Electrical Trades Union

National Competition Policy Analysis 2025: National Licensing

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About the ETU

The Electrical Trades Union of Australia ('the ETU')[1] is the principal union for electrical and electrotechnology tradespeople and apprentices in Australia, representing well over sixty-thousand workers around the country.

The ETU welcomes the opportunity to make submissions on the prospective benefits of national licensing of electrical occupations. The ETU has continuously advocated for the integrity of the electrical license, and against the introduction of Automatic Mutual Recognition.

ETU members make up a critical pillar of the licensed electrical workforce responsible for delivering the Australian Government's commitments on providing a more efficient, affordable, and secure emissions-free energy network, including building renewable generation and storage projects and transmission projects. Strong licensing provisions at a national level are critical to support labour mobility to support the energy transition and associated efficiencies in the electrical contracting industry, while maintaining the safety quality of electrical work.

Acknowledgement

In the spirit of reconciliation, the ETU acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all First Nations peoples today.

[1]Being a division of the CEPU, a trade union registered under the *Fair Work (Registered Organisations) Act 2009* (Cth).

National Secretary Michael Wright
PO Box 380 Rosebery NSW 2018 Suite 408, Level 4, 30-40 Harcourt Parade, Rosebery NSW 2018 (02) 9663 3699 (02) 9663 5599

National Licensing in the Electrical Trades

The ETU welcomes Treasurer Chalmers' announcement of a national licensing scheme to support electrical trades to work seamlessly across state and territory borders, as part of the National Competition Policy framework.[2] National licensing reform is an opportunity for state and territory regulators to work with industry to harmonise licensing in the electrical occupations according to the highest standard. It has the potential to enable greater labour mobility of electrical workers, while providing the confidence that electrical work is carried out to the highest standards and safety outcomes for workers and communities.

As it exists currently, licensing serves multiple critical functions in the electrical industry:

- Through registration of individuals, assurance for the regulator of trades qualification at the industry standard.
- Through publication of individual registrations, assurance for the customer of trades qualification at the industry standard.
- Through the restriction of performance or supervision of high-risk work to registered individuals, de-risk of electrical work and electrical installations across industry within the licensing jurisdiction.
- Through preconditions such as endorsements for the performance of high-risk work and Continuing Professional Development, consistent application of safe working best practice within the licensing jurisdiction.

Electrical work is inherently dangerous and hazardous and there is a strong need to ensure that any harmonisation of state and territory licensing adopts the highest possible standard, and that licensing legislations are aligned.

A national licence does not preclude the need for state-based regulators, and the ETU would oppose any attempts to introduce a national licence that would see a move to a national regulator.

Which occupations would be best suited to a national licensing scheme?

The electrical industry nationally and in each state and territory is experiencing a sustained skills shortage in the face of increasing labour demand. That shortage is projected to increase substantially over the coming years, due to the decarbonisation of the energy system and the electrification of industry, transport and households.[3]

The ETU has observed that a growing share of its members perform work across state borders, corresponding with an increasing amount of fly-in-fly-out (FIFO) work for contractors delivering utility-scale renewable energy and storage projects, including Enerven, Consolidated Power Projects (CPP) and ACG Renewables. Linesworker members are also working on interconnector projects, constructing the transmission lines that connect states in the National Energy Market

[2] https://ministers.treasury.gov.au/ministers/jim-chalmers-2022/media-releases/national-licensing-electrical-trades
[3] https://www.jobsandskills.gov.au/download/19313/clean-energy-generation/2383/supplementary-report/docx, p. 17.

(NEM). Simultaneously, work is ramping in the electrification of households and industry, adding to labour demands in the construction industry.

Greater labour mobility in the electrical trades would go some way to alleviating existing and projected labour market constraints, while enhancing worker and community safety, by allowing workers to move where the work is. With large-scale renewables projects typically lasting for 12 – 18 months, national licensing has the potential to provide greater career security by allowing workers to be employed by the same contractor across multiple projects and states.

National licensing for electrical trades will also be beneficial in the offshore wind industry as it progresses in Australian waters. Currently the licensing requirements of each state will apply to the offshore wind projects adjacent or connected to the relevant state. This adds to the complexity of delivering offshore wind generation, as some projects will border inter-State boundaries. The introduction of national licensing is an opportunity to extended harmonise licensing into Australian waters for occupations involved in the construction, operation and maintenance of offshore wind projects.

The ETU has puts forward the following general principles that should guide the design of a national licensing scheme:

- National licensing should be pursued with a view to adopting the highest standard among the models currently in place in each State or Territory.
- The best candidates for national licensing are those occupations that already have licensing requirements defined in at least one State or Territory.
- Each of the electrical occupations involves high-risk work, for which licencing is a necessary measure to ensure consistent training and safe working standards.
- National Licensing should not elide existing categories of licence or reduce the minimum qualifications of a license in any participating jurisdiction.

The electrical trades include various occupations and licence types. The ETU does not propose that national licencing should be developed for all occupations or licence types simultaneously. Instead, the ETU proposes that the development of the national licence should focus on those areas that will deliver the most immediate benefit from harmonisation to workers and the broader community: electricians and linesworkers.

Electricians and linesworkers are regulated to some degree in all states and territories, with sound licensing and compliance legislation applicable to the work in most states and territories. Western Australia and New South Wales do not have a licence for linesworkers but have announced an intention to introduce one.

National licensing reform is an opportunity for state and territory regulators to work with industry to harmonise licensing in these electrical occupations according to the highest standard and ensure that the development of the linesworker licence in WA and NSW adopts the highest standard from across the states.

Following this, consideration could be given to introducing national licensing for electrical contractors and other electrical workers, including:

- Electrical Inspector
- Electrical Cable Jointer
- Restricted Electrical License (REL), relevant to the following applications only:
    - Refrigeration and Air Conditioning
    - Water Heater and Gas Appliances
    - Electronics
    - Instrumentation
    - Electrical Appliances
    - Motors
- Supervised Worker's License
- Electrical Contractor

What would be the first steps towards a national licensing scheme for selected occupations?

All states and territories have established licencing schemes for electricians, and all jurisdictions other than Western Australia and New South Wales have licencing schemes for linesworkers. The industry does not need a national licensing scheme at all costs – it needs a good national licensing scheme that builds upon the highest standard of participating jurisdictions. Objectives for the design of a good national licensing scheme should include:

- That there be no reduction in any State or Territory of the minimum qualification, training standards, continuing obligations or other prerequisites of the relevant licence – confidence in the technical and safety standard of work being the main object of licensing.
- That there be broad industry consensus on the content of the licensing standard – industry buy-in being critical to State and Territory adoption of the national scheme.
- That the state and territory electrical safety regulators be involved in the development of the national licence and retain administration of the licence within their respective jurisdictions to better manage intersections of electrical licensing, wiring rules, installation compliance and safety, occupational training, and workplace safety.
- That there be directed consultation with relevant stakeholders (see below) throughout the development and implementation of the national licence.

To meet those objectives the ETU recommends that the first steps towards a national licensing scheme would be:

- Establishment of a National Licensing Board and appointment of a Chief Executive Officer for such board.
- Establishment of a National Electrical Licensing Advisory Committee to advise the National Licensing Board, inclusive of each State and Territory electrical safety regulator, Electrical Regulatory Authorities Council (ERAC), National Electrical and Communications Association (NECA), Master Electricians Australia (MEA), ECAWA, Energy Skills Australia (ESA) and the ETU.
- Terms of reference for the National Electrical Licensing Advisory Committee to determine a model for national licensing of selected occupations that meets the highest standards

for electrical licensing of participating jurisdictions.

- Establishment of a National Occupational Licensing Authority to administer the National Licences.

Adopting these principles at the outset may help avoid the previous failures to adopt a scheme.

Why did previous attempts at a national licensing scheme, such as the National Occupational Licensing Scheme, fail? How could a renewed attempt overcome the barriers to a national licensing scheme?

In 2008, COAG proposed the National Occupational Licensing System (NOLS) to streamline trades licensing across Australia. NOLS objective was to allow workers such as electricians and plumbers to operate under a single license recognised nationwide. If successful a national license would have alleviated the administrate, financial and time delay burdens of the relevant occupations to hold licenses in multiple states and territories.

Labor was in power across all states and territories in 2009 which allowed NOLS to move forward in a positive direction, however by 2011 Victoria and Western Australia had elected Liberal government who were keen to reduce 'red tape' and Federal 'overstep'.

The NOLS stood up by the National Occupational Licensing Authority (NOLA) in 2013 took a 'lowest common denominator' approach to the design of standards for each proposed occupational licence. The reforms included a proposal to water down training and reduce the preconditions for licences in some jurisdictions, using the electrical licensing scheme in NSW as a model. However, this failed to recognise that some states, including Victoria and QLD would deem the lower standards unacceptable. Adopting the NSW standard for electrical licensing was seen as a backwards step in states and territories that had built much sounder standards for electrical licensing, considering the real risks and expected safety standards of the occupations.

Poor coordination and consultation led to significant delays and multiple missed milestones. Industry and union stakeholders felt that bureaucrats dominated the decision making and ignored their needs. In a report to the Productivity Commission in August 2013, NOLA identified both that extensive and repeated consultation processes had blown out timelines for the project and that industry perceived that consultation had been insufficient.[4] Unions and industry participants were united in criticising the proposed national licensing model. The ETU and NECA both expressed opposition to the model proposed in 2013 on the basis that it undermined licensing standards. NECA has expressed support for a single national occupational licensing scheme, but cautioned that its implementation "must not dilute safety standards, technical expertise or adequate insurance requirements".[5]

The states and territories were ultimately unable to agree on nationally uniform registration

[4] NOLA, 2013, Submission to Productivity Commission in relation to Geographic Labour Mobility Issues Inquiry, p. 12.
[5] NECA, 2020, *National Electrical and Communications Association (NECA) 2020-2021 Australian Governmetn Pre-Budget Submission*, p. 20.

requirements for each occupation and the scheme was abandoned.[6]

With renewed focus, a national licensing system can still provide significant economic benefits and an efficient foundation for enhancing labour mobility. The failure of similar reforms in 2013 underscores the need to commit at the outset to adopting the highest standard in the national license.

What benefit would a national licensing scheme provide over an expansion of the automatic mutual recognition (AMR) scheme?

The ETU has consistently advocated against the introduction of an Automatic Mutual Recognition (AMR) scheme, arguing that it is not fit for purpose in the electrical industry. In the absence of harmonised licensing rules in the electrical industry, the AMR scheme adds to regulatory uncertainty and risk. This includes the cost and administrative burden of maintaining multiple licences, the regulatory burden of working under different licensing rules, and the cost of maintaining insurances in multiple jurisdictions. Furthermore, the AMR scheme provides no control measures for where risks, regulatory overlap, or duplication result from jurisdictional inconsistencies associated with installation compliance and safety, electrical and licensing legislation which exist across Australia and New Zealand.

Current operation of the AMR scheme

In the current AMR scheme, a worker moving between participating jurisdictions may apply for registration in a new jurisdiction on the basis that the worker holds registration in another participating state or territory (their Home Jurisdiction). A workers' home jurisdiction is the state or territory in which the worker has their 'principal place of residence' or 'principal place of work' in the occupation. The worker is authorised to work in their trade as though registered in the new jurisdiction, even while their application for registration on the basis of mutual recognition is under consideration, hence for a time the worker enjoys 'automatic' mutual recognition.

The AMR scheme is an incomplete solution for inter-state mobility of electrical labour, as it is available only to workers who maintain a principal place of residence or principal place of work in their home jurisdiction. This requires that a worker apply for registration of a licence in the new jurisdiction if their work in the new jurisdiction is not short-term and would result in a relocation of their principal place of residence or work to the new jurisdiction. For example, where a worker moves from NSW to Victoria for 6 months to work on a project, the principal residence of that worker may be taken to have changed, and the worker required to apply for registration and/or a license in Victoria to continue working in their trade.

Thus, the AMR system does not alleviate the cost and administrative burden for all or even most itinerant electrical trades of maintaining multiple licences across multiple jurisdictions. The AMR system is particularly maladapted for modes of work that we expect to predominate in the electrical industry as regional projects for construction of renewable energy generation and

[6] Council of Australian Governments, 2013 *COAG Communique:* COAG Meeting, 13 December 2013, p. 5.

transmission ramp up. In those growth areas for the electrical industry, electrical labour is expected to be increasingly contracted across state and territory boundaries.

Regulatory risk of unlicenced work and different scopes of license

Licences issued in different jurisdictions for the same occupational area often have different parameters, eligibility requirements and scopes of regulated work. Different licence classifications, training requirements, licence terms and licence structures commonly apply. These differences can impose costs on those businesses that operate in multiple jurisdictions, along with barriers to mobility of workers and poor understanding of legislative requirements by workers and employers when moving from state to state. AMR is an incomplete solution to the problems produced by the inconsistent licensing requirements of each state and indeed adds to the complexity and regulatory risk of working in a licensed trade across state borders.

Further, each state regulates electrical work by different legislation, administered by different regulatory authorities. The siloed development of state and territory licensing schemes has resulted in differences in the legislated requirements for licensing, the scope of work permitted under a license, requirements for the supervision of work, inspection regimes, compliance obligations and continuous professional development obligations. The AMR scheme does nothing to bridge gaps in workers' understanding of the scope of the licence in different jurisdictions, leaving the worker at professional risk and introducing regulatory risks for the worker, principal contractor and end customer.

The legislated scope of electrical and linesworker licences (and exemptions where applicable) are poorly understood by workers when moving from one state to another. Training for electrical and linesworker qualifications does not include training on the licensing legislation that they must comply with in different jurisdictions. A worker moving between jurisdictions and relying upon the AMR scheme for their licence in a new jurisdiction is thus exposed to professional risk and risk of prosecution for infringement of the licensing scheme or performance of unlicenced work. Where a worker exceeds the scope of their licence in the new jurisdiction, their employer or principal contractor may be required to recertify the compliance of the work with legislated requirements, wiring rules and other applicable standards.

Not all states have signed onto AMR. Queensland does not participate in AMR and so requires workers from interstate to maintain a separate licence in the State. New South Wales and South Australia participate in the AMR scheme, but workers must notify the local regulator. Victoria requires a separate registration of the AMR. Western Australia requires a separate license for certain work. Tasmania, the Australian Capital Territory and the Northern Territory participate fully in the AMR scheme, however recent changes to licensing for work on renewables in the ACT may complicate its position.

The ACT electrical license, such that work on some renewables (distributed energy resources[7]) now requires an additional endorsement to the electricians' license. This creates the

[7] Solar photovoltaic panels, grid connected inverters part of a photovoltaic system, and grid connected batteries not part of large-scale generation.

complication that a license holder can carry out the electrical work that they are licensed to perform in their home state, which may include work not authorised in the state where they work. An electrician in the ACT needs the additional endorsement to carry out renewables work in the ACT, however an electrician from another state can carry out renewables work in the ACT if it is within the scope of their license from their home state, without the additional endorsement. That conflict endangers the continuation of AMR in relation to renewables work in the ACT and in the meantime workers in the ACT relying on AMR to perform renewables work risk prosecution.

Similarly, South Australia is reviewing the scope of work for Restricted Electrical License Holders, with the potential for conflict with other states' legislation. The conflict also exists regarding Continuous Professional Development. This will create a situation where some states and territories will cease to be a part of AMR as licensing scopes change.

Finally, registration for AMR expires when the home state license expires so there is a requirement to register for AMR again on renewal of the state-based license.

Issues and conflicts in the AMR are poorly understood by the broader industry and electrical workers, leaving electrical workers at risk of non-compliance with state and territory legislation, and at risk of carrying out work unsafely and to be subject from enforcement action, infringement or prosecution. National licensing presents a pathway to harmonise the scope and preconditions of electrical licenses across participating States and Territories, providing certainty to workers about the work they are authorised to perform when working across State boundaries.

Continuing professional development

Some states have also introduced Continuing Professional Development (CPD) as a condition of the license, acknowledging that professional development is an essential component in electrical licensing. Continual training in skills like mandatory testing are essential for the adoption of new best practice and safe working methods. Continuing professional development (CPD) is a requirement of continuing license to perform electrical work in only a handful of jurisdictions. In those jurisdictions, CPD ensures that developments in technology and best practice are translated across the industry with consistency. This allows for electrical workers to be drivers of technological and safe working improvements in their workplaces.

In the AMR scheme, a worker transferring to a jurisdiction with CPD requirements is immediately authorised to commence licenced work in that jurisdiction despite not having complied with CPD requirements applicable to those who principally reside in the jurisdiction. This introduces risk of a knowledge gap between workers with local registration and workers relying upon the AMR scheme for registration.

A national licensing scheme could ensure a more consistent application of CPD requirements as part of a national license. Given the changing nature of the electrical industry, with the introduction of new technologies and practices, CPD requirements will lift safety across the industry by requiring electrical workers to maintain awareness of and be trained in how to deal with these changes.

Contractor registration

AMR does not cover contractor registration with each state and territory having different requirements for electrical contractors. Some states require additional endorsements for electrical contractors such as a business studies endorsement in Victoria. Also, there are different requirements regarding the technical nominee requirements for electrical contractors. Further liability insurance requirements from state to state differ. There is no benefit in the AMR system for electrical contractors, other than a sole trader only, whereas national licensing could harmonise contractor licensing.

How could the PC best quantify the benefits of a national licensing scheme?

The primary benefit and purpose of occupational licencing in the electrical occupations is assurance of competency to perform high-risk work safely and in compliance with practice rules and standards that are nationally consistent.

The standardisation of electrical work, whether on large scale generation, electrical installation or the distribution network, achieved through Australian Standards, State and Territory legislation, standards, codes of practice and method statements, is foundational to the electrical industry. The industry operates on a principle that all electrical distribution networks and electrical installations of a kind are wired, marked, fixed, tested, isolated, tagged, locked, connected, disconnected or otherwise worked upon in the same manner, by persons of the same minimum level of competency and training. That standardisation facilitates mobility of electrical labour and consumer choice of electrical labour within a jurisdiction, without compromising safety of the worker or the end user of the electrical installation.

Licencing in electrical occupations provides assurance to the regulator, industry participants, and consumers that people working on electrical installations hold the requisite minimum qualifications and training to work in compliance with applicable standards and to recognise and mitigate electrical hazards. The impacts of licencing on the risk profile of electrical work are difficult to measure.

The impacts of national licencing may be assessed across three distinct categories:

- *Direct impacts*. These are the impacts directly to an individual, business or government as a result of the implementation of National Licencing, including: reduced duplication of licencing fees; reduced time and labour costs involved in the regulatory burden of making and managing multiple licence registrations, confidence in legislative requirements and understanding; and reduced costs to State and Territory regulators through the consolidation of regulatory functions.
- *Wider economic impacts*. These are the impacts that flow from reduced costs to industry and wider implications for the economy due to the ease of labour mobility, associated improvements in resource allocation, and secondary gains in terms of economic growth, employment and consumer outcomes.
- *Consumer outcomes*. These are impacts to the quality or availability of services to consumers, including safety outcomes.

Quantifying the cost of injury and fatality

Increased safety for workers and consumers is a key outcome of electrical licensing. As discussed below, this impact can be against each of the above categories.

As we've argued above, the ETU is advocating for a national licence that brings all states up to best practice. While Australia does not have any substandard electrical licences across the country, some states have more stringent safety and skills maintenance requirements. Following this, it could be argued that there would be general improvement in safety from moving to a national licence, which stems from bringing all states up to the highest standard *and* avoiding the pitfalls of AMR as described in the section above.

A comprehensive quantitative analysis of the cost of injury and fatality that arise from insufficient licensing standards is not possible because many instances go unreported, and the costs of these instances are often not recorded because prosecutions for workplace fatalities are rare. Often the penalty is below community expectation or subject to secret settlements that avoids any public scrutiny. Furthermore, it is difficult to identify a causal link between different licensing standards and cause of injury or death. However, the costs of injuries and fatalities in the electrical industry are measurable and include the direct cost of penalties for contravention of work health and safety legislation. Some examples include:

- December 9, 2013. Two workers were killed in Queenstown Tasmania at the Mt Lyell Copper Mine. Nearly three years later, in 2016, the mine operator plead guilty and was fined $225,000.
- September 29, 2011. A worker was killed in Brisbane on the Airport Link Tunnel project run by John Holland. Four and a half years later John Holland was fined $170,000.
- December 5, 2009. A worker was killed in North Queensland on a job site controlled by John Holland. A year later ComCare advised no charges would be laid, however 8 years later a coronial inquest found employer responsible for the fatality.
- December 2011. A worker was killed on the Perth Citilink project controlled by John Holland. Nearly three years later and John Holland was fined $360,000. No one from management is prosecuted.

The ETU notes that these examples are not necessarily directly due to licencing standards. They are provided as examples of how injury and death may be quantified for the purposes of establishing the value of a national licence that improves standards across the country. However, we note concerns expressed by the Electrical Safety Commissioner, QLD that automatic mutual recognition introduces significant issues regarding "disciplinary matters and ability to cancel, suspend and impose conditions on interstate licences".[8] Following this, it can be assumed that there would be a negative safety impact as a result of AMR that would not persist with national licensing and could be quantified.

Safe Work Australia estimates that if workplaces injuries and illnesses were eliminated, Australia's economy would grow by $28.6 billion annually, with an estimated 185,500 new full-

[8] https://www.regulatoryreform.gov.au/sites/default/files/2021-06/submission-amr-59.pdf

time jobs created.[5]

Workers' compensation claims can be used a proxy for the direct cost of injury risk. Economic cost can be estimated as the sum of the direct cost and the opportunity cost of lost work hours and wages, being a measure of potential productivity.

For example, in NSW:

- Direct medical expenses can be claimed in full for the first two years. These can be a proxy for direct cost.
- Income replacement can be claimed as 95% of the pre-injury average weekly earnings for the first 14 weeks.[6] This will be an underestimate of opportunity cost because it does not cover the full earnings, and does include irregular overtime and site or situational allowance payments.

These data could be modified to account for the differences between the claimable payments and the actual unearned income to estimate economic cost.

Quantifying the benefits of labour mobility through national licensing on labour market constraints

Given persistent workforce shortages, the ETU has observed that FIFO workers are increasingly employed on renewable energy projects. Directly employed by a contractor, they will move between different renewable energy projects, often across state borders. Furthermore, in transmission, there are several large-scale interconnector projects that are being built to connect two states in the National Energy Market (NEM).

As discussed above, AMR involves unclear definitions of primary residency and requires workers to comply with regulatory requirements that they have not been trained in. This creates regulatory uncertainty for workers and potentially introduces additional compliance risks for employers, unless additional on-the-job training in local requirements is provided. A national licence would reduce these risks while also avoiding workers (or their employers) having to pay multiple licence fees.

In calculating the benefits of the national licence, the Productivity Commission could consider the growing share of the market that was employing workers for cross-border and/or regular FIFO work, and consider the savings per worker to these businesses of avoiding multiple licensing fees and additional on-the-job training and inductions regarding local regulatory requirements.

Furthermore, the Productivity Commission could consider the broader impact that labour mobility has on easing labour market constraints by acting to 'smooth' the pipeline of large-scale infrastructure construction by allowing electrical workers greater scope to 'follow the work' across borders.

Infrastructure Australia's *Market Capacity Report 2024* calculates the impact of steps taken by government to actively manage infrastructure project pipelines to align demand more closely to current workforce demand, coupled with the softening of demand, has resulted in a 20%

decrease in the volume of workers required on the Major Public Infrastructure Pipeline.[9] The Productivity Commission should consider how labour mobility and a potential increase in FIFO work in the renewables sector could act to 'smooth' the renewables pipeline and alleviate regional labour market capacity issues, and the role of more predictable planning and approvals processes in allowing for better project coordination.

[9] https://www.infrastructureaustralia.gov.au/sites/default/files/2025-05/IA24_Market%20Capacity%20Report_05-25.pdf, p. 6.