

## **Supplementary Questions**

### **1. *What role do unions play in shaping training, apprenticeships, and certifications for new energy infrastructure jobs?***

Unions are always engaging with governments and industry participants on training and apprenticeship pathways in key sectors. The ETU has spent the last decade actively pushing State & Federal Governments for policy initiatives to expand training capacity for electrical trades, better equip the VET sector to offer training on the latest net zero technologies, push industry to massively boost the number of apprentices being trained, and provide wraparound supports to ensure that apprentices complete their training.

The ETU currently holds a number of positions on bodies which are critical to shaping the training, apprenticeships, and certifications for new energy careers. In NSW, this includes

- Board positions on the Utilities & Electrotechnology Industry Training Advisory Body (U&E ITAB) which engages on training standards & policy development
- Co-Chair of the NSW Renewable Energy Sector Board which consults renewable energy planning bodies on workforce, training, and local content requirements
- 1 of 2 positions on the Trade Skills Recognition Review Panel reviewing applications for electrical qualifications from people who don't use the apprenticeship pathway (e.g. migrants with overseas qualifications)

Nationally, we also hold positions on the Powering Skills Organisation board which oversees vocational education and training for the entire energy & renewables sector. Several other state branches of the ETU also have ownership stakes in not-for-profit, industry-led RTOs which directly deliver high quality training in close partnership with industry & employer groups. We have presented proposals to the NSW Government seeking support for establishing a similar offering in NSW to ease pressure on TAFE.

Industrially, the ETU applies minimum apprenticeship ratios and a range of apprentice protections in many of our enterprise agreements, particularly in the construction sector. We also have a dedicated apprentice organiser, apprentice representative on our State Council, and a Youth Crew which meets regularly to engage electrical apprentices. These internal structures all exist to make sure that there are open lines of communication that allow us to respond to issues around safety, training, and standards as soon as they arise. They also help us to equip our ETU apprentices with the knowledge of what opportunities are available to them in the new energy space.

### **2. *What kinds of upskilling programs are essential for electrical trades to support the energy transition?***

A fully qualified and licensed electrical worker will generally have most of the skills & knowledge needed to support the energy transition, especially if they have received specific OEM training through their employer on the technology they are working with. The biggest priority in terms of upskilling for the transition should be increasing the number of people put onto apprenticeship pathways and upskilled into a licensed outcome.

The Continuing Professional Development (CPD) program being rolled out in Victoria for electrical trades is a model example of how an effective upskilling program should be rolled out. All license renewals after 1 July 2023 require the completion of an 8hour “Skills Maintenance” course for licensed electrical workers aimed at maintaining currency, and from July 2028 renewals will also require 8 hours of “Skills Development” training in a new or emerging area relevant to the electrical trade (options include EV installation courses).

In addition to actively requiring a minimum level of upskilling every 5 years for those already in the industry, creating this CPD architecture is also aimed at kickstarting a healthy market for quality short course upskill training products that workers can access as needed.

Given the critical skills shortage and abysmally low training rates for transmission linesworkers, upskilling initiatives that train distribution linesworkers to be able to work in the transmission sector are also essential unless we intend to build 10,000 km of new transmission lines with overseas workers. This point is generally less relevant to the Terms of this Inquiry.

### **3. *How can industry standards and safety protocols be updated to reflect emerging technologies in electric and alternative energy transport?***

There is a vast network of tripartite bodies, councils, and committees consistently working to ensure that Standards and safety protocols in the electrical industry are updated to ensure that emerging technologies are able to be adopted in a safe and responsible manner.

Electricity Supply Authorities are largely exempt from elements of electrical safety legislation contained in the *Home Building Act 1989* and *Gas & Electricity (Consumer Safety) Act 2017*. Instead, they develop their own Safety Management Systems and monitor their own performance against them with some IPART oversight. This is an outdated way of regulating the network now that it is mostly private companies with profit maximising interests. Bringing control over safe work practices & standards on the electricity network back into State hands would allow a level playing field to be set with consistent and rigorous requirements set independently of power companies.

## **Questions on Notice**

1. **Mr Warren Kirby:** *If we're talking about a regulator for the infrastructure required for EV's, would it be reasonable if that regulator was also responsible for EVs in and of themselves—like, systemically—given, as Nathan pointed out earlier, essentially they're an electrical device that just happens to be on wheels? We also noted from one of the people who provided evidence yesterday that in a short period of time the vehicles themselves will be the biggest provider of energy in New South Wales. Should they be included as part of that regulatory framework or be kept separate?*

### **On Notice response:**

Electric vehicle battery and propulsion systems should be considered electrical installations under the definition in the *Gas and Electricity (Consumer Safety Act) 2017*. These are 400V-800V DC systems which carry serious electrical safety risks to automotive workers and the exemption given under s144(2) of the *Work Health and Safety Regulation 2017* should be reconsidered.

Our position is that a future electrical safety regulator should have oversight over EVs at the point they are connected to the grid by a charging point, as well as in maintenance wherever electrical wiring or installation work (as defined in the *Gas and Electricity (Consumer Safety Act) 2017*) takes place. There should also be scope for an electrical safety regulator to investigate serious electrical incidents involving EV's and EV components (e.g. battery fires).

We believe that the framework of existing automotive regulators & industry bodies will remain important and should maintain their role overseeing most matters to do with motor vehicles and road transportation. Most mechanical work on electric vehicles should still continue to be conducted by skilled workers authorised under existing systems, as long as a licensed electrical worker has conducted any necessary disconnections or isolation work required to ensure their safety.

2. **Chair:** *... Does the union have a view on the capacity of the grid and the interface, and how that should be rolled out, particularly in regional areas where there obviously appears to be a lack of energy and it could provide an alternative storage facility for the grid?*

**James Miranda:** *My understanding is there is a lot of work going on with the Federal Government in coordination between the State energy Ministers on accelerating the timeline for vehicle to grid becoming a reality. I can take on notice exactly where that's up to and what that's looking like at this stage.*

***On Notice response:***

Standards Australia approved a new standard that allowed vehicle to grid charging in Australia to commence in late-2024, this was coordinated as part of the National Consumer Energy Resources Roadmap. As yet, there are few electric vehicles available in the Australian market that have bidirectional charging capabilities available. There are also very few electric vehicle chargers that have been certified as compliant with the updated Standards and made available to Australian consumers. So, while State & Federal Governments have worked to remove the most significant regulatory barriers to rolling out widespread vehicle-to-grid charging, it will still likely be quite some time before the market can catch up. As long as all of the equipment was compliant and the work was done by qualified electricians, we would be happy to support any initiative aimed at accelerating that process of uptake in regional areas where there might be additional grid security benefits to communities.

3. **Mr Ray Williams:** Is there any data that you're aware of that indicates that the installers of electric vehicle chargers have undertaken that in an inappropriate way?

***On Notice response:***

The ETU is not aware of any specific examples of electric vehicle charger installers acting inappropriately or conducting noncompliant work. However, it is important to note that a kerbside charging station installation is not the type of jobsite that our officials would typically visit for a safety inspection. A SafeWork report in 2024 highlighted significant levels of noncompliance from a sample of 102 rooftop solar inspections (around 1 in 3 sites had some form of electrical noncompliance), we would contend that you would find similar issues in the EV charging space if regulators took the time to check.

The ETU are currently taking one NSW DNSP to Federal Court over their use of unlicensed linesworkers to install government-funded community batteries, despite those workers not being qualified to safely conduct testing or commissioning on those batteries. If that level of systemic non-compliance is being facilitated by well-established businesses on publicly funded projects, it would be reasonable to suspect that smaller operators with far less oversight may also be cutting corners on occasion.