight that the more complex gasfitting work for certain types of gas appliances, such as ovens and water heaters will need to be connected or disconnected by a licensed person.

Feedback received indicated that there was still some work required to fine tune the definition. Further consultation with agencies and industry will be conducted before finalising the definition.

Recommendation

12. Amend the definition of *gasfitting work* in the G&E Act to clarify when licensed gasfitters are required.

Autogas

Context

The discussion paper identified several irregularities in the G&E Act regarding the requirements for autogas. Currently the G&E Act requires a person carrying out autogas installations on vehicles, vessels and machines to hold a licence under the MDR Act or the HB Act. The G&E Regulation also requires a *responsible contractor* to test and issue a certificate of inspection and attach a compliance plate to an autogas installation. The definition of responsible contractor also refers to a licence holder under the MDR or HB Act.

The MDR Act only prescribes licensing classes for persons to carry out autogas installation on vehicles. The HB Act does not include a licensing class that would cover autogas.

It has also been identified that neither the MDR or HB Acts cover vessels (such as gas fuel systems for marine engines) and machines (such as gas fuel systems for forklifts and industrial engines) or prescribes licences for such work.

The discussion paper proposed that the provisions related to the licensing requirements for autogas work on vehicles be consolidated into the MDR Act. This would streamline provisions relating to autogas work, by consolidating obligations for licence holders and repair businesses in one legislation and ultimately improve compliance activities.

The maintenance and labelling requirements prescribed for autogas installations will continue to be captured in the G&E Act and Regulation. Amendment to the definitions will need to be made to ensure appropriate competent and qualified persons continue to test autogas work on vessels and machines.

Stakeholder views

The majority of stakeholders did not express a view on this proposal with limited feedback provided which supported the move of autogas into the MDR Act and that vessels and machines should be captured in the G&E Act. Concerns were also raised about potentially changing the objectives of the MDR Act if autogas was incorporated from the G&E legislation.

Findings

Transferring the licensing requirements for autogas on vehicles to the MDR Act would not change the objectives of the MDR Act, which is primarily focused on delivering consumer protection through the licensing and oversight of those working on motor vehicles. The MDR Regulation prescribes the qualifications for tradespersons undertaking work in the compressed natural gas mechanic, liquefied natural gas mechanic and liquefied petroleum gas mechanic repair classes. The G&E Act refer to these licensing classes to carry out autogas installations.

The review recommends moving the current requirements for autogas that relate to motor vehicles from the G&E Act into the MDR Act. As both Acts provide similar licensing requirements, this would remove duplication and provide clarity on what rules an operator must abide by. Repair work related to autogas on vehicles is already regulated under the MDR Act so there would be no changes to current requirements for licence holders. This would provide synergies with the requirements for licensing a repair business and people carrying out repair work and provide flexibility for emerging technologies (such as electric and hydrogen vehicles). Additional powers may be adopted for autogas installations if required.

The WHS Regulation requires the testing of pressure equipment on a regular basis by a ‘competent person’ and the gas cylinder must be marked showing the date of the inspection. The definition of competent person covers specific types of work but for all other types of work the definition is a person who has acquired through training, qualification or experience, the knowledge and skills to carry out the task.

The G&E Regulation provides additional requirements by prescribing that not only is the cylinder required to be tested but also the regulators and the whole installation. There are also additional requirements for testing certificates to be issued to the owner and the Secretary and identification labels attached to the outside of the vehicle, vessel or machine.

The review found that although there have been insufficient incidents in the market to justify imposing a licensing requirement for vessels and machines, the requirements prescribed for testing and maintaining autogas installations in the G&E legislation should be maintained. The review recommends that the G&E Act and Regulation be amended to require the testing and maintenance requirements for autogas installation to be carried out by a competent person for vessels and machines and a person that holds a licence under the MDR Act for vehicles. The definition of ‘competent person’ will be developed in consultation with internal and industry stakeholders using the WHS Regulation as a model starting point.

Recommendations

13. Move the current requirements for licensing of autogas for motor vehicles from the G&E Act into the MDR Act and prescribe any additional powers for autogas installations if required.

14. Amend the definitions in the G&E Act and Regulation to require the testing and maintenance requirements for autogas installation to be carried out by a competent person for vessels and machines and a person that holds a licence under the MDR Act for vehicles.

6.3. Appliances

Electrical appliances

Context

The G&E Act regulates electrical articles in NSW through an independent compliance scheme. Before an electrical article can be sold in NSW, high-risk articles must be tested and certified by either NSW Fair Trading or a REAS. All other articles must comply with minimum safety requirements contained in relevant Australian Standards.

The discussion paper sought feedback on a proposal for NSW to adopt the EESS as an alternative system for the regulation of electrical articles.

The EESS is intended to operate as a national scheme, developed with the intent of providing national consistency, uniformity and certainty of premarket sale requirements for electrical articles. It centres around the registration of electrical articles and suppliers in a national publicly accessible database. In addition to being registered, suppliers are required to obtain testing evidence and certification before applying for the article to be registered on the EESS database.

Currently Queensland, Victoria, Western Australia and Tasmania have signed the intergovernmental agreement on the governance of the EESS. All other jurisdictions, barring NSW, accept the EESS and its principles to show compliance even if they have not formally adopted the scheme.

The discussion paper also sought feedback on a proposal for the introduction of an enhanced compliance scheme for electrical articles modelled around Level 4 of the *AS/NZS ISO/IEC 17065:2013 Requirements for bodies certifying products, processes and services.* Adoption of this scheme (Level 4 scheme) would involve type testing of models, factory follow-up inspections and marketplace surveillance.

The current regulatory schemes in Australia, including the EESS and the NSW schemes follow level 1 of the AS/NZS ISO/IEC 17065 requirements for bodies certifying products, processes and

services, and issuing certificates of products. Level 1 is limited to type testing a model and issuing certificates based off the test. It was proposed that NSW would adopt Level 4 of the Standard to include the additional compliance obligations of factory follow-up inspections and marketplace surveillance in the scheme. Currently some certification schemes in the European Union, particularly Germany, follow the Level 4 compliance scheme.

Stakeholder views

The majority of stakeholders supported the proposal for NSW to adopt the EESS scheme, stating that having to comply with two schemes that are largely duplicative is onerous on industry. The small minority of stakeholders who opposed the proposal were certifying bodies under the REAS. However, it is worth noting that these stakeholders may have a vested economic interest in the maintenance of multiple schemes.

Further, 88 per cent of stakeholders felt that the NSW testing and certification process is not an effective way to ensure electrical articles are safe in NSW and that the existing costs to business were not appropriate.

Stakeholders highlighted that the main point of difference between the two schemes is the sell-through provisions. Under the G&E Act an electrical article must comply with the relevant Australian Standard at the time of sale. Whereas under the EESS scheme, the electrical article's compliance is assessed at the time of import/supply of the articles.

Stakeholders submitted that the onerous sell-through provisions in NSW cost industry a large sum of money in terms of loss of sales when a standard changes. This makes the NSW scheme unviable for the operation of business in NSW.

Additionally, most stakeholders opposed the proposal of NSW adopting the Level 4 compliance scheme. It was submitted that adopting this scheme would cause further divergence from the nationally accepted scheme and place further cost burden on industry.

Conversely, NSW Fair Trading has raised some concerns about the operation of EESS from a compliance and enforcement perspective. These issues include the oversight of the governance of the scheme, the distribution of funding amongst jurisdictions, lack of recognition of certificates issued by NSW Fair Trading and NSW REAS, and the logistical difficulty in enforcing the sell-through provisions. It has been submitted that the sell-through under EESS lack traceability due to an indefinite time period to sell articles once a standard changes. As there is no surveillance at the time of importation per se, NSW Fair Trading have stated that there is no way to ensure that non-compliant products are not imported into Australia once a standard changes. NSW Fair Trading have also noted that the current powers of prohibition of sale are not sufficient in dealing with the changing marketplace with e-commerce platforms providing a marketplace for third party sellers, increasing the complexity of carrying out robust compliance and enforcement actions.

Findings

The EESS is a pseudo-national scheme developed with the intent of providing national consistency, uniformity and certainty of premarket sale requirements for electrical articles. With Victoria and Queensland already operating under the EESS, and other States moving to adopt, NSW is seen by industry stakeholders as obstructing nationally consistent rules.

The operation of two schemes and the lack of mutual recognition of certification under the two schemes is onerous on industry as it increases cost of operation, administrative costs and regulatory burden.

Currently, NSW is the only jurisdiction in Australia that does not recognise testing and certification performed under the EESS scheme. On the other hand, Victoria does not recognise certificates issued under the NSW scheme. This means industry is compelled to get dual certificates for articles to comply with regulatory requirements.

Having two sets of rules for Australia's biggest markets creates additional costs for industry. It forces them to pay for two sets of compliance regimes and creates confusion. This puts them at risk of breaching both schemes seemingly seeking to achieve the same regulatory outcomes, being user and consumer safety.

A major concern raised by industry in the operation of the NSW scheme was the sell through provisions under the G&E Act. Data from industry reveals that under the current provisions if an Australian Standard changes, industry must either spend $3,000-$5,000 per product for the re-testing and re-certification (which may not be granted) in order to sell their stock. Alternatively, they may transport stock interstate which in some cases has cost up to $1.4 million in loss of sales and freight costs. Some stock may even have to be destroyed, making the sector more unsustainable. While large companies operating on a national scale may be able to absorb such costs, this can have a large impact on the liquidity of small businesses who may not be able to afford the cost of re-testing and re-certification or have the means to transfer stock interstate. This makes conducting business in NSW for these companies untenable.

The added regulatory cost of the NSW scheme is likely to be passed on to consumers, driving up the retail price of items. This can also impact the availability of certain electrical articles to consumers in NSW.

However, allowing the sale of electrical articles after the relevant standard changes may carry a potential safety risk. Standards often change to address any safety risk that may exist with an electrical article. Application of a standard at the time of sale allows NSW Fair Trading to easily carry out market surveillance and help ensure that non-compliant articles are not sold to consumers. If the sell-through provisions are amended NSW Fair Trading may not know the relevant date of importation of electrical articles to determine what standard would apply. This may enable poor players to flout regulation and continue importing or supplying non-compliant articles.

Accordingly, to ensure that the scheme is operable, and safety of consumers is maintained, there must be an obligation on importers or suppliers of electrical articles to retain evidence of the date of importation of their stock. Without clarity over when an item has been imported, it is likely any changes to the scheme to move to national consistency will compromise the ability for NSW Fair Trading to effectively enforce safety and compliance obligations for electrical articles. Ensuring that clear records of an item's compliance, and when it was compliant, is provided down the supply chain will enhance the Regulator's ability to oversight the scheme and purchaser's ability to make informed decisions on whether to purchase an item based on when it was certified.

Although it may be argued that adopting sell-through provision may potentially lead to a reduction in consumer safety, there appears to be insufficient evidence to show that the sell-through provisions under the EESS have resulted in lower consumer safety as compared to safety under the NSW scheme. Adopting a nationally consistent scheme with the proposed safeguards will not only lower regulatory burden but will also allow better knowledge sharing amongst regulators. This could help identify safety risks in any electrical article and improve overall market surveillance and proactive regulation of the industry.

Additionally, NSW Fair Trading will continue to retain the power to prohibit the sale of any high-risk electrical articles. In particularly high-risk cases where an imminent threat exists, NSW Fair Trading can also conduct operations to recall such electrical articles. In a recent joint operation by NSW Fair Trading and Fire and Rescue NSW (FRNSW) customers who purchased water damaged e-scooters sold by an auction house were advised of the risks and requested to return the e-scooters. This operation prevented dozens of fires.[7] The powers to prohibit sale or enable recall of high-risk electrical articles will continue to remain with NSW Fair Trading to address any imminent, evidence-based threat to consumer safety. In fact, these orders are more effective in protecting consumer safety as they are accompanied by wide ranging educational campaigns and publication of information as opposed to cases where a Standard change is notified through the Gazette which consumers are unlikely to be aware of.

To further strengthen the market surveillance abilities of the regulator, the review recommends the introduction of a power to direct sellers, including e-commerce platforms, to remove or take down prohibited electrical articles from the platform or catalogue. This will address the legislative gap and improve regulatory oversight on e-commerce platforms as well. The review recommends amending G&E Act to allow for the sell-through of electrical articles upon import/supply even if the relevant Australian changes, if the article has a valid certificate of approval. The ability to sell-through such articles will be limited to the duration of the validity of their compliance certificate which is typically around 5 years. To ensure that this provision can be effectively enforced, it is proposed to include an obligation on importer/suppliers of electrical articles to retain evidence of the date of importation of their stock. It is also proposed to introduce a power for the Secretary to audit the records of importers or suppliers to ensure compliance with the G&E Act. This new requirement will effectively complement existing and proposed changes to the Regulator's enforcement powers, including prohibition of sale orders and recall powers.

[7] https://www.fire.nsw.gov.au/incident.php?record=rec63N0aRvBcLW2f9

Further, there is in principle support for NSW to join the EESS, subject to enhancements to the EESS. Accordingly, it is proposed for NSW to engage with the Standing Committee of Officials to discuss and negotiate terms and conditions for NSW to join the scheme. It is proposed that NSW participate in the upcoming review of the EESS in 2023-24 and negotiate amendments to the scheme to ensure any move to national consistency does not compromise consumer safety in NSW.

While moving to a nationally accepted certification scheme is supported, the review was unable to find sufficient evidence of the need to move towards level 4 compliance in NSW, which would result in even greater divergence from other jurisdictions. While in other jurisdictions industry would only require type-test certificates under Level 1, in NSW industry would also need to organise factory follow-up inspections at a substantial cost.

Data indicates that a testing certificate under Level 1 requirements can cost industry around $800-$3,000 per product. The Level 4 requirements would cost industry $6,000 for application plus an annual fee of $6,000 in addition to the cost of the testing certificate. The result of the Level 4 scheme would mean the cost for certification would increase by nearly 400 per cent.

The increased cost is likely to be passed on to consumers, making electrical articles more expensive. Further, given the small market size of NSW on a global scale, manufacturers may decide to stop supply to the NSW market, costing customers in terms of availability of products in the market.

In light of the above findings, it is recommended that the Level 4 scheme should not be adopted at this stage as this would push NSW further away from the national regulatory framework, increasing regulatory burden on industry and driving up prices for consumers.

Recommendations

15. Amend the G&E Act to enable sell-through provisions for electrical articles where:
    a. the electrical article has been tested and certified as compliant with the relevant standard at the point of import or supply, and
    b. the supplier of the electrical article provides evidence of the date of importation or manufacture to the retailer or consumer.
16. Amend the G&E Act to include a power for the Secretary to request evidence of the date of importation or manufacture of electrical articles sold in NSW
17. Amend the G&E Act to include a power for the Secretary to issue written direction notices to sellers, including e-commerce platforms, to remove or take down any prohibited electrical article from their platform or catalogue.
18. NSW to provide in-principle support for joining the Electrical Equipment Safety System (EESS) subject to some issues being resolved including:
    a. Certificates of compliance issued by NSW Fair Trading or by a NSW Recognised External Approval Scheme (REAS) to be recognised in all other states and territories.
    b. Funding received by NSW for testing to be retained by NSW. Funds received as part of the EESS registration framework for the operation of the scheme to be retained by the relevant state.
    c. Establishing clear oversight on the governance of the scheme at a Ministerial level.

Type A and Type B Gas Appliances

Context

The definition of *gas appliance* under section 4 of the G&E Act encompasses all types of gas appliances and does not differentiate Type A from Type B appliances.

Type A gas appliances are domestic and light commercial appliances for which a certification scheme exists. These include cookers, space heaters, central heaters, water heaters, catering equipment and leisure appliances. In NSW, a gas appliance can be certified only by the holder of a certification authority under the G&E Act. These are external bodies duly approved by the Secretary.

Type B gas appliances are appliances with a gas consumption of more than 10 Mj/h, for which a certification scheme does not exist. Such appliances are mainly used for industrial and heavy commercial purposes and include industrial boilers, incinerators and gas fired turbines. As a certification scheme for Type B gas appliances does not exist, such appliances are certified or commissioned on a case-by-case basis by the holder of certification authority under the G&E Act.

AS/NZS 5601 Gas installations specifies that Type A appliances are part of a Type B appliance when used in an industrial or commercial application for a purpose it is not intended. For instance, if an appliance, certified as Type A for use in a household, is modified and used in an industrial setting (i.e., not for the purpose it has been certified for) the appliance will be categorised as Type B in that setting.

The differences between the two are apparent from the appliance type, their use and the environment they are used in. Owing to the difference in the nature, complexity and risk, professionals working on either type may require different qualifications and experience. The appliances themselves would require different inspection, certification or approval processes and different standards would apply to the work done on these appliances.

The gas safety laws in all Australian jurisdictions, except NSW, distinctly define Type A and Type B appliances. Further, these jurisdictions also prescribe distinct gas fitting licence categories or classes for Type A and Type B appliances. Therefore, NSW is the only jurisdiction in Australia that does not differentiate between Type A and Type B gas appliances.

The discussion paper sought feedback on a proposal to amend the G&E Act to include definitions for Type A and Type B gas appliances.

Feedback was also sought on a proposal to introduce a new licence for doing gasfitting work on Type B gas appliances and what considerations should be made in developing a new licensing requirement.

Stakeholder views

There was broad support for the introduction of definitions for Type A and Type B gas appliances in the G&E Act.

Stakeholders acknowledged that the two types of gas appliances carry different risk profiles that need to be regulated separately. It was submitted that the definitions for Type A and Type B should be aligned with the definitions of other jurisdictions and *AS/NZS 5601 Gas installations.*

There was also broad support for the introduction of a different licence class for gasfitting work on Type B gas appliances. Stakeholders submitted that practitioners require specialised skills and knowledge to be able to work on Type B gas appliances. Prescribing a separate licence class with appropriate qualification requirements will help ensure the safety of workers as well as the work done by them.

Stakeholder feedback highlighted that gasfitters from NSW are at a disadvantage at a national level as their licences are not recognised by other jurisdictions for carrying out gasfitting work on or with Type B gas appliances. Introducing a specific licence class would help gasfitters from NSW to work interstate and obtain automatic mutual recognition of their skills.

The majority of stakeholders who supported the proposal, noted it was conditional on further detailed consultation with industry to determine the licensing requirements, qualifications and pathways for current gasfitters.

Findings

Considering the complexity and lack of a uniform certification scheme for Type B gas appliances, it is important to prescribe requirements different to those for Type A appliances, to better regulate gas appliances and improve consumer safety in NSW.

The lack of distinct provisions for the two types of gas appliances can result in a confusion around certification requirements for appliances and impede safety. As the two types of appliances are inherently different, with Type B appliance also being more complex, it is pertinent to ensure that gasfitters working on each type have the relevant knowledge and skills required. If they don't, there is a risk of faulty installation work which may result in a serious gas accident, such as an explosion causing injuries and fatalities.

As Type B appliances are not approved under a certification scheme, and generally consume gas at much higher rates than Type A appliances, the risk of severity of gas accidents is significantly higher for Type B appliances. This is exacerbated by the fact that Type B appliances are classified as complex appliances which may have an electric component as part of the appliance. A gasfitter installing or connecting a Type B appliance would typically need skills and knowledge of electrical fault finding to test that the appliance is safely connected before use. These skills are specialised and go beyond the basic skills needed by a gasfitter working with Type A appliances. For instance, a licensed gasfitter in NSW who may not possess the specialised skills or knowledge about Type B appliances can still install or connect such appliances. If such a gasfitter fails to conduct a fault-test on the appliance and connects it nonetheless, an issue with the electrical component of the appliance can lead to a serious gas accident.

The safety risk around Type B appliances is also evident from the risk assessment requirements specified in *AS 3814 Industrial and commercial gas-fired appliances*. As these appliances are used in industrial settings, improper installation or use can result in a higher number of injuries or fatalities.

There is also a strong case for adopting a consistent approach with other jurisdictions to improve clarity around standards. This will minimise misconception on gas safety requirements amongst gasfitters working on gas appliances and improve overall safety for consumers and those working with these appliances. It would also help in furthering the objectives of mutual recognition, particularly for gasfitters.

The review recommends amending the G&E Act to include definitions for Type A and Type B gas appliances in the G&E Act. This will help ensure that authorisation to certify gas appliances in NSW is granted to certifying bodies only in accordance with their capacity to certify the relevant type of gas appliance. This will mean a certifying body that only has the capability to certify Type A gas appliances and not Type B appliances will be granted limited authority under the G&E Act.

Further, the review recommends that a new licence category to carry out gasfitting work on Type B appliances should be considered as part of the review of the HB Act. Having a distinct licence class will allow gasfitters in NSW to upskill, gain relevant experience and be mutually recognised by other jurisdictions, creating better interstate work opportunities.

The new licensing framework should be considered after further consultation with industry and subject matter experts as part of the broader licensing reforms package to ensure that there is thorough impact analysis and transitioning provisions in place to support industry.

Recommendations

19. Include definitions of Type A and Type B gas appliances in the G&E Act.
20. Introduce a regulation making power to prescribe any requirements, such as relevant standards or certification requirements for Type A and Type B gas appliances and make any subsequent amendments to the G&E Regulation if required.
21. Consider introducing an additional licence class for gasfitting work on Type B gas appliances as part of the review of the HB Act.

Servicing gas appliances

Context

Service and repair of gas appliances is complex work that is crucial to ensuring they are safe for use over time. Improper repair or servicing can lead to fatal accidents. Therefore, there is a need to regulate the service and repair of gas appliances to ensure consumer safety. Currently, in NSW there is no prescription of standards for the service or repair of gas appliances. This can result in unregulated, faulty repair or servicing work being carried out, putting the lives of consumers in NSW at risk.

The discussion paper sought feedback on a proposal for the prescription of *AS 4575:2019 Gas appliances – Servicing of Type A appliances* for the repair and maintenance of Type A gas appliances. Prescription of this standard can potentially help improve the quality of servicing done

on a Type A gas appliance. Work compliant with the relevant safety standard can help reduce fatal accidents such as gas leaks and fires.

The discussion paper also sought feedback on a proposal to allow only licensed gasfitters to carry out the service, repair and maintenance of gas appliances. This would ensure that only qualified and skilled professionals work on gas appliances, improving the quality of work and reducing the risk of accidents as a result of defective work. This is particularly important in the case of Type B gas appliances as they are currently not subjected to a certification scheme and the service or repair of these appliances is not covered by relevant standards.

Stakeholder views

There was wide support from stakeholders on the proposal to prescribe a standard for the service and repair of gas appliances. Feedback highlighted that industry is of the opinion that service and repair of gas appliances is complex work that is crucial to ensuring that gas appliances are safe for use over time.

Stakeholders reiterated that gas appliances can degrade over time and it is important to ensure that they are serviced by skilled professionals who can test the safety of the appliance and identify any risks associated with their installation.

While some stakeholders were supportive of allowing only licensed gasfitters to do this work, others recommended the introduction of a separate licence class for the service and repair of gas appliances, in line with the Queensland legislation.

Stakeholders submitted that a majority of gas appliance repairers in NSW were either unlicensed or obtained gas servicing licences from other states. Those repairers who hold an interstate gas servicing licence are unable to obtain an equivalent licence in NSW. Stakeholders recommended that NSW introduce a gas servicing licence as well as recognise interstate licences.

Findings

There have been some cases in recent years where faulty servicing has resulted in serious gas accidents. For instance, in September 2022, a family of three in Sydney suffered from carbon monoxide poisoning as the result of a leak in their gas heater, which had been serviced only the year before. Although in this case the family was rescued by the timely arrival of paramedics, carbon monoxide poisoning can be lethal.

Following investigation, dirt deposits in the heater were found to be the cause of the gas leak. The case highlights the potential harms of gas leaks which can be the result of poor servicing of gas appliances. Carbon monoxide poisoning accounts for almost five per cent of gas accidents and is the second leading cause of gas accidents after fire or explosion.

In fact, almost six per cent of all serious gas accidents are attributed to maintenance deficiency. Therefore, there is a need to prescribe standards for servicing work, to ensure that gas appliances

are safe for use after service or maintenance. In Victoria, *AS 4575:2019 Gas appliances – Servicing of Type A appliances* is prescribed for the servicing of Type A gas appliances. This ensures that servicing and repair of Type A appliances which are generally used in households are up to standard. To ensure that servicing work on a gas appliance is compliant with the standard, a sufficient penalty for failure to comply with the standard should be prescribed in the G&E Act. This will allow NSW Fair Trading to bring suitable compliance action against poor players in the industry.

Under the Queensland legislation, a gas work licence (servicing) is required for repairing, servicing and testing of Type A gas appliances. There appears to be a lack of sufficient evidence to justify the need for licensing professionals working on gas appliances. As highlighted by industry in the feedback, although the professionals servicing gas appliances are unlicensed, they possess the necessary skills and training through their employers such as gas appliance manufacturers.

It is believed that the imposition of a penalty in case of non-compliance with the prescribed standard will be a sufficient measure to improve safety in servicing and repair of gas appliances. Taking into consideration the feedback received from stakeholders, it is proposed that the Department should evaluate the effectiveness of prescription of the standard. If it is found that the prescription of the standard alone is not sufficient and there exists a major safety risk, the Department may consider imposing licensing conditions on industry to improve safety. Under the current circumstances the regulatory burden imposed by licensing may outweigh any potential benefit of licensing servicing of gas appliances. Therefore, in light of the disproportionate regulatory burden, at this stage a licensing framework for service and repair of gas appliances is not recommended.

The review recommends amending the G&E Act to require the service, maintenance and repair of gas appliances in NSW to be carried out by a ‘competent person’ and include a regulation making power to prescribe a safety Standard for the repair work. The definition of ‘competent person’ will be developed in consultation with internal and industry stakeholders. To ensure compliance with the standard, the review also recommends the imposition of a penalty for failing to comply with the prescribed standard. The maximum amount for the proposed penalty will be in accordance with the proposed penalty tiers below. The actual penalty amount will be prescribed after further consultation with stakeholders including the Department of Communities and Justice.

This will help improve the quality of servicing and repair work carried out on gas appliances in NSW. This will also help improve the oversight of the Regulator on this sector.

Recommendation

22. Introduce a requirement in the G&E Act for the service, repair or maintenance work on gas appliances to be carried out by a 'competent person' and include a regulation making power to prescribe relevant standards for the repair work. An offence should be prescribed for failure to comply with the standards and make any subsequent amendments to the G&E Regulation if required. The definition of 'competent person' should be developed in consultation with internal and industry stakeholders..

6.4. Enforcement and auditing

Increasing inspection capacity

Context

Under the *Plumbing and Drainage Act 2011*, the Regulator may delegate any of its functions to a local council, joint organisation or county council. The discussion paper sought feedback on a proposal to adopt a similar framework under the G&E Act for electrical inspections as this could provide a flexible option to increase auditing and inspections in the electricity industry.

In 2021, a project was initiated to enhance supervision practices in the electrical industry after concerns were raised by NSW Fair Trading and SafeWork NSW inspectors. As part of this project, a survey of those involved in electrical work was conducted in July 2021 with 796 anonymous responses received. Survey and discussion paper responses all showed a strong view supporting unscheduled random audits to enforce supervision requirements and inspection for electrical work. Stakeholders also had a strong view that rectification and infringement notices should also be issued to electricians for non-compliant electrical work.

Accordingly, the discussion paper proposed the option to outsource some electrical inspections to large companies, in accordance with measures determined by NSW Fair Trading. This would complement the proactive and reactive inspection regime undertaken by NSW Fair Trading and SafeWork NSW inspectors.

An alternative option explored in the discussion paper was establishing a model similar to Victoria for a licensed category of electrical inspector. Under the Victorian model, duly qualified individuals may obtain a 'Licensed Electrical Inspector (LEI) Licence' that authorises them to inspect electrical installations for safety and compliance.

Stakeholder views

Stakeholder feedback for the proposal to outsource inspector functions under the G&E Act was mixed, with 44 per cent stakeholders opposing the proposal and 56 per cent supporting.

The main concerns raised related to the autonomy of inspectors and the need for the duties to be carried out by a statutory body or authority. Industry expressed concerns that outsourcing inspector duties has the potential to create conflict of interest and biased decision making. These concerns were shared by the operational areas of NSW Fair Trading and SafeWork NSW.

Further concerns were also raised about the skills, qualifications and knowledge of individuals employed by such companies who would be carrying out the inspector duties.

Findings

Conducting electrical inspections throughout NSW is a resource intensive job. The outsourcing of some inspector duties could increase ad-hoc auditing of electrical work. This would not only improve the safety of home and property owners but potentially reduce costs of rectifying substandard work.

However, the proposal of outsourcing the work raises legitimate concerns, as highlighted by industry in their submissions, such as the potential for conflict of interest and bias industry capability to undertake inspections and overlap with the Regulator's inspectorate responsibilities.

As such, if inspector duties were outsourced, the powers to issue infringement notices or any other compliance and enforcement actions under the G&E Act would continue to rest with the authorised officers employed by the Government. Outsourcing the functions may not reduce the burden of the operational areas of NSW Fair Trading but result in increased work.

The review recommends not going ahead with outsourcing of inspector duties to external companies. The Regulator should seek to find opportunities to increase its inspection footprint in lieu of outsourcing inspector functions.

Recommendation

23. The G&E Act is not to be amended to allow the outsourcing of inspector work.

Installing prohibited appliances

Context

Over the last 10 years, open-flue gas heaters have been responsible for at least four deaths in Australia. EnergySafe Victoria have stopped the sale of all models of open flue heaters currently on the market after the reported deaths. The Victorian Gas Safety (Gas Installation) Amendment Regulation 2022 prohibited the installation of an open-flued gas space heater unless it meets additional safety requirements. There are concerns that manufactures with currently certified existing stock may try and sell their products in NSW without additional safety requirements being put in place.

Under section 28 of the G&E Act, the Secretary has the power to issue a written notice prohibiting the sale of an electrical article or gas appliance in NSW if the product carries a risk of causing death or injury to a person or property. However, as this power is limited to only prohibiting the sale of products, a person may still be able to install such products after the date of the prohibition order if the product was purchased before the prohibition order. This in turn defeats the risk mitigation purpose of the prohibition order.

The discussion paper proposed to close this loophole by amending the G&E Act to impose a penalty on a person who installs a product covered by a prohibition notice under section 28 of the Act.

Stakeholder views

The majority of stakeholders were supportive of this proposal. Stakeholders acknowledged the legislative loophole and supported the risk mitigation objective of the proposal.

Some stakeholders supported the proposal subject to the condition that the Department adopts a robust notification process and develops an easily accessible public database with information about all electrical articles and gas appliances subject to prohibition orders. It was submitted that having such a measure could help minimise lack of information or clarity amongst the industry and consumers.

One submission opposing the proposal highlighted that the proposal duplicates the obligations under the Australian/New Zealand Wiring Rules. However, as these only apply to electrical installations, and do not extend to gas appliances or electrical articles, the proposed amendment would not duplicate existing requirements for the majority of captured articles.

Findings

Although under section 31 the G&E Act has the powers to prohibit the sale of unsafe products, these items can still be installed. This is because section 37 of the G&E Act only applies a penalty

on a person connecting a gas appliance that is not certified. If the item has been certified, then a penalty could not be imposed as is the case with the open-flued heaters.

Therefore, the review recommends amending the G&E Act to expand the scope of section 31 of the Act to include the installation of unsafe products that are subject to a prohibition notice under section 28 of the Act. This will make it an offence for a person to install any electrical equipment or gas appliance that is subject to a prohibition notice under s 28 of the G&E Act. Creating a penalty can help minimise instances of prohibited products being installed in NSW. This will ultimately help ensure that the objective of prohibition notices to take high-risk products out of the market is achieved. Subsequential amendments should also be made to section 28 to clarify that the notice will prohibit the sale and installation of the appliance.

Recommendation

24. Amend the G&E Act to expand the existing scope of the offence relating to the sale of a prohibited electrical or gas appliance under section 31(1) of the Act to also apply to the installation of the appliance. Make any subsequential amendments to section 28 of the Act to make clear that the notice prohibits both sale and installation of the appliance.

Requesting documentation

Context

The G&E Regulation requires electricians to provide the results of a safety and compliance test (also known as a Certificate of Compliance for Electrical Work (CCEW)) to the Secretary and other prescribed persons. Failure to provide the CCEW or failing to retain or produce copies of the CCEW, which must be kept for 5 years, is punishable by a maximum penalty of 40 penalty units ($4,400) for a corporation or 20 penalty units ($2,200) for individual.

It is also a requirement when completing gasfitting work for a certificate of compliance to be provided to the Secretary and owner. A breach of this requirement can result in a maximum penalty being issued of 100 penalty units ($11,000) for a corporation or 25 penalty units ($2,750) for an individual.

This requirement to submit a certificate of compliance is proposed to be extended to all specialist work under the draft Building Bill. Under the Building Bill, a certificate of compliance will need to be submitted to the Secretary after the completion of all specialist work.

However, NSW Fair Trading and industry have suggested that the current requirements under the G&E Act are not sufficiently adhered to and requires stronger enforcement. Further, authorised officers can request documentation such as a CCEW or certificate of compliance only in limited

circumstances. This includes for the purposes of investigation leading to a prosecution or the issuing of a show cause notice to commence disciplinary proceedings. This limits the ability of authorised officers to conduct regular checks, which could impede efforts to identify poor players and take appropriate compliance action.

The discussion paper included a proposal to create a power for authorised officers to issue a written notice directing a licence holder to provide a copy of requested information or records or both to the officer.

Stakeholder views

Both industry and NSW Fair Trading were supportive of the introduction of a power for authorised officers to direct licence holders to provide a copy of requested information, records or both. Stakeholders acknowledged that the current legislative gap in the G&E Act allowed poor players to get away with non-compliance of the requirement to notify results of a safety and compliance test.

Stakeholders agreed that including the proposed power would allow better oversight of the Regulator and help improve safety outcomes in the industry in the long term.

Findings

The current legislative gap in the G&E Act limits the ability of the Regulator to conduct robust and proactive compliance and enforcement activities to oversee the industry. Including a power to direct licence holders to provide requested information, documents or records will help the Regulator to regularly audit and check licence holders and impede poor players by taking appropriate compliance action against them.

Further, the proposed requirement is consistent with the requirements under the *Residential Apartment Buildings (Compliance and Enforcement Powers) Act 2020* and the proposed Building and Compliance Enforcement Bill (BCE Bill). This will enable NSW Fair Trading to obtain certificates of compliance and investigate any issues in the industry, resulting in increased safety for consumers in the long-term.

Accordingly, the review recommends amending the G&E Act to include a power for authorised officers to issue a written notice directing a licence holder to provide to the officer a copy of requested information or records or both as the officer may require for an authorised purpose. It is proposed that authorised officers can request only such information or records that relate to the obligations or requirements for persons under the Act.

This will allow for improved oversight on licence holders and help the authorised officers in taking appropriate compliance action against the poor players in the industry, ultimately improving the quality of work and safety of consumers.

Recommendation

25. Amend the G&E Act to include a power for authorised officers to issue written directions to request for information, records or both as the officer may require for an authorised purpose.

Written direction notices

Context

Under section 52 of the G&E Act an authorised officer can issue a written notice, prohibiting the use of an electrical article, gas appliance or electrical, gas or autogas installation if they believe on reasonable grounds that such article, appliance or installation, is being used in a manner that presents a significant risk of -

(a) the death of, or injury to, any person; or

(b) significant damage to any property.

A person may be guilty of an offence for contravening of the written notice punishable by 1,000 penalty units ($110,000) for a corporation or 200 penalty units ($22,000) for an individual.

However, authorised officers cannot issue written direction notices in cases of a safety risk where an electrical article, gas appliance or electrical or gas installation has the potential to or causes a safety risk. This limitation can pose a serious threat to the welfare of occupiers or persons in neighbouring properties and therefore the power needs to be extended.

The discussion paper included a proposal to amend the G&E Act to include safety risk or potential safety risk to the owner or occupiers of premises or any adjoining premises on which the electrical or gas appliance or electrical or gas installation is being used.

Further, the penalty for the current offence includes penalties for a subsequent offence as follows:

(a) in the case of an individual—

100 penalty units for a first offence, or

150 penalty units for a second or subsequent offence, or

(b) in the case of a corporation—

1,000 penalty units for a first offence, or

1,500 penalty units for a second or subsequent offence.

The discussion paper included a proposal to amend the provision to a reoccurring offence, allowing for the imposition of penalties for each day the offence continues to ensure quicker compliance with written direction notices while acting as a deterrent for repeat offenders.

Stakeholder views

No feedback was received from industry stakeholders on this proposal.

Findings

The limited scope of section 52 of the G&E Act prevents authorised officers from undertaking compliance and enforcement actions in case the use of any electrical installation or gas appliance or installation poses any risk to safety of a person or property.

The review recommends including a power for authorised officers to issue written direction notice to protect against harm more effectively. The proposed amendments will enable a written direction notice to be issued to require an installation to be rectified or prohibit the use of an appliance that is used in an unsafe manner and has the potential to cause harm to a third party or their property. The definition of safety risk will be developed in consultation with internal and industry stakeholders. To ensure a person that receives a written direction notice has recourse, a natural justice provision for a review process of the decision will be prescribed in the G&E Act.

Often when such a notice is issued by an authorised officer the person receiving the notice may delay the commencement of any rectification or repair work. This in effect defeats the purpose of the notice, as the safety risk continues for each day that the problem is not fixed.

The review therefore recommends amending the penalty provision to be a continuing offence to help ensure that the cause of the safety risk is rectified as soon as possible, reducing any time delays in rectification or repair work. The exact penalty amount will be prescribed after further consultation with stakeholders. The proposed amendment will also provide consistency with the proposed BCE Bill.

Recommendations

26. Amend the G&E Act to include a power for authorised officers to issue written direction orders and a review process for these powers where an electrical or gas installation or the use of an electrical or gas appliance has caused or has the potential to cause a safety risk.

27. Amend the G&E Act to include a penalty for each day the offence of unsafely using an appliance or installation that is subject to a written direction notice continues

Penalties and offences

Context

Under the proposed Building Bill and BCE Bill, a tiered approach for prescribing penalties has been proposed to create consistency with how similar offences are treated across all building legislation in NSW. The discussion paper included a proposal to adopt the penalty tiers under the G&E Act and amend maximum penalty units under the Act to maintain consistency with other building legislation.

The proposed maximum penalties in the G&E Act would be determined according to the relative seriousness of the offence, examining the nature of offending conduct and its resulting harms or impacts. In general, as is consistent across the rest of the statute book, penalties that apply to corporations will remain higher than penalties that apply to individuals or other bodies.

Stakeholder views

There was broad support for the adoption of a tiered approach to penalties under the G&E Act. Some of the support was conditional on further consultation with industry on the penalty amounts and tiers applicable to the different offences under the G&E Act.

Stakeholders recommended that there should be clear definitions for the penalty tiers and the type of offences that fall into a tier to ensure that there is no misinterpretation by authorised officers.

Findings

Introducing penalty tiers and aligning maximum penalty amounts under the G&E Act will help ensure that the Act is aligned with the broader building legislation.

A maximum penalty is the most severe penalty a court can impose on a person who has been found guilty of an offence. Maximum penalties are only given for the worst or most serious instances of an offence. The proposed maximum penalties in the G&E Act will be determined according to the seriousness of the offence, examining the nature of the offending conduct and its resulting harms or impacts.

Having a tiered system will help ensure that like offences are treated consistently with similar penalties being imposed regardless of which legislation is applicable. This will further uniformity across compliance and enforcement in the building and construction industry and reduce the legislative loopholes in terms of inconsistency across laws.

The review recommends amending the G&E Act to standardise penalties, as far as possible, based on five levels of offences to ensure like conduct is treated the same across all NSW building laws. Tier 1 is intended to apply to the most serious matters. Tier 2 applies to offences such as carrying out work without an appropriate licence. Tier 3 applies to offences such as interfering with an installation, and Tier 4 applies to offences such as not providing documentation related to a

metering safety management system or carrying out work that is not compliant with prescribed rules or standards. Tier 5 is reserved for minor or administrative matters which may ultimately be resolved in an alternative manner (for example, through issuing warnings or a penalty infringement notice).

In general, as is consistent across the rest of the statute book, penalties that apply to corporations will remain higher than penalties that apply to individuals or other bodies. Further consultation will occur to ensure that the penalties are consistent with existing and proposed offences of a similar nature or seriousness across the building legislation.

Recommendation

28. Amend the G&E Act to standardise maximum penalty amounts for offences to align with the tiers as proposed to be adopted under the Building Bill and the Building Compliance and Enforcement Bill.

7 Appendix A – Stakeholder submissions

No.	Organisation	Type
1	SAA Approvals Pty Ltd	Certification Body
2	EESS Conformity	Certification Body
3	SAI Global	Certification Body
4	Plumbing Industry Climate Action Centre	Union
5	Australian Information Industry Association	Industry Association
6	Rheem Australia Pty Ltd	Manufacturer
7	Consumer Electronics Suppliers Association (CESA)	Industry Association
8	Total Tools	Retailer
9	Momentum Energy	Energy Retailer
10	Public Interest Advocacy Centre (PIAC)	Non-profit organisation
11	Hisense Australia	Manufacturer
12	Australian Automotive Aftermarket Association (AAAA)	Industry Association
13	Energy Australia	Energy Retailer
14	National Fire Industry Association (NFAI)	Industry Association
15	TG Certifications Pty Ltd	Certification Body
16	National Retail Association	Industry Association
17	GAMMA	Industry Association
18	Vector Metering	Metering Provider
19	Super Retail Group	Retailer
20	Stiebel Eltron (Aust) Pty Ltd	Business
21	Daikin Australia Pty Ltd	Manufacturer
22	National Association of Food Equipment Suppliers Ltd. (NAFES)	Industry Association
23	Caravan & Camping Industry Association (CCIA)	Industry Association
24	NSW UE ITAB	Training Association
25	Rinnai	Manufacturer
26	ZBD Electrical	Individual
27	Lighting Council Australia	Industry Association
28	Master Electricians	Industry Association
29	Federal Chamber of Automotive Industries (FCAI)	Industry Association
30	Whirlpool (Australia) Pty Ltd	Manufacturer
31	The Reject Shop	Retailer
32	AGL	Energy Retailer
33	Tempo Group of Companies	Business
34	Target Australia	Retailer

No.	Organisation	Type
35	Origin	Energy Retailer
36	Techtronic Industries Australia Pty. Ltd.	Business
37	Andi-Co Australia	Business
38	Swann Communications	Business
39	Ausgrid	ESA
40	NECA	Industry Association
41	Cygnett	Business
42	Shriro Australia	Business
43	Communications Alliance Ltd	Industry Association
44	CDB Group of Companies	Business
45	AI Group	Industry Association
46	Plus ES	Energy Retailer
47	Red Energy	Energy Retailer
48	Mitsubishi Electric	Manufacturer
49	Electrical Trades Union	Union
50	LG Electronics	Manufacturer
51	Mitsubishi Heavy Industries Air-Conditioners Australia	Manufacturer
52	Shell Energy	Energy Retailer
53	Office of Industrial Relations - QLD	Queensland Government
54	Australian Competition and Consumer Commission (ACCC)	Federal Government
55	Office of Energy and Climate Change	NSW Government
56	Standing Committee of Officials	Intergovernmental agency
57	Energy Safe Victoria	Victoria Government