FCAI response to:

NSW Discussion Paper: Statutory review of the Gas and Electricity (Consumer Safety) Act 2017



Federal Chamber of Automotive Industries Level 1, 59 Wentworth Avenue KINGSTON ACT 2604 Phone: +61 2 6229 8222 Facsimile: +61 2 6248 7673

Contacts: Mr Rob Langridge, Emerging Technologies Director Mr Tony Weber, Chief Executive Officer 5th December 2022

1.0 FCAI POSITION

The Federal Chamber of Automotive Industries (FCAI) welcomes the opportunity to provide our views on the NSW Governments Statutory review of the Gas and Electricity (Consumer Safety) Act 2017 Discussion Paper.

The FCAI is the peak Australian industry organisation representing the importers and distributors of over 99% of new passenger vehicles and light commercial vehicles up to 3.5t Gross Vehicle Mass (GVM) and motorcycles sold into the Australia market. Our members through their authorised repairer networks indirectly employ thousands of automotive vehicle repair technicians and some associated trades with a large proportion of these being registered in NSW.

Australia is a small market comprising approximately 1 million new passenger cars and light commercial vehicles sales each year. This amounts to around only 1.2% of annual, global new vehicle sales. Following the withdrawal of all domestic manufacturing in 2017, Australia is a technology taker of increasingly complex automotive products particularly as we consider the technological changes that are occurring within the industry of which some of these may have implications for the proposed legislative changes.

In the first instance, FCAI points out that motor vehicles imported into Australia are designed and built to comply with Federal legislation being the Road Vehicle Standards Act (RVSA), it is this Act which describes several pathways through which a road vehicle can demonstrate compliance with the Australian Design Rules (ADRs) and be approved for sale across Australia. It is designed to set nationally consistent and uniform standards, with which road vehicles must comply with and are permitted to be registered by States and Territories across Australia.

The RVSA includes the Register of Approved Vehicles (RAV) being a publicly searchable database of approved vehicles that are available for supply in Australia.

In line with environmental considerations, we do expect that the light vehicle fleet will increasingly move away from Internal Combustion Engines (ICE), introducing a range of electrified powertrains in various manners. These electrified powertrains can include:

- Hybrid Vehicles (HV)
- Plug In Hybrid Electric Vehicles PHEV)
- Battery Electric Vehicles (BEV)
- Hydrogen Fuel Cell Electric Vehicles (FCEV)

It is under this environment that we need to ensure that there remains the ability for automotive manufacturers to bring these newer technology vehicles to market including maintaining the capability for these vehicles to be serviced and maintained by suitably qualified automotive professionals – we note that there is a separate discussion paper issued by NSW dealing with Electric Vehicle (EV) mechanic repair classes which we will respond to separately.

The FCAI in our response to this paper wishes to ensure that none of the changes proposed in this discussion paper would have the unintended consequences of restricting the ability for the automotive industry to import, comply, register for use on public roads in NSW or service and repair these newer powertrain equipped light vehicles using suitably qualified automotive technicians.

We would also like to acknowledge the separate NSW discussion paper released recently "Proposed introduction of Light Electric Vehicle mechanic and Heavy Electric Vehicle mechanic repair classes in NSW" and there is no doubt several interrelated issues between these two discussion papers depending on the scope contemplated or considered.

Below is the discussion response paper and we should point out that FCAI will only respond to the questions that we believe are relevant to the light vehicle automotive sector.

Discussion Paper: Statutory review of the Gas and Electricity (Consumer Safety) Act 2017

Submission Template

This document is a compilation of all the questions contained in the Discussion Paper. You can download, edit and save your responses and feedback in this document at your convenience. We would prefer to receive submissions in this format, by email to <u>GasElectricityRegulation@customerservice.nsw.gov.au</u>.

The closing date for submissions is **5 December 2022**.

Questions

Electricity

Definition of electrical work

1. Do you support the changes to the definition of electrical installation work? If not, what changes should be made?

FCAI Response

FCAI is concerned that the revised definition seems wide ranging, and we would expect that the revised wording may have the unintended consequences of encompassing light motor vehicles (unless specifically exempted). Modern electrified powertrain equipped vehicles may be considered to be "energised electrical work", these vehicles do contain large traction batteries operating in the Low Voltage range (LV) range (meaning voltage greater than ELV, but not more than 1000V (AC RMS) or 1500V (ripple-free DC)).

Automotive technicians trained by new vehicle manufacturers and TAFE colleges are educated in the electrical safety procedures that need to be employed to safely work on these electrified powertrain products.

PHEV and BEV vehicles are capable of being plugged in to charging stations for the primary express purpose of recharging the traction battery.

Future capabilities for these vehicles that may need consideration depending on the overall scope contemplated for this legislation would be:

- Vehicle to Grid (V2G) applications
- Vehicle to Home (V2H) applications
- Vehicle to Load (V2L) applications

Therefore, the definition needs to be carefully considered to ensure that there are no unintended consequences. It is our opinion that Manufacturers are more than well placed to train their technicians (as they do globally) on the correct procedures to utilise when working on electrified powertrains on the low voltage range and have been doing so for a substantial number of years. Manufacturers also make available workshop manuals that succinctly describe the specific repair procedures to be used and identify the cautions that are necessary on any given product.

TAFE colleges are also well placed to train automotive technicians who have not undertaken manufacturer training and would be the first point of call for the independent repairer sector.

2. Do you support the changes to the definition of electrical equipment? If not, what changes should be made?

FCAI Response

FCAI does not support the revised definition which we expect would clearly encompass any light motor vehicle with an electrified powertrain (HV, PHEV, BEV, FCEV) unless specifically exempted. These vehicles contain a traction battery (energy storage system) at a voltage greater than extra low voltage.

FCAI recommends that an exemption be created that excludes light motor vehicles from the Act or revise the definition to define what is in and out of scope.

3. Do you support the changes to the definition of electrical installation? If not, what changes should be made?

FCAI Response

Given that the primary definition refers to "fixed electrical equipment" we do not believe that the changes to electrical installation would have any impact on the light automotive vehicle industry.

However, under the definition it does refer to a "private generating source" whilst we do not believe it was intended, it is possible that the regeneration capability of modern electrified powertrain vehicles to generate electricity to recharge the traction battery whilst driving could raise some confusion. FCAI recommends that the regeneration capability of these vehicles should either be excluded from the definition or the scope of what is intended adjusted to remove any potential confusion.

4. Do you believe that persons working on generating work should be licensed? If not, why?

FCAI Response

In line with FCAIs response to Q3 above, firstly we do not agree that automotive regeneration work should be included in the definition of electrical work.

FCAI does support the introduction of Light Electric Vehicle mechanic certifications for working on vehicles with Low Voltage (LV) powertrains and we will contribute to the separate NSW discussion paper on this subject.

Electrical Licences

5. It is not proposed to change the existing regulatory requirements for licensing of employees working on mines. Do you support this? If not, why?

6. It is not proposed to change the existing regulatory requirements for licensing employees of electricity supply authorities. Do you support this? If not, why?

FCAI No Response

7. Do you support moving the gas fitting licensing requirements into the HB Act?

FCAI No Response

8. Do you support moving the Autogas licensing requirements into the MDR Act?

FCAI Response

It would seem most appropriate that the Autogas licensing requirements are moved into the MDR Act. As both Acts provide similar requirements, this would remove duplication and provide clarity. Repair work related to Autogas on vehicles is already regulated 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).

This option will streamline provisions relating to Autogas work, by consolidating obligations for licence holders in one legislation - the MDR Act. FCAI expects that this will ultimately improve compliance and raise the quality of work.

It is the FCAI's opinion that if vessels and machines (that cannot be regulated under the MDR Act), then a separate section may need to be created under the G&E Act to specifically cater for these scenarios.

Remote re-energisation and de-energisation of smart meters

9. What are the reasons retailers and metering providers are not undertaking remote reenergisation and de-energisation despite having approved safety management plans?

FCAI No Response

10. What elements of the remote re-energisation and de-energisation framework could be improved to encourage participation in re-energisation and de-energisation among retailers and metering providers?

FCAI No Response

11. Are there any alternative procedures that could be proposed to improve the framework while ensuring safety during the re-energisation and de-energisation process?

FCAI No Response

Electrical Installations

12. Do you support the requirement for electricians to report a defective installation even if it was not their work initially?

13. Are the time limits proposed for reporting the defect suitable? If not, what should they be?

FCAI No Response

14. Should a penalty be prescribed in the G&E Act that could be imposed on a person that fails to comply with the requirement for electrical installations?

FCAI No Response

15. Should NSW regulate all ELV equipment? Why or why not?

FCAI Response

FCAI does not believe that there is any public good to be gained from regulating ELV equipment at all. This proposal would have large implications for the automotive industry if the automotive industry (light vehicles, heavy vehicles, caravans, or trailers) were in scope. There would be a substantial increase in the costs to consumers for service and repairs should this proceed. Beyond motor vehicles themselves this would also have implications for trailers of all sorts as well as caravans.

16. Do you support the inclusion of a power for the Secretary to declare some ELV equipment as high-risk? If not, why?

FCAI Response

This would seem like a reasonable proposition where the Secretary determines that there is a public benefit for some types of ELV determined to be "high risk" rather than regulating all ELV equipment. Of course, before we could agree to this proposition, FCAI would like to understand how the Secretary would evaluate ELV equipment as "high risk" and what procedures and opportunities for industry to respond would be involved in such a determination if motor vehicles are in scope.

Gas

Definitions

17. Do you support the definition of gas being amended to capture blended gases? If not, why?

FCAI No Response

18. Should the definition of gas be amended to also capture the use of 100 per cent hydrogen? If not, why?

FCAI Response

FCAI is concerned that amending the definition may encompass Hydrogen Fuel Cell Electric Vehicles (FCEV) and that may raise several issues as follows:

- All FCEVs require an extremely high level of purity in accordance with ISO 14687:2019 or SAE J2719. These standards do not permit the requirement for an odourant to be incorporated which can be a requirement for other uses of Hydrogen, particularly where piped supply is involved.
- The FCAI members currently importing FCEVs to the Australian market have confirmed that their vehicles have been engineered in accordance with United

Nations Regulation UN 134 which specifies requirements for FCEV powertrains equipped vehicles. These requirements are specific to automotive products and include leak detection and shut off systems with the understanding that odourised hydrogen will not be utilised.

FCAI can provide the department with additional details on request.

FCAI has written to the Department of Infrastructure requesting that they fast track the development of a new Australian Design Rule (ADR) adopting the requirements for UN134 concerning Hydrogen fuelled vehicles and we will continue to advocate for an ADR to ensure that Australia has nationally consistent laws concerning hydrogen fuelled vehicles.

19. What elements of the regulatory framework would need to be changed to safely accommodate and regulate 100 per cent hydrogen gas appliances?

FCAI Response:

FCAI recommends that light vehicle automotive products are excluded from this framework, the fittings used in light automotive products do not require typical gas fitting skills. The pipes and connections used in light vehicle automotive products are designed to be shut off with valving (where required) and have connections that can be disassembled and reconnected in accordance with the prescribed procedures. There is absolutely no expectation that light vehicle automotive technicians would require gas fitting skills typically required in other use cases.

20. Do you support changes to the definition of gas fitting work to clarify the requirements?

FCAI Response

It is difficult to understand exactly what is defined as a "gas appliance", in the automotive world gas supply systems can be shut off using valves. Connections and disconnections to pipework are designed in such a way to facilitate the process and do not require gas fitter experience.

Autogas should be exempted from these requirements and catered for under the MDR Act specifically and undertaken by suitably qualified technicians.

Autogas

21. Should references to vessels and machines be removed from the definition of Autogas installation under the G&E Act? Why or why not?

FCAI Response

This option will streamline provisions relating to Autogas work, by consolidating obligations for licence holders in one legislation - the MDR Act. FCAI expects that this will ultimately improve compliance and raise the quality of work.

22. Should the regulation of Autogas work and Autogas installations in vehicles be transferred into the MDR Act? Why or why not?

FCAI Response

It would seem most appropriate that the Autogas licensing requirements are moved into the MDR Act. As both Acts provide similar requirements, this would remove duplication and provide clarity. Repair work related to Autogas on vehicles is already regulated 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).

This option will streamline provisions relating to Autogas work, by consolidating obligations for licence holders in one legislation - the MDR Act. FCAI expects that this will ultimately improve compliance and raise the quality of work.

It is the FCAI's opinion that if vessels and machines (that cannot be regulated under the MDR Act), then a separate section may need to be created under the G&E Act to specifically cater for these scenarios.

23. What other options for regulating Autogas work can be viable?

FCAI No Response

Appliances

Electrical appliances

24. Do you consider that the NSW testing and certification process is an effective way to ensure safe electrical articles are safe in NSW? Are the existing costs on business appropriate?

FCAI No Response

25. Should NSW adopt the national EESS? Why or why not?

FCAI Response

FCAI does not consider that motor vehicles (with or without electrified powertrains or other electrical equipment supplied as a component of the vehicle) would not be considered in scope as "electrical equipment". On that basis we do not have an opinion on whether NSW adopts EESS.

26. If NSW were to adopt the national EESS what changes should be made to enhance the operation of the EESS?

FCAI No Response

27. If NSW were to adopt the national EESS what parts of the NSW scheme should be retained, or considered, in the adoption of the EESS in NSW?

FCAI No Response

28. Do you support the implementation of a Level 4 compliance scheme for electrical appliances? If not, why?

Gas appliances

29. Do you support the introduction of definitions for Type A and Type B gas appliances in the G&E Act? If not, why?

FCAI Response

If it is likely that Type B gas devices will encompass the emergence of FCEV products (unless they are specifically exempted) and it seems incongruous that for motor vehicles these would be defined and regulated under the G&E Act rather than under the MDR Act where all other matters for motor vehicles are managed. Should Type B gas devices encompass FCEVs, then an appropriate approval pathway that acknowledges compliance to UN 134 which would automatically permit NSW approval under any State based approval process would need to be instigated. NSW would also have to consider that FCEV products may have been approved in other States and Territories and therefore would be expected to cross state borders during their operation without any obligation to re-certify the products.

Queensland Resources and Safety and Health recently undertook a study looking at a Hydrogen Safety Code of Practice to operate in conjunction with their State based legislation and it may be informative for NSW to review this work to inform this current review by NSW.

Ultimately, FCAI's preference is for a Federal Australian Design Rule to be implemented that would specifically cater for hydrogen powered light motor vehicles that have been manufactured in accordance with UN 134 to be federally regulated across Australia.

30. Should a new licence be introduced for carrying out work on Type B appliances? If not, why?

FCAI Response

It would be most appropriate for some form of licensing to be introduced to manage the inherent risks of working with Hydrogen fuelled vehicles. All FCAI members importing FCEV products require automotive technicians to undertake extensive training prior to being permitted to work on FCEV products.

FCAI does not consider that technicians working on FCEV, and not undertaking other gas work, will need to have gas fitting qualifications. It is unclear what competencies and qualifications will be the most appropriate for workers in the emerging hydrogen industry. FCAI recommends that consideration is being given to work being undertaken nationally to develop the hydrogen industry workforce development that identifies several new skills and occupations, including specialist roles such as Electrolyser Technicians and Fuel Cell Technicians.

31. If a new licence was introduced, what considerations should be made in developing the licencing requirement for Type B gas appliances?

FCAI Response

FCEV vehicles encompass two types of newer technologies, in the first instance they generate electricity through a hydrogen fuel cell and in the process of generating and using the electricity they act as a battery electric vehicle with all the inherent implications of products operating in the Low Voltage range. As an example, the types of training undertaken by FCAI members are as per the generic example below:

Manufacturer (OEM) Technician training

OEM FCEVs are maintained by hydrogen and BEV certified dealership network with only qualified mechanical technicians servicing these vehicles in these select dealer workshops. Technicians must complete the OEMs highest level of certification to be awarded OEM Master Technician status before being permitted to complete FCEV technician training.

As noted above, OEM technician training ensures the highest level of technician competency (must have successfully completed OEM Vehicle training up to "Specialist Technician for HEV, PHEV and EV" before attending FCEV training).

OEM FCEV technician training also incorporates manufacturer service and safety procedures including cautions and warnings with focus on personal and general safety on low voltage and hydrogen systems as well as assessment of correct application and use of special service tools (technicians must demonstrate correct use of special service tools for all hydrogen related procedures).

32. Do you support the prescription of standards for servicing of gas appliances under the G&E Act? If not, why?

FCAI Response

The answer to this question is entirely dependent on whether NSW decide to include FCEVs and other hydrogen powered automotive products as Type B gas appliances. If hydrogen powered light vehicles are classified to be Type B gas appliances, then we consider that this should most appropriately have the prescription of standards under the MDR Act.

If hydrogen powered light vehicles are not classified to be Type B gas appliances, then we have no issue with the prescription of standards under the G&E Act.

33. Should the servicing and repair of gas appliances only be done by licenced gasfitters?

FCAI Response

FCAI does not consider that technicians working on FCEV, and not undertaking other gas work, will need to have gas fitting qualifications. It is unclear what competencies and qualifications will be the most appropriate for workers in the emerging hydrogen industry. FCAI recommends that consideration is being given to work being undertaken nationally to develop the hydrogen industry workforce development that identifies several new skills and occupations, including specialist roles such as Electrolyser Technicians and Fuel Cell Technicians.

Miscellaneous

Notifications of serious electrical and gas accidents

34. Who do you think should report serious gas or electrical accidents that occur in a person's home?

35. Do you think that a serious electrical or gas accident should be notified to the Secretary within 24 hours of its occurrence? Why or why not?

FCAI No Response

36. Do you think the definition of a serious electrical accident or serious gas accident should be amended to include temporary disability and receiving a shock or injury from electricity? If not, why?

FCAI No Response

37. Do you believe that the industry would benefit from the publication of relevant incidents and compliance investigation data by NSW Fair Trading? If not, why?

FCAI No Response

Enforcement and audits

38. Do you support the proposal for outsourcing electrical inspection work under the G&E Act? If not, why?

FCAI No Response

39. What requirements in terms of qualifications, evaluation of work and powers under the G&E Act should be considered if electrical inspection work were to be outsourced?

FCAI No Response

40. Do you support expanding the G&E Act to impose a penalty on a person that installs an appliance that is subject to a prohibition notice?

FCAI No Response

41. Do you support the adoption of a tiered approach for prescribing penalties under the G&E Act? If not, why?

FCAI No Response

42. Do you support the changes proposed to maximum penalty amounts in Appendix 1? If not, please advise what should be changed?

Additional feedback

Is there anything you would like to add on any aspect of the Discussion Paper or the Gas and Electricity (Consumer Safety) Act 2017?

FCAI Response

Please refer to introductory remarks

End of Submission