

[REDACTED]

Sent: Wednesday, 13 September 2023 6:43 PM
To: ESPolicy
Subject: Re: FOR RESPONSE by 15 September 2023 | Publishing submissions to the Discussion Paper - Review of Queensland's Electrical Safety Act 2002
Attachments: image001.png

I apologise for the delay.
My response,
Response in a personal capacity

- **Published in full**

Definition - extra low voltage means voltage of 50V or less AC RMS, or 120V or less ripple-free DC.

My background as a Electrical worker in the Medical and Medical and scientific research across Australia and New Zealand, If the product is manufactured to Australian and International standards for Electrical safety, on a flexible lead then factory trained Robotic service Technicians are best placed to service and repair this type of Equipment, not a Electrical contractor as they would be unaware without factory training of Robotic equipment safety issues or specific protocols of calibration. My customers ranged from Federal police to Forensic labs, to Antarctic Research Vessels, the items worked mostly on 12-volt DC or 24 Volt DC. In this environment the most dangerous thing would be biohazards and Chemicals. So, for saying an Electrical contractor without know knowledge of Biohazards or Robotics could place themselves in a dangerous situation.

It is evident that: -

Including ETU electrical workers as only people that can work on Electric Vehicles would be a great cost imposition to Queensland and Australian Economy, in a time of skill shortages and high home building costs.

The manufacturers of Electric Vehicles and their service Technicians are best placed to service Electric Vehicles from E Bikes to Skateboards, Golf Carts, Electric Forklifts, Electric Cars, Farm tractors. These domestic or light industrial settings. Over regulation in the service of Electric Vehicles by only Licenced contractors makes no sense, existing Motor Mechanics and Auto electricians are best placed for this work with appropriate factory or industry training.

There will be an industry in retro fitting of Bicycles and Small vehicles, which all under the ELV should not be limited by over regulation and again extra costs.

An example of a Farm ATV converted to a Electric vehicle with a high efficiency DC motor of 48 Volt DC or 60 Volt DC with a all in one transaxle, ticks boxes of Carbon reduction and Energy efficiency should not require a Electrical contractor to be involved, a service Technician or Auto electrician or a motor mechanic would suffice.

For Heavy Industrial Motors and mining equipment, Electrical Fitters or Endorsed electrical workers are best placed to service install and repair, obviously with the specified product training.

The same for Electrical Entities, large Solar Farms are best served by Product trained Electrical Workers or Contractors, or under direct supervision by Licensed Electrical workers.

There are more issues in the Storage of battery vehicles, or flooding of Electric vehicles, which is more the Fire regulations.

The move towards high efficiency DC motors which are hugely more efficient compared to older 240 V AC motors (where an Electrician or fitter would be involved, has created many Electrical workers working and servicing new technology energy efficient equipment in Industry, we have to be careful, these 12 Volt and 24 Volt, 48 Volt systems are not a safety issue, as long as the where manufactured to international safety standards, WE need the Licensed Electricians and Contractors to have the building wiring and safety systems present in the building wiring to ensure

the plugged in devices in Industry work, To broaden the scope into ELV work would put pressure on trade shortages as the work is already being done safely by existing service Technicians, Licensed and factory trained. Increasing costs to housing and inflation in economy, if only Electrical contractors do this work.

Electric vehicle chargers were connected to the main system should be completed by an Electrical Contractor, or Licensed electrical worker, the repair of such a system under a safe system of work can be completed by a factory trained Technician.

If unit could not be repaired, then a new unit would be installed by a licenced Electrician (if fixed wiring) otherwise by a plug and socket connection then an Electrical worker or restricted license Technician.

Again, if we catch all as Electrical contractor only then will affect availability of trades for General Industry and housing construction, affect cost of house building and inflation, industry impediments.

Existing legislation describes safe systems of work, my option 3 or 4 would be industry education

Increase education and awareness, including: • increased Government communication and engagement with electrical workers, electrical contractors, persons conducting a business or undertaking (PCBUs), unlicensed workers, and the community, on risks of emerging technologies and approaches to risk management • Government promoting standards and training development • Government providing homeowner guidance as relevant.

Maintaining and improving knowledge, Auto Electricians, Mechanics, Technicians, factory training, industry training.

Keeping Major installations, building wiring to Licenced Electrical contractors, maintaining a safe system of work.

Regards

Nigel Gibson

Electrical worker, 35 years' experience Science and Medical, Research support in Australia and NZ