Electrical Trades Union

Review of Market Settings in the National Electricity Market to Follow the Capacity Investment Scheme

February 2024

Submission by the Electrical Trades Union (ETU)

14 Feb 2025

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.

Our members are involved in the construction, operation and maintenance of power generation throughout Australia, including in the declining fossil fuel sectors and the ever-expanding renewable industry sector. ETU members make up a critical pillar of the licensed electrical workforce responsible for delivering a more efficient, affordable, reliable and resilient emissions-free energy network.

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

Introduction

The ETU welcomes the opportunity to make a submission into the *Review of Market settings in the National Energy Market to follow the Capacity Investment Scheme*. The ETU has consistently engaged with governments at all levels regarding the design, maintenance, and operation of the National Energy Market (NEM), including the various mechanisms that are aimed at incentivising investment in renewable generation and storage. In particular, we have interest in the effective operation of the Capacity Investment Scheme (CIS), the Long Term Energy Service Agreements (LTESA) in NSW and the development of Power Purchase Agreements across multiple jurisdictions.

In engaging on these issues, we draw on the experience of our members across the power industry, including transmission, distribution, fossil fuel and renewable generation. These workers form the backbone of the industry and the economy it supports, making their input into the design and operation of the energy system critical to it's success.

With CIS tenders due to conclude in 2027, there is an urgent need to put in place mechanisms to incentivise longer term investment in renewable generation and storage. However, it is crucial that energy security and reliability are prioritised in the shift from a centralised, unidirectional energy system based predominantly on fossil-fuel generation, to a decentralized, bi-directional model with significant integration of distributed energy resources. Indeed, the social license for market operation is built on the expectation that consumer can access safe and reliable energy when it is needed, whether for domestic or commercial use.

That is why our submission argues that we need not just new mechanisms to incentivise investment, but a fundamental reorientation of how the energy system is structured. We argue that without effective regulation that maintains energy security, resilience, and affordability the government's ambition to lower emissions is at risk of failure.

This cannot wait. The ISP predicts that by 2038, all coal-fired power stations currently operating in the NEM will be retired.[2] Crucially, the Integrated Systems Plan (ISP) forecast that 42% of the grid will be orchestrated consumer energy resources by 2050.[3] On the 7st of October 2024, 45% of total NEM electricity generation came from rooftop solar, more than 1.7 times the amount from black and brown coal combined.[4] These developments show how rapidly the market is changing, and highlights how critical it is that regulation catches up.

There can be little doubt that without reform, decentralisation will further compound issues already being experienced across the NEM.

When attempting to deliver energy sector reform for the benefit of the Australian community and correcting for the repeated failures of marketisation, corporatisation and privatisation, the solution cannot be more marketisation, corporatisation and privatisation. We need to reorient our solutions towards improved outcomes, not simply attempt to put polish on the ill-conceived and inadequate system that keeps producing poor outcomes.

The ETU commends the Albanese government for its historic commitments to electrification and decarbonisation, however we need to think strategically about how much value we can generate off the back of this investment. For too long, the NEM has been a system that socialises risk and privatises benefits. Therefore, we argue that the renewable investment schemes included in the budget present an opportunity to ensure that the energy system delivers a public benefit in return

[2] AEMO (2024), *2024 Integrated System Plan.*
[3] AEMO (2024). *Integrated Systems Plan*
[4] AEMO (2024). *Renewable Penetration*

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

for public investment, including but not limited to the resumption of equity in critical energy infrastructure as a public good.

In this submission, the ETU focuses on the critical concerns identified by our members across the power industry – including renewable and fossil fuel generation, distribution and transmission. We also identify areas for substantial reform. These include:

- The impact of privatisation on network safety and reliability;
- The impact of privatisation on workforce shortages;
- The role of public financing to rebuild public ownership;
- Contestability as a driver of inefficiencies;
- The need to move beyond a narrow definition of "economic efficiency"; and
- The role of transmission and distribution as enabling the energy transition.

We note that many of the issues raised below sit outside to the current scope of the Review. However, they are raised to highlight how a failure to consider additional factors will act as a handbrake on achieving the broader aims of government of decarbonisation and electrification of the economy.

The Case for Public Ownership

The ETU has long advocated for a publicly owned energy system. Since the privatisation of energy assets first began, our members have observed a considerable decline in maintenance standards for critical energy infrastructure, reducing the reliability and stability of the energy system as a whole and creating significant risk across the economy. Similarly, electrical workers report a declining investment in apprenticeships and industry training, leading to nationwide skill shortages across numerous key electrical trades. As we discuss below, the concurrent nature of these phenomena is not accidental or novel – it is the inevitable outcome of a system which incentivises private profit over public need. Finally, and as discussed in the final section, public ownership facilitates the energy transition, by giving government more control over the levers and mechanisms that can use to transition the energy system while continuing to provide support to the transitioning workforce.

Privatisation of the market has meant that the management of risk and cost has remained in public hands, while the benefit and profit has been recouped by private operators. As it stands, the NEM is being run on a 'work to fail' approach to infrastructure maintenance and outsourcing responsibilities for workforce development to the state. Recently, Per Capita highlighted the devastating impacts that this significant underinvestment can have on the system as a whole:

> *Before privatisation, Victoria's electricity network was maintained by the State Electricity Commission. After privatisation, inadequate maintenance led to reliability issues. This system's weaknesses were tragically exposed during the 2009 Black Saturday bushfires, which killed 173 people, injured over 400, killed one million animals and destroyed thousands of homes and buildings. Investigations, including the Bushfire Royal Commission, found that failed electricity assets caused five major fires, including Kilmore East, where 119 lives were lost. A 2015 coronial report further confirmed that deficiencies in privatised power assets contributed to the devastation*.[5]

Therefore, the failures of privatisation aren't just a risk to economic security and electrical sustainability – they are a threat to the lives of electrical workers and energy users.

[5] Centre for New Industry (2024). *Submission to the Tasmanian Government's Government Business Governance Reform Draft Plan*. Per Capita

In the following sections we show how a natural monopoly which is an essential service and public good *cannot* be effectively operated towards both public interest and private profit over the long term. We argue that any reform which fails to acceptance of this fundamental dichotomy will continue to produce the same inadequate, and potentially life threatening, outcomes for both workers and consumers.

Impact of Privatisation on Network Safety and Reliability

Decarbonising Australia's energy networks will not only require thousands of kilometres of new transmission lines and distribution networks but will also be dependent on the maintenance of existing networks. Indeed, as the capacity for generation from renewables grows the reliability of the grid becomes essential. Unfortunately, decades of chronic and deliberate underinvestment have led to a slow deterioration of the collective infrastructure of our energy system, which was developed and built under public ownership.

ETU Victoria's submission to the *Victorian Network Outage Review* highlights ongoing issues in the privatised distribution and transmission network which have repeatedly caused significant outages and rapidly declining safety performance.[6] As detailed in that report, the costs of these outages are consistently borne by workers and consumers, while profits are pocketed in the billions by the network operators. Crucially, in the state where privatisation has been total, the Victorian case study highlights how inadequate regulation produces substantive differences in performance between various private providers. This is crucial as it shows the fundamental issue facing any attempt to regulate a privately owned natural monopoly that is also essential service and public good: wherever profit can be drawn at the expense of public safety, unscrupulous operators will preference their own profit.

Capacity limits on the existing, privatised distribution networks are also acting as a significant handbrake on the renewables' rollout. Without adequate and appropriate investments in transmission and storage capacity, the potential of renewable energy generation is wasted. Unfortunately, private operates have consistently chose to avoid investment in upgrades and replacements which would capture the growing capacity of solar and wind generation, prioritising private profit ahead of the public interest time and time again.

Recommendation: As discussed further below, distribution and transmission networks are both natural monopolies and essential public services, and as such should be returned to public ownership.

Impact of Privatisation on Workforce Shortages

To deliver the energy transition, Jobs and Skills Australia (JSA) estimates that on current trends, there will be a shortfall of between 32,000 and 42,500 electricians by 2030, increasing to 117,000 by 2050. [7] This jeopardises the government's ambition to decarbonise the economy, electrify industry, and become a 'Renewable Energy Superpower'.

This shortage of electrical workers is not new, having consistently been reported by government for over two decades. Crucially, there are no quick fixes due to the complex range of drivers embedded

[6] ETU Victoria (2024), *ETU Submission to the Network Outage Review*
[7] See JSA (2003), *The Clean Energy Generation,* p. 165. The 32,000 estimate is based on the 'central' scenario, with the 42,500 estimate corresponding to the 'high' scenario which encompasses the *Future Made in Australia* requirements.

within the skills crisis.[8] However, while not solely responsible, the role of privatisation in substantially underinvesting in apprenticeships is significant.

Publicly owned energy companies, from transmission through to generation, have historically trained a significant share of apprentices. Indeed, an investment in developing the next generation skilled electrical workforce was part of the social license to operate, and a key recognition that their ability to pursue profit is built on the existence of a highly skilled, highly valuable workforce.

Unfortunately, the same levels of apprentice training are not seen in the broader, privatised energy sector. There are a variety of factors that contribute to this, including:

1. The Australian Energy Regulator (AER) revenue determination methodologies for Distributed Network Service Providers (DNSPs) has historically treated the training of apprentices as an inefficient resource allocation. This points to the way that private operators engage with regulation, treating the minimum requirements as a floor rather than a ceiling.
2. Government tender guidelines have focused on lowest cost at the 'point of sale', which acts as a perverse incentive for potential bidders, encouraging them to underbid to appear competitive, and creating downward pressure on labour costs. In effect, this devalues apprentices in the process, as their cost-to-productivity ratio is always going to be lower than a fully qualified, experienced and licensed electrical worker. Unfortunately, this market rationale has led to a situation where significant, government funded generation, storage and network projects that employ few or even no apprentices.[9]

However, domestic evidence from natural experiments highlights the stark contrast between ownership models. Notably, state owned and operated organisations Energy Queensland Ltd (EQL) and Powerlink have developed a comprehensive workforce and skills resourcing plan as part of the Queensland Government's *Energy and Jobs Plan*. This document outlines each parties' commitment to expanding the annual apprentice intake facilitated in part by pre-apprenticeship programs. By utilising shared interests and collective decision making to develop strategies for increased recruitment of women and First Nations apprentices, EQL has achieved a record 50% women and 8% First Nations apprentices in the 2024 intake.

Conversely, the relative lack of training opportunities in the private sector is contributing to the nationwide shortage of skilled trades workers by spurring additional demand without making any reciprocal contribution to new supply. This, in turn, has negative flow on effects across energy, defence and construction projects which all utilise skilled electrical workers.

In recognition of this, the CIS and several state-based mechanisms have included apprentice ratios and/or merit criteria that award project developers for employing apprentices during the construction phase.[10]

Recommendation: The review must consider how training and local workforce development is incentivised in all new energy projects which receive public investment or finance, inclusive of transmission, storage, and generation.

[8] Per Capita (2024). *Charged Up: Strategies for Addressing the Skills Shortage in the Energy Transition.*
[9] See Appendix A.
[10] DCCEEW (2024). *Capacity Investment Scheme Tender 4: National Electricity Market - Generation Tender Guidelines*

Maintaining and Building Back Public Ownership to Facilitate the Energy Transition

The ETU welcomes national investment in the grid through various dedicated investment vehicles, most notably via *Rewiring the Nation* and the CIS. This funding, often augmented by state and territory governments, presents an opportunity to create public value through public investment by prioritising investment in 100% publicly owned renewable energy assets.

There are several positive examples, both domestically and international, where governments have used public funds to create public energy assets capable of delivering benefits for diverse community stakeholders, not just private shareholders:

First, and most notable, the Victorian Government has enshrined the revived State Electricity Commission (SEC) in the *Victorian Constitution* to ensure renewable energy assets remain publicly owned.[11] This popular reform includes commitments to delivering 4.5 GW of new renewable energy generation, with a focus on addressing critical system gaps. This is being accomplished through investments in dedicated renewable energy assets, starting with the SEC Renewable Energy Park in Horsham, a 100% publicly owned utility-scale solar generation and battery storage project.[12]

Second, Queensland's recently ratified *Energy (Renewable Transformation and Jobs) Act 2024* requires the energy minister to prepare a five-year plan to achieve and maintain public ownership targets for energy assets of:

- Equal to or more than 54% for generation assets,
- 100% for transmission and distribution assets, and
- 100% for deep storage assets.

This landmark reform has given the Queensland Government flexibility in its decarbonisation strategy and reduced regulatory costs which would inevitably be passed on to consumers during the transition.

Finally, the Tasmanian Government reacquired the Bell Bay Power Station and Tamar Valley Power Station in 2008, [13] after they were mismanaged by the now-defunct global investment and advisory firm Babcock & Brown.[14] Public ownership has allowed the government to have direct oversight over both the necessary decommissioning of Bell Bay and the recommissioning of Tamar Valley in response to the 2016 Tasmanian energy crisis.[15]

Recommendation: The Committee should consider the role of public ownership and equity, as part of its broader consideration of suitable mechanisms that will incentive investment in renewable generation, storage and ancillary services.

[11] Constitution Amendment (SEC) Act 2024 (Vic).
[12] State Electricity Commission of Victoria (2024). New SEC Renewable Energy Park 100% publicly owned
[13] ABC (2008). Hydro confirms Bell Bay buy back offer; ACCC (2008). ACCC accepts undertaking in Tamar Valley generation assets acquisition
[14] Scott Murdoch (2009). It's game over for investment bank Babcock & Brown
[15] Alex Blucher (2016). Tasmanian power crisis: More back-up generators ordered because of delays in Basslink cable repair. ABC

Contestability as a Driver of Inefficiency in Natural Monopolies

Natural monopolies are a common economic phenomena, which occur wherever a good or service contains natural barriers to entry that make market competition impossible. For example, train lines are natural monopolies as consumers are unable to choose between multiple companies who provide the same service; such competition would entail investment in multiple identical trainlines, creating substantial inefficiencies that would ameliorate any benefits made through competition. Similarly, it is not feasible for multiple firms to provide competing transmission and services. Between Australia's low population and large landmass, the capital expenditure required to build and maintain multiple transmission and distribution networks would far outweigh the potential benefits.

Therefore, as the most efficient electricity network is one where consumers have a single connection to the grid, and substations have single connections to generating units, it can only be the state which is responsible for delivery. This is demonstrated by the fact that private electricity network providers in Australia never face *actual competition* outside of the original sale process; they simply service different markets, divided by region. Consumers have no choice which network provider they use, as it is naturally determined by location. As a result, private operators have no incentive to compete on price, efficiency, or quality, to grow their market share.

Ring-fencing is intended to address the inability of natural monopolies to feature competition, by functionally separating the regulated services offered by network providers from any other business activity so as to prevent abuses of market power, including cross-subsidization and customer discrimination.

However, this largely ignores how public ownership can drive *down* operational costs for taxpayer funded network service providers and reduce costs across the board. Importantly, the inability to cross-subsidise means that network costs are incurred (within a pre-set determination) and passed on to consumers through network charges. Where concerns regarding discriminatory practices arise, the ownership of these assets by a democratically elected government means that genuine accountability would still be achievable in the absence of ring-fenced entities. This would, in turn, produce additional savings on administration and regulatory costs associated with market regulation.

For example, CEPU members in Tasmania. report that when attending a customer's premises to respond to a fault, where a portion of the work required is deemed an unregulated service they are required to leave it unfinished for a third party contractor to perform work despite having all the requisite skills, equipment, tools, and replacement parts on-hand. For customers, this can mean that simple routine works are staggered over 2-3 visits from separate groups of workers instead of being completed in the one go. Not only is this inconvenient and unproductive for customers and workers alike, but it adds an additional and wholly unnecessary layer of costs to maintenance and repair programs. Ring-fencing is intended to reduce costs by encouraging cost-competition, but in practice, it actually just introduces new transactional costs.

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

The Role of Transmission and Distribution as Enablers of the Energy Transition

The decarbonisation of Australia's energy system will require thousands of kilometres of new transmission lines. While transmission and distribution are nominally beyond the scope of the current terms of reference, the ETU stresses that a failure to address these crucial areas threatens to undermine the efficacy of any recommendations proposed through this review.

The ETU has repeatedly engaged with government on the limitations imposed through the RIT-T process to deliver fit for purpose transmission expansion and augmentation. The existing interpretation of a narrow economic test presents a barrier to decarbonisation by failing to deliver community support, social licence, or broad economic benefits.

As it stands, investment in transmission and distribution remains uncoordinated and there is no incentive to maximise national economic benefits, and ensure benefit is shared amongst diverse community stakeholders. As noted by Nexa Advisory, the current regulatory process has contributed to:

> *… challenges around social licence and early community engagement throughout the planning process. This is because proponents are expected to justify both the need for community engagement, and the basis for the costs as part of its expenditure forecasts, and the AER must still review the associated expenditure through the lens of efficiency.* [16]

As a result, the current regulatory process means that the AER cannot consider deviations from the "least-cost" route to avoid areas of significant concern. Recognising this, many states have made significant reforms to their processes for approving new transmission and generation projects. In Victoria, the government has adopted the NEL to introduce an economic benefit test to their regulatory investment test. Similarly, NSW has altered its approach for transmission approvals in Renewable Energy Zones (REZs), to avoid the constraints imposed by the unnecessarily limited application of the Regulatory Investment Tests for Transmission (RIT-T), constrained as it is by narrowly defined and interpreted National Energy Objectives (NEO).

In addition to delays in the construction of new transmission lines, the ETU finds significant under investment in new transmission and the maintenance of existing transmission assets. For example, in 2024, approximately 20,000 people in Broken Hill and surrounding communities in far western NSW were left for more than a week without power, after a storm took out the only transmission connection to the area, known as X2.[17]

In response, Transgrid needed to deploy Lindsey Emergency Restoration System structures, or 'Lindsey Towers' (LTs) to quickly bring it back online. However, they had neither invested in enough LTs to cover the outage nor ensured that the workforce had been trained to build them. As a result, consumers were without power for longer that would have been expected. In contrast, QLD's Powerlink require that all linesworkers practice installing LTs every 6 months.

Additionally, as Broken Hill and the surrounding communities rely on two diesel-fired generators, built in the 1960s and in need of significant refurbishment, to remain operational in times of crisis. Unfortunately, when X2 went down one of the generators was offline for maintenance, and the other generator was not capable of handling the load, resulting in sweeping blackouts. Eventually, it was a Battery Energy Storage System (BESS) already connected to nearby solar and wind generation

[16] Nexa Advisory (2024), *Supercharging Transmission Buildout*.
[17] ABC (2024). Broken Hill, surrounding communities without power after wild overnight storm

(and previously ordered by Transgrid to be disabled) that was eventually brought online to restore power.

Worst of all, this vulnerability was known to Transgrid. In 2021 they assessed five options for addressing it, including the construction of new transmission lines, which would support development of nearby REZs and increase system reliability. Instead, Transgrid proposed the development of a compressed air storage system that The Public Interest Advocacy Centre had warned was not a commercial technology.[18] Ultimately, they chose to simply refurbish the diesel-fired generators, increasing emissions over the medium term and leaving the system more vulnerable to extreme weather events.[19]

With public ownership, transmission and storage could have been developed with public oversight from start to finish to connect the towns to renewable energy and prevent this foreseen and preventable system failure.

Maximising Reliability of Coal-fired Power Stations until their End of Life

The most recent AER *Wholesale Markets Quarterly Report* found that the average capacity unavailable due to coal outages in Q4 2024 was significantly higher than the same time in the previous years, contributing to high price events and market volatility.

As power stations age, they become more unreliable and require more frequent maintenance to remain operational. Indeed, Baringa recently published analysis of data from the past decade, showing that a "coal generator's availability to produce electricity drops dramatically from 40 years of age, decreasing from 81% to 65% on average".[20]

Unreliability due to age is compounded by operators changing their maintenance regimes as generators approach their end of life.

In 2020, AEMO commissioned AEP Elliptical to produce an assessment of ageing coal-fired generation reliability, to produce projections of Thermal Generation Reliability and Forced Outage Rates (FOR). The methodology included interviews with operators of the sixteen coal-fired power stations in the NEM, to understand various aspects impacting on outage rates.

Significantly, the report found that many operators may change maintenance regimes as they approach their announced closure date:

> *For plants approaching their end of life, planned maintenance outages generally continue as normal until the last 4 or so years of operation after which AEP Elliptical expects maintenance expenditure will be reduced to meet statutory obligations only. This is expected to result in increases in FOR and EPOR values in the final years of operation.*[21]

In order to decarbonise, the current sources of energy generation must be able to operate effectively and efficiently until renewables exceed demand. Therefore, the committee should consider whether current statutory obligations are sufficient to ensure that coal-fired power stations are maintained at levels to provide sufficient capacity and grid reliability until their end of life.

[18] Transgrid (2021). *Maintaining reliable supply to Broken Hill. (pp. 19)*
[19] Transgrid (2021). *Maintaining reliable supply to Broken Hill. (pp. 40)*
[20] Climate Council (2025). *Lights Out: Ageing Coal and Summer Blackouts*
[21] AEP Elical (2024). *AEMO Ageing Coal-Fired Generation Reliability (NEM)*. (pp. 7)

The Need to go Beyond "Economic Efficiency"

The National Electricity Law contains a NEO which purports to apply "economic efficiency in the long-term interests of consumers". This is not a problem in and of itself, however the interpretation has been far too narrow, and has consequently constrained important considerations regarding our energy system. These include its important role in emissions reductions, the increasing impact climate change is having on system resilience, and the essential contributions it makes to the Australian economy.

While the NEO has since been broadened to include consideration of climate goals and emissions reductions, this reform missed a significant opportunity to include additional amendments which recognise the importance of social licence in delivering broad economic benefits to diverse community stakeholders, or to ensure the resilience of the grid.

The amendments also failed to properly address "resilience" in the face of more frequent and severe natural disasters, with implications for overall energy system design, maintenance and operation. This means that state governments and developers continue to have to take an ad hoc approach to resilience in order to protect consumers from the impacts of these disasters. For example, the Victorian government recently sought feedback on a draft rule change proposal that would change how the AER assesses 'resilience' in their revenue determination processes for DNSPs.[22]

This means that states continue to seek work arounds to avoid the regulatory obstacles in the NEM. In NSW, the *Electricity Infrastructure Investment Act 2020* specifically list supply chain, local jobs and training opportunities as an objective of its energy transition plan, to be balanced against the interests of electricity consumers. Similarly, the Victorian Renewable Energy Target (VRET) program also centres employment, training, and broader community benefits in its energy transition work, while delivering affordable electricity for consumers. Additionally, the Queensland Government's *Powering Queensland Plan* aims to deliver stable energy prices, ensure long-term security of electricity supply, transition to a cleaner energy sector, and create new investment and jobs.

Recommendation: That the Review amend the NEO to include consideration of community benefits and specifically, a long-term vision of the energy workforce, in order move beyond the current peaks and troughs of energy system development exacerbate skills shortages and hamper work being performed.

[22] AEMC (2025). *Recognising distribution network resilience in the national electricity rules*

Appendix A: Examples of Low Training Numbers in Government Funded Renewables and Transmission Projects

The following are a selection of case studies from ETU branches that provide examples of significant failures to employ apprentices on government funded clean energy projects.

Project Energy Connect, NSW

PEC is Australia's largest energy transmission project, involving 900km of new 330KV high voltage transmission lines to connect NSW and SA. Green Light Contractors (GLC), a subsidiary of Elecnor Australia (Elecnor), was awarded the contract for the design and construction of the NSW section by Transgrid. GLC has a current labour migration agreement (LMA) to provide migrant workers to PEC.

The project is slated to create 1500 jobs on the NSW section alone. ETU organisers report that there are 1200 workers employed at any onThae time on the site, including over 400 overseas workers employed via an LMA, who are paid $10/hour less than domestic workers. The ETU has identified systemic abuse of overseas Filipino workers on PEC. This includes:

- being hired in lower roles than they are qualified to perform at home, and being paid $10/hour less than the domestic workforce employed on the Project with the same qualifications;
- not being provided with culturally appropriate food and/or not being allowed to cook their own food;
- being put on different roster rotations than the domestic workforce, with Filipino workers reporting that they are expected to work 8 weeks straight before being rostered for two weeks off – in that period, they are only given one day off every 14 days – raising significant concerns about fatigue on site, especially when compared to the two weeks on, one week off roster for the domestic workforce.

Workers also report instances of being served food that was out-of-date – including rotting food – and instances where the worksite kitchen has failed to properly cater for the workers on site and run out of food.

At the same time, TransGrid and Elecnor have not hired any apprentices to work on PEC. GLC was instead engaged to hire "up to" 100 trainees completing a Certificate II, which involves training in "basic operational knowledge" of "mainly routine work" with "limited complexity". There appears to be no commitment to use the opportunity to train a domestic workforce to an advanced standard, with trainees only offered an 18-month Certificate II qualification with little skill transferability and no direct Cert III trade qualification pathways.

Hunter Transmission and Renewable Generation Projects, NSW

The NSW branch reports that significant, government funded renewable and transmission projects are failing to employ sufficient – or even any – apprentices, including the Hunter Power Project and Waratah Super Battery. This is in the face of ongoing shortages of electrical trades, and employers needing to look beyond the region to employ qualified trades people.

Hunter Power Project, Kurri Kurri

The project has an obligation to employ a minimum of 10% apprentices – the company is currently failing to meet this obligation. The company conducted several expressions of interest to meet their obligation to employ 65 apprentices (based on a 650 strong workforce). However, as of May 2024,

less than 20 potential apprentices had been offered an apprenticeship and none had started as apprentices on the project. Even if all the successful applicants took up their apprenticeship, the company would still only meet 1/3 of their obligation.

The company also has obligations to hire indigenous apprentices. The union has identified no indigenous apprentice that has been offered an apprenticeship but is yet to start on site.

This shortfall in the number of apprentices employed relative to the company's obligations is ongoing, despite the union having raised the issue with the relevant Minister in December 2023.

Waratah Super Battery, Munmorah

CPP is the main contractor at the Waratah Super Battery. The union has only identified three apprentices employed on the site, relative to a total daily workforce in excess of 100-150. Electrical work on the project has been going on for approximately 12 months, and even longer for civil and other trades. Despite union engagement regarding the failure to comply with their obligation to employ a minimum of 10% apprentices, the company has failed to increase the numbers of apprentices on site.

Shortages and Apprentice Employment across the Hunter Region

Via our delegates, the ETU has identified several prospective applicants who are interested in undertaking an electrical apprenticeship. The branch has identified a GTO and training provider, Electrogroup Training, as a provider who could place apprentices on projects across the region, to allow these projects to meet their 10% apprentice obligation.

The failure to employ apprentices on these projects has repercussions on projects across the Hunter region, where there are significant shortages in the electrical workforce. The local organiser currently looks after projects with a combined value of $11 billion, ranging from infrastructure projects to high rise residential construction. A number of these projects are currently looking for electrical trades and unable to fill roles. For example, the Eraring Battery Storage facility is starting to ramp up and will require an additional 60-80 electricians for this project alone. The Hunter Power Project currently has around 170 electricians and is sourcing additional labour from Sydney and interstate.

MacIntyre Wind Farm, Queensland

MacIntyre Wind Farm is a 1,026-MW wind power complex under construction southwest of Warrick in Queensland. With a total investment of AU$1.96 billion, the 1,026MW MacIntyre Wind Farm Precinct is being developed by Acciona and is one of the largest onshore wind farms in the world.

The project is approximately 70% completed and there are around 500 FTE construction workers on the project, many of whom are 88-day working holiday visa workers.

The wind farm construction and high voltage reticulation work is all being performed by Acciona who employ no apprentices on the project. As part of the project, new high voltage substations also need to be constructed to connect the high voltage reticulation network.

The failure to employ apprentices on this project is not due to the lack of demand for apprenticeships in the region. Yurika, a subsidiary of Energy Queensland Limited has the contract for the substation construction, have a regular supply of apprentices who are rotated through the substation part of the project. If a GTO was appointed to the region *and* there were minimum apprentice ratios on government funded procurement projects, the MacIntyre Wind Farm could be providing training opportunities to a significant number of apprentices over the life of the project.