

Post 2025 Market Design

A transition plan without a plan to transition

Submission by the Electrical Trades Union to the Energy Security Board

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1 RECOMMENDATIONS

In order to ensure the Post 2025 reforms to the energy sector are in fact in the long-term interests of workers, communities, and consumers the ETU calls on the Energy Security Board to make the following recommendations to the COAG Energy Council Ministers:

1. Re-nationalise the National Energy Market so that public ownership and public accountability is returned to Australia's essential energy systems.
2. Amend the National Energy Objective to include a focus on balancing consumer interests and worker interests and the need for a fair transition in the energy sector.
3. Establish a public Transition Authority to oversee the orderly and equitable transition of the energy sector with the requisite regulatory power and resources to ensure:
 - a) equitable sharing of responsibilities and fair distribution of the costs associated with the transition of Australia's energy sector,
 - b) formal consultations with relevant stakeholders including trade unions, employers and communities',
 - c) the promotion of clean job opportunities and the greening of existing jobs and industries through public and private investment in low carbon development strategies and technologies and the appropriate educational qualifications that enhance working peoples' capacity,
 - d) formal education, training, retraining, and life-long learning for working people, their families, and their communities,
 - e) organised economic and employment diversification policies within sectors and communities at risk, and
 - f) development and implementation of social protection measures such as active labour market policies, access to health services and social insurances among others.
4. Establish an independent review of the current regulatory environment with an objective to abolish the multiple regulatory bodies and bring all the functions into a single regulatory body.
5. When amending generator notification of closure law, introduce consequential amendments to *the Fair Work Act 2009* to require thermal generator companies to adopt minimum terms in their industrial instruments which provide for transition provisions for worker.
6. Mandate the requirement for worker representation on the energy regulator's boards and advisory bodies and for consultation with workers and their representatives in their consultation activities and in particular, technical decision-making.
7. Abolish the RIT-T and replace the assessment of Transmission upgrades, augmentations and expansions with a broad economic benefit test which assesses the right planning, coordination, timing of projects in order to guarantee the maximum possible economic benefits to Australian consumers, workers, communities and supply chain manufacturing businesses, including through expanded public ownership.

2 INTRODUCTION

1. The Electrical Trades Union of Australia (“the ETU”) is the Electrical, Energy and Services Division of the Communications, Electrical, Electronic, Energy, Information, Postal, Plumbing and Allied Services Union of Australia (CEPU). The ETU represents over 60,000 electrical and electronic workers around the country and the CEPU as a whole represents over 90,000 workers nationally.
2. The ETU welcomes the opportunity to make a submission on the Energy Security Board’s Post 2025 Market Design Consultation Paper.
3. Australia is in the middle of rapid energy sector transformation that is being poorly managed by a largely dysfunctional regulatory environment that is attempting to operate in a landscape devoid of policy certainty.
4. More than three decades of championing investor profits as the key driver of energy reform rather than a considered Government led and properly planned and resourced energy transition is not delivering for customers, workers or communities.
5. The post 2025 market review appears to contemplate a narrowly constrained reform agenda that is attempting to create a transition plan without an actual plan to transition.
6. The solution to correcting the failings of marketisation, corporatisation and privatisation to deliver energy sector reform for the benefit of the Australian community is not more marketisation, corporatisation and privatisation.
7. Australia’s current state of energy policy paralysis is being exploited by private energy companies with ever increasing profits coupled with ever decreasing service levels. Several reports, such as the Australia Institute, *The Costs of Market Experiments: Electricity Consumers Pay the Price for Competition, Privatisation, Corporatisation and Marketization*¹ shows the wasteful nature of the artificial structure of private competition that has been imposed on the electricity sector.
8. The report clearly articulates costs drivers:
 - a. Real output per worker in the electricity sector has fallen by 37% between 2000 and 2018, due to the excessive allocation of ultimately unproductive labour to advertising, sales, contract administration and other activities associated with privatisation.
 - b. The number of sales-staff employed by electricity companies has grown almost 400% since the industry began to be privatised in the mid-1990s and the number of managers has grown over 200%.
 - c. Productivity growth has been worse than for any other industry in Australia, completely contrary to the assumption that privatisation enhances efficiency.
 - d. Over the same period, the number of electrical tradespeople and other workers involved in actual production has grown just 21%.
 - e. Electricity sector now spends more on finance and banking costs than the actual fossil fuels that power electricity generation.
9. It is regrettable that the terms of reference of this consultation precludes any analysis of anything other than a market-based solution. Absent critical analysis of all the

¹ [The Costs of Market Experiments](#)

options available prevents the consideration of other approaches that are in the best interests of consumers.

10. Fully re-nationalising the electricity industry is the only sensible solution to drive down costs, eradicate energy market misconduct, deliver a timely and well planned energy transition while ensuring Australia's essential electricity services are delivered in the best interests of consumers, workers and the broader Australian community.

3 RESOURCE ADEQUACY MECHANISMS (RAMS)

11. The current National Electricity Market (NEM) design is proving incapable of ensuring timely deployment of new generation and system services and unable to ensure these are deployed in the right locations.
12. Leaving the planning and deployment of the energy transition to the whims of financial investors motivated by high rates of return is reckless. These investors have demonstrated a commitment to profits but no commitment to local employment, local businesses, or local communities.
13. That much of the new renewable generation being deployed in the network is securing greater than a 10% rate of return on long term, low risk asset classes demonstrate the inappropriateness of leaving the energy transition 'to the market'.
14. Firstly, these high rates of return are argued as somehow necessary to offset the investment uncertainty caused by the absence of any guarantee as to the timing and capacity when connecting to the network. Secondly, these exorbitant rates of return are being borne by consumers.
15. It is incongruent that rates of return above 6% within Network businesses were variously described as 'profiteering' and 'gold plating' while greater than 10% rates of return on renewable generators is contemplated through the lens of needing to 'send the right investment signal'.
16. The current, and proposed approaches are focussed almost entirely on appeasing investors wallets with little or no regard to the actual long-term interests of consumers.
17. We note that the COAG Energy Ministers are seeking a rule change² to prevent private wind and solar farms from manipulating the market. The AER paper outlines that during periods where the spot price falls below \$0 some solar and wind farms are ceasing exports or reducing their outputs obviously to avoid paying for the privilege of generating.
18. A clear example of 'gaming' the system, which Angus Taylor argued his Energy Market Misconduct laws would fix.³
19. The ETU argued consistently⁴ that these laws were all about the announcement and contained no substance and no capacity to deal with misconduct. The framework under which the electricity market operates, from a layperson point of view, appears to

² <https://www.aer.gov.au/publications/reviews/semi-scheduled-generators-proposed-rule-changes>

³ <https://ministers.treasury.gov.au/ministers/josh-frydenberg-2018/media-releases/new-laws-are-win-energy-users>

⁴ <https://www.aph.gov.au/DocumentStore.ashx?id=7d7e2810-1097-49ca-b31f-9954b3b66520&subId=665745>

have as its central feature, a focus on actively facilitating misconduct rather than preventing it.

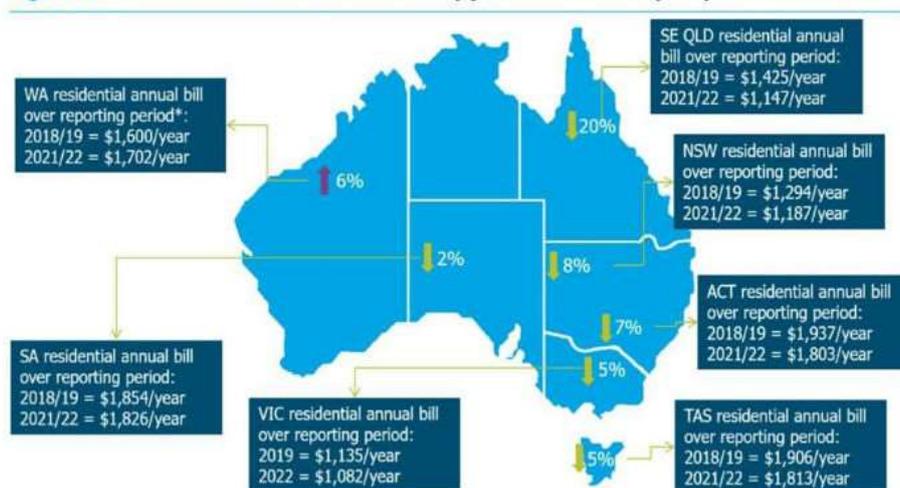
20. The Union's position has been vindicated in this recent announcement in that we said these laws were useless and the real culprit was the poorly constructed market mechanisms that allow for and even encourage these kinds of behaviours.
21. It also leaves the question: now that it has been proven that the Energy Market Misconduct laws do not actually prevent misconduct such as the kind identified above, what are they for?

Five Minute Settlements

22. The ETU is aware of the proposed 1 October 2021 commencement of the five minute settlement rule. Whilst recognising there is an absolute case for this rule change under the current market arrangements, particularly due to the lower cost of trading intervals that will result from this reform, nothing in this rule or in the broader consultation paper deals with the impacts that will result from this change.
23. Firstly, there is currently no mechanism to enforce that any reduction of wholesale energy costs will actually flow to the benefit of consumers.
24. Despite regular declarations from the AER or the Federal Government of successful reductions in energy prices, consumers prices continue to rise. Recent reports from the AER⁵ declared the lowest Q1 wholesale electricity prices since Q1 2015.
25. The ETU notes that despite record reductions in networks costs, wholesale electricity prices falling considerably and massive interventions in retail markets, the total benefit to consumers on average is forecast to be a reduction of less than \$2 per week from their average electricity bills over the next 3 years.

Extract from AEMC 2019 Electricity Price Forecast Report⁶.

Figure 1.1: Trends in annual residential bills by jurisdiction over 3-year period



Source: AEMC analysis

Note: * A different methodology has been used for WA allowing the AEMC to estimate both electricity cost of supply and residential price. Our results for WA should be treated with caution given the different methodology that has been used to establish these prices. Residential electricity prices are set by the WA Government.

⁵ <https://www.aer.gov.au/news-release/wholesale-energy-prices-continue-to-fall>

⁶ [https://www.aemc.gov.au/sites/default/files/2019-](https://www.aemc.gov.au/sites/default/files/2019-12/2019%20Residential%20Electricity%20Price%20Trends%20final%20report%20FINAL.pdf)

[12/2019%20Residential%20Electricity%20Price%20Trends%20final%20report%20FINAL.pdf](https://www.aemc.gov.au/sites/default/files/2019-12/2019%20Residential%20Electricity%20Price%20Trends%20final%20report%20FINAL.pdf)

26. Second, the introduction of the five minute settlement rule will introduce significant unintended consequences for workers, local supply chains and communities due to the subsequent reduction in the commercial life of many fossil fuel generators resulting from the change.
27. Absent any guaranteed reduction in consumers electricity bills and an enforceable plan to transition these workers and communities, many are left wondering who will actually benefit from this reform. It appears investors are once again in the firm position of 'winner takes all'.

Wholesale Demand Response

28. Attempting to resolve the debacle that is Australia's National Electricity Market through a 'wholesale consumer activist' lens is reckless and disregards important issues of community safety, socioeconomic exclusion, and workplace rights.
29. Adding to the complexity of this issue is the completely inadequate regulatory oversight of the flow on impacts of wholesale demand responses. Once again, a case of technical energy regulation continuing to be blind to its impact on workers and the broader community.
30. A serious question must be asked: how has it become the focus of wholesale consumers being the ones tasked with figuring out how to reduce their energy demand in response to the shortcomings of the network rather than the network serving the needs of those businesses which are reliant on a steady, stable and reliable electricity supply?
31. Another concern for the ETU, under the current and proposed models, relates to the additional network pressures introduced by 'prosumer' initiatives. They are rarely paid in full by these individual large consumers but rather borne by all consumers while the individual reaps all the benefits exclusively. The focus of these programs put pressure on the system without acknowledging this will cost and someone has got to pay.
32. Further it is well established that some large energy consuming businesses are gaming the system by purchasing greater energy supplies than they need for the specific purpose of on selling their additional supplies for profit during periods of higher priced trading intervals in the electricity market. A practice that, while abhorrent, is entirely lawful.
33. As wholesale demand response grows, Australian business, workers and consumers will be forced to grapple with the impacts of 'turning off' or 'winding down' an entities operation to either meet the networks needs or to maximise profits for the business. What happens to the workforce in these businesses that are turned off during peak demand periods? If it is a large school or nursing home or some other community service, who receives priority in the decision to cut or reduce demand?
34. At the end of the day, there is a serious risk that individual consumers, workers and the community will be placed second to the potential of maximising profits and these adjustments and initiatives will ultimately put a strain and an additional cost onto the network which will then be disproportionately borne by the consumers.

Deficiencies in Planning

35. The final issue associated with RAM's is some of the obvious deficiencies contained within the current planning processes. The GenCost process which ultimately acts as a reference base for future projection by AEMO has some concerning shortcomings.
36. By way of example, a key input to the Integrated System Plan(ISP), GenCost 2019-20, categorises offshore wind power as a speculative 'other' technology,⁷ while listing nuclear Small Modular Reactors (SMR) technology, gas with Carbon Capture and Storage(CCS), brown coal with CCS, and black coal with CCS in the main listings of the different available types of technologies.⁸
37. This is despite the fact that SMR technology does not actually exist yet anywhere in the world. Nuclear power generation is also currently banned in Australia and costed at \$16,000 \$/kW in the report (p.15). There is also no working power generator with CCS in operation in Australia, and no credible proposals underway that we are aware of.
38. In contrast offshore wind is a well-known and established technology, costed at \$6,000/kW in the GenCost report (p.19-20).
39. There are currently over 4,500 grid-connected offshore wind turbines operating in Europe alone, and more being built across Asia and North America.
40. In Australia, there are the following offshore wind projects underway:
 - a. A 2GW project with an exploration licence and environmental referrals underway and led by an experienced developer with serious investment support off the coast of Victoria.
 - b. In September 2020 it was announced to the ASX that a \$1.2 million feasibility study will be undertaken for a 1.1GW offshore project off the coast of West Australia.
 - c. An application for an exploration licence has been lodged with the Department of Industry, Science, Energy and Resources for an offshore wind project off Newcastle.
 - d. Developers are looking at the possibilities of re-using licenced areas for oil and gas exploration in the Bass Strait for offshore wind.
41. It would appear there is an issue of regulatory capture to the fossil fuel industry in some of the planning processes which needs to be eradicated if we are to obtain reliable planning information for the future.

4 AGEING THERMAL GENERATION STRATEGY

42. Australia is more than a decade into an entirely uncontrolled and unplanned energy transition. As pointed out by the Centre for Climate and Energy Policy, Crawford

⁷ *GenCost 2019-20* says that 'other technologies...have higher uncertainty about their future potential investment prospects (ocean located technologies...) but remain of interest' (p.19), implying that their use is more unlikely than the 'main' technologies.

⁸ Graham, P, Hayward, J, Foster, J, Havas, L. [GenCost 2019-20](#), CSIRO. Main technologies are listed on p.11-19.

School of Public Policy⁹, around one-third of Australia's coal-fired power stations closed between 2012–2017 and most of the remainder are expected to close within a few decades.

43. In this energy transition, ensuring a just transition for affected workers and communities is a priority for the ETU. The sudden closure of two foreign owned private generators in, Alinta's operations in Port Augusta in 2016 and Engie's Hazelwood power station in 2017, illustrate the inadequacy of an unplanned transition in this sector. Both were sudden and came with detrimental impacts on workers and their communities that are still being felt some 4 years later.
44. These detrimental impacts would have been far greater if it were not for the work of the relevant trade unions, including the ETU, and the Gippsland community to advocate for and secure the support of the Victorian State Government to set up the Latrobe Valley Authority. The broader issue that needs addressing is how the Federal Government opportunistically claims the benefits of new energy sector jobs as if they created them but are nowhere to be found when it comes time to support impacted workers and their communities during and after power station closures.
45. The absence of any form of Just Transition policy in the consultation paper indicates the ESB is simply determining an ageing thermal generation tactic, rather than anything with sufficient detail to warrant being called an actual strategy.
46. Transitioning any industry is a massive economic and social disruption, and sadly it is something that has been done poorly to date in Australia, often waiting until a company, or an entire sector, goes under before offering training or financial assistance to redundant workers.
47. The consequences of not having a plan to transition an industry that is undergoing significant structural change can be devastating. History shows that workers and communities often bear the brunt of such transitions suffering hardship, unemployment, and generations of economic and social depression.
48. Industry also suffers through the loss and disengagement of skilled workers that could otherwise have been re-skilled, upskilled, or cross skilled into the new technology area. The subsequent rush to fill skills shortages through poorly cobbled together employment programs, temporary skilled visa arrangements or through the utilisation of a fly in / fly out workforce is completely avoidable.
49. The energy trilemma of reliability, affordability and accessibility will not be solved as long as the fundamental issue of a just transition remains absent from the debate. Whilst the ETU is interested in Just Transition from the position of advocating for our members interest who work in this industry, this is not the singular reason.
50. Australia's energy industry cannot function without an appropriately qualified, skilled, secure, and reliable workforce. Consumers should not be forced to wear inefficient costs associated with an energy transition that is absent the obvious workforce planning required for an effective transition.
51. The fact that energy policy in Australia remains completely absent of any consideration of the workforce and community planning requirements which ensure energy assets

⁹ <https://ccep.crawford.anu.edu.au/publication/ccep-working-paper/12998/closures-coal-fired-power-stations-australia-local-unemployment>

are effectively operated, maintained, repaired, replaced and commissioned can only be described as negligent.

52. A properly established and resourced public Transition Authority is the only sensible solution.

Improved Notice of Closure Arrangements

53. The ETU has previously argued that the current notice of closure arrangements are deficient and we would be concerned if any reform was limited to simply increasing penalties in a deficient regulatory environment and/or tinkering at the edges of regulation.
54. The current rules do not ensure that closure notifications are evidence based. There is no requirement for Generators to independently validate their assessment of determining the closure date, nor does it adequately prevent a Generator from changing the closure date, including changing the date multiple times.
55. There is also a concern that a change in closure date beyond three years might technically meet the threshold of having been notified as per the rules. By way of example:
 - a. Generator X notifies intended closure date of 3 years from today. Subsequent to this notification, at the end of year 2 generator X notifies new closure date of 2 year later (5 years from original notification).
56. Arguably this would be compliant with the proposed rule change as the notification has technically been provided in the requisite 3 years.
57. Further, the “beyond the reasonable control” exemption provisions of the rule change create even greater uncertainty as to when a Generator will actually close, particularly when this is considered against the other reforms proposed that will have the real effect of reducing the commercial life of most fossil fuel generators in Australia.
58. Finally, genuine closures of Generators for legitimate reason does not appear to have been contemplated such as periods of “mothballing”, extended maintenance shutdowns and augmentations or a significant period of non-generation caused by fuel reserve shortages or supply issues.
59. At the time of the rule change the ETU argued the current construct of the rules meant it is entirely foreseeable that Generator closures will be no less certain than under the current regime. It appears this has been the outcome.
60. Any reform to notification of closure rules must address these concerns in order for closure notifications to hold value.
61. In addition, the ETU is familiar with the Grattan Institutes report *Power play: how governments can better direct Australia’s electricity market*¹⁰ and its argument for a more structured funding of generation transition. While broadly supportive of the concept of the industry itself being required to plan for and fund for a proper transition,

¹⁰ <https://grattan.edu.au/report/power-play/>

the ETU believes these measures need to go much further in guaranteeing a fair and just transition for the impacted workers and communities as well.

62. These should be enforceable regulatory requirements as per our introductory comments and centrally coordinated under the oversight of a public transition authority rather than being left to a 'market' that hasn't demonstrated any capacity so far to act in a socially responsible manner.
63. In addition, any amendment to generator closure legislation should be accompanied by consequential amendments to Australia's industrial laws to provide a legislative requirement for mandatory transition conditions in any industrial instruments associated with thermal generation workplaces.
64. Finally, the Federal Government should join with the 46 countries globally who have committed to developing a Just Transition plan as part of their commitment under the Paris Agreement¹¹.

Leaving it to the States

65. While recognising there is a need for States and Territory's to consider appropriate planning for their energy needs, the challenge of leaving it to the states are twofold.
66. Firstly, the overwhelming evidence so far indicates that, largely, States are not up to the task.
67. Secondly, the ad hoc and inconsistent approaches taken by States and Territories have been a major contributor to the uncertainties that exist in the system.
68. While some states have taken some bold first steps to better planning and coordinating the energy transition such as the Queensland Government's establishment of CleanCo and the creation of a Just Transition Group, other Jurisdictions are much further behind (and sometimes much more constrained) in their work.
69. A more sensible approach would be the establishment of a public Transition Authority to ensure Australia leads the way in driving expansion of reliable and affordable renewable energy generation through coordinated and sustainable investment decisions which maximise supply chain opportunities, jobs, skills and training throughout the transition.
70. Historically, the move to renewable power sources in Australia and abroad has not been managed well with only a few exceptions.
71. Workers and the communities in which they live, are all too often the last consideration when it comes to closing inefficient, high polluting generators and building new clean energy projects.
72. The devastation to jobs and the local community experienced through the sudden closure of Hazelwood power station in Victoria and the Port Augusta power station and

¹¹ [Just Transition Pledge UN Climate Action Summit 2019](#)

the subsequent scramble to implement worker transfer programs are just two recent examples that can and must be avoided into the future.

73. The heart and soul of many regional communities is the highly skilled workforce already working in this sector. Through the effective utilisation of existing generator staff and by providing a seamless employment pathway from fossil fuel generation to renewable and storage mediums, and cheaper and cleaner manufacturing industries, employment opportunities will be maximised, and communities will be supported to transition to the jobs of the future
74. The single biggest challenge for Government energy policy in Australia's electricity generation sector is how to manage a just transition from fossil fuel to renewable energy sources.
75. The transition to affordable, reliable and renewable energy does not need to occur in a way which is detrimental to Australian workers and their communities, but it won't happen automatically.
76. The key matters that must be resolved to ensure a Just Transition include:
 - a. equitable sharing of responsibilities and fair distribution of the costs associated with the transition of Australia's energy sector,
 - b. formal consultations with relevant stakeholders including trade unions, employers and communities',
 - c. the promotion of clean job opportunities and the greening of existing jobs and industries through public and private investment in low carbon development strategies and technologies and the appropriate educational qualifications that enhance working peoples' capacity,
 - d. formal education, training, retraining, and life-long learning for working people, their families, and their communities,
 - e. organised economic and employment diversification policies within sectors and communities at risk, and
 - f. development and implementation of social protection measures such as active labour market policies, access to health services and social insurances among others.
77. A public Authority would have oversight of the deployment of new renewable generation. It would be able to assist in the coordinated phasing out of stations whose operating life is exhausted through planning for and delivering new clean generation replacement capacity in the right places at the right time.

5 ESSENTIAL SYSTEM SERVICES & SCHEDULING AND AHEAD MECHANISMS

78. The ETU's contribution to these two sections is predetermined by our initial views stated in our introductory remarks and in several of the other chapters of this submission. On this basis, we do not wish to unnecessarily replicate content already outlined within the submission.
79. Suffice to say, in summary, that the renationalisation of Australia's essential electricity sector with meaningful regulatory reforms outlined throughout our submission means the ETU supports a centrally controlled and coordinated system of dispatching these services as the only appropriate way to plan for, coordinate and deliver optimal system security outcomes.

80. The concept of planning for, coordinating and delivering system security measures through the addition of further energy markets and sub-markets with ever evolving rules and regulations is ludicrous. Creating more artificial markets in an attempt 'incentivise' profit driven entities to somehow deliver in the best interests of consumers, workers and their communities could only be described as fanciful and the blind pursuit of madness.
81. How can it be argued to be in the long term interests of consumers to be forced to pay for what will be thousands of additional sales, marketing and managerial staff required in regulatory bodies, generators, retailers and network companies to regulate, monitor and manage these entirely unnecessary artificial market arrangements.

6 TWO SIDED MARKETS

82. Due to the interrelation of each of these market design initiatives, several of the issues associated with two sided markets have been discussed in other sections of this submission and we would refer the ESB to those parts rather than repeating them here.
 - a. Five minute settlement in Chapter 4 - (pg 6)
 - b. Wholesale demand management in Chapter 4 - (pg 7)
 - c. DER Technical Standards in Chapter 9 – (pg 16)
83. Notwithstanding, the ETU understands both the role of and value in, recognising that two sided power flows are already a feature of Australia's energy system, despite the system not being fit for purpose to handle it, and that these flows will increase exponentially in the next decade and beyond.
84. There are two major risks the ETU sees with the inevitable increases in two way flow of energy. Firstly the inequitable way the current market and regulatory arrangements favour some consumers over others while ignoring the profiteering of retailers and poor installation practices associated with this part of the industry. Secondly, the deeply inefficient and deficient regulatory environment which continues to drive poor outcomes for energy workers and consumers.

The Prosumer Fallacy

85. Attempting to resolve the catastrophe that is Australia's National Electricity Market through a 'consumer activist' lens is reckless and disregards important issues of safety, scale, quality standards and socioeconomic exclusion.
86. Annual reports from the Clean Energy Regulator have consistently demonstrated the high rates of non-compliance in the small-scale solar installation industry. In fact, their most recent report showed the number of "unsafe or substandard" installations increased again.
87. The proliferation of small-scale renewables and demand management initiatives without any meaningful coordination or planning is having a massive impact on the network, often requiring expensive investment in network upgrades to deal with the subsequent voltage and system imbalance issues. Adding to the complexity of these issues is the high rates of non-conformance and completely inadequate regulatory oversight of this industry.

88. Table 1 below, demonstrates the high rates of poor performance across Australia, with Tasmania having the highest rates of unsafe installations and amongst the highest rates of sub-standard installation, yet the federal Clean Energy Regulator (CER) has never changed its auditing approach, increased its regulatory activities and to the ETU's knowledge has only ever suspended one single operator's license over the past decade.

Table 1. Completed inspection reports received as at 31 July 2018

State	Systems inspected	Unsafe systems	% Unsafe	Substandard systems	% Sub Standard
ACT	311	12	3.86	36	11.58
NSW	6,236	210	3.37	1,082	17.35
NT	142	5	3.52	30	21.13
QLD	8,270	265	3.20	1,583	19.14
SA	3,241	55	1.70	591	18.24
TAS	383	20	5.22	69	18.02
VIC	5,258	201	3.82	754	14.34
WA	4,203	146	3.47	861	20.49
Grand Total	28,044	914		5,006	
Total Percent	-	3.26%		17.85%	

89. A serious question must be asked: when Australia has the largest reserves of relatively cheap fossil fuel sources and even cheaper renewable energy sources how it has become the individual consumers being the ones tasked with figuring out how to reduce their own power prices?
90. Further, under the current model, the additional network pressures introduced by 'prosumer' initiatives are not paid for by these individual consumers but rather borne by all consumers while the individual reaps all the benefits exclusively. The focus of these programs put pressure on the system without acknowledging this will cost and someone has got to pay.
91. The high levels of social and economic exclusion of marginalized and socially disadvantaged people facilitated by these initiatives is deeply problematic, yet those that can least afford it are expected to subsidise the costs of someone else's benefit.
92. At the end of the day, even those individuals gaining some benefits will be unlikely to be able to offset the profiteering by private providers and often, their well-intentioned adjustments and initiatives will ultimately put a strain and additional costs onto the network which are then borne by all consumers.

Regulatory Cost

93. The ETU has been and continues to be critical of the highly complex overlap of many different regulatory bodies and processes and the fragmented and piecemeal

regulatory, ownership and governance structures now imposed on the electrical power industry.

94. The decisions of these regulatory bodies, and in particular the Australian Energy Regulator (AER) are placing a whole range of regulatory pressures on the industry which are resulting in:
 - a. Network reliability and safety is being diminished,
 - b. Regional jobs being lost and the closure of regional depots,
 - c. A changing industry profile from long-term stable jobs to increasing insecure employment practices,
 - d. Reductions in opportunities for training, including apprentices,
 - e. Increased prevalence of second, third, fourth and beyond tiers of contracting out models with high rates of exploitation and unsafe work practices, and
 - f. A network that is not 'fit for purpose' for connecting new generation sources which also places unnecessary financial pressure on renewable developers who then look to cut costs / risks elsewhere, usually leading to downward pressure on wages and conditions in renewable construction.
95. Regulatory decisions used to manage various market reforms such as Ringfencing Guidelines and Metering Power of Choice reforms are in fact introducing deep inefficiencies to the electricity sector.
96. Recent meetings between the ETU and the AER revealed that no assessment of the cost of regulatory impacts is made by the regulator either prior to, or after the introduction of these kinds of guidelines. Similarly, meetings with the AEMC revealed a similar absence of regulatory impact analysis.
97. Until very recently there has been no meaningful consultation with workers and their representatives on reform proposals by the AER or AEMC. Many preliminary and final decisions of these regulatory bodies are framed on extraordinarily narrow technical economic tests which ignore various safety, climatic and geographical challenges faced by workers and industry.
98. A recent example was a decision to refuse EnergyQld's proposal for funding to replace large sections of 3/12 conductor from its network, a known high risk component, that serves some of the more isolated sections of the Qld network as well as connecting important parts of the sub-transmission network. The heightened risk and pressure placed on the company as a result of this decision will undoubtedly put workers safety at risk, increase fire hazards, result in reduced community safety and will likely put strain on network and system security over the 2020 - 2025 regulatory determination period.
99. The reality of the AER issuing operational expenditure determinations based on arbitrary formulae simply creates financial pressures on network service providers to effectively cut corners on safety and / or to simply manipulate the funding pool in an effort to achieve paper compliance. Either outcome is completely unacceptable.
100. Further AER imposes a whole range of inappropriate economic benchmarks which result in many unintended, but obvious, consequences including"
 - a. Managers attempting to utilise assets against manufacturer guidelines,
 - b. Managers introducing unsafe work practices for workers operating equipment,

- c. Adoption of control measures with a focus on the lowest form of control first instead of the highest i.e. administrative controls instead of elimination / substitution,
 - d. Assets being utilised beyond their operational life,
 - e. Asset maintenance cycles being extended for purely monetary reasons without regard for the safety consequences,
 - f. Removing workers from having any meaningful input into the safe operation of electrical apparatus,
 - g. Introduction of less safe work practices; and
 - h. The introduction of suboptimal and often dangerous 'lowest cost' asset maintenance and life extension practices.
101. Many of these decisions have the effect of constraining the network which further limits the capacity to facilitate efficient two-way power flows within the network.
102. The single most astonishing failure of the regulatory determination process is that the substantial regulatory costs are not offset by any enforceability of the network service providers (NSP) plans. NSP's literally spend in excess of a million dollars working their way through a years long regulatory proposal which sets out all the maintenance, augmentation, construction and upgrades they plan for the next 5 years. But once approved there is no actual requirement for the NSP to in fact perform any of the work they outlined in the manner that they said they would.
103. Meanwhile, the regulators employ hundreds and the NSP's collectively employ thousands of regulatory, legal, financial and managerial staff to go through the smoke and mirrors of the most ridiculously complex regulatory process that in the end is not enforceable and literally takes little notice of the community and worker impacts of their decisions.
104. A recent report of the Australian National Audit Office into the AER tabled in Parliament during the week beginning 5 October 2020. is highly critical of the AER's performance, stating:
- 'Performance reporting arrangements have not enabled the AER to demonstrate it is meeting its purposes, such as promoting the efficient operation of energy services for the long-term interests of energy consumers with respect to price, quality, reliability and security.'*
105. A thorough review of Australia's energy regulators is required with a clear objective of consolidating into a single regulatory agency rather than the current structure of disparate agencies who all point to each other every time a problem arises.

7 VALUING DEMAND FLEXIBILITY AND INTEGRATING DER

106. Distributed energy resources (DER) would be best served through a technical approach to integration as opposed to a market based approach as per the ETU's position on the introduction of further markets outlined throughout various parts of our submission.
107. The risks and issues with taking a market approach to DER are outlined in several other parts of this submission so we will not repeat them here but instead focus our response on this section to DER technical standards.

108. We refer to our submission¹² to the July 2020 ESB Governance of DER Technical Standards Consultation Paper which proposed worker representation as a key element in any establishment of any new Governance Committee overseeing the establishment and maintenance of DER technical standards.
109. Since the early days of small scale solar, ETU members have predicted the technical, safety and network challenges associated with expanding the integration of DER. Regrettably many of these concerns went ignored when initially raised leaving energy industry workers exasperated when many months later Managers or energy regulators suddenly declare they have found a problem.
110. In determining DER technical standards, it is important to recognise the development, implementation and enforcement of DER Standards will have broad ranging impacts on workers, including but not limited to:
- a. Impacts on industry work practices and construction standards,
 - b. Skills and training needs,
 - c. Consumer and worker safety considerations,
 - d. Effects on jobs, productivity, and efficiency measures in workplaces,
 - e. Workforce resourcing and skills matrices,
 - f. Network stability and operations,
 - g. Industry transitions for workers,
 - h. Dealings with regulatory bodies, and
 - i. Interactions with emergency services.
111. It is also important to understand that every state and territory in Australia has different conduct rules when it comes to the performance of electrical work and for electrical safety standards and how this may interact with the development of standards and any particular jurisdictions capacity to adopt and comply with a standard.
112. The ETU has significant experience in these areas. The ETU also has both established formal and informal structures to consult deeply and widely with energy industry workers in order to effectively represent their views.
113. Worker representation in assessing technical standards is critical to the success of greater DER integration.

8 TRANSMISSION ACCESS AND THE COORDINATION OF GENERATION AND TRANSMISSION INVESTMENT

114. The impacts of a decade of underinvestment in transmission are one of the largest drivers of investment uncertainty in renewable energy deployment. When the ETU meets with renewable energy project proponents, they regularly raise the challenge of network connection.
115. The project proponents state that they can connect to the network on a stated date for a certain price, but the network owner reserves their right to:
- a. Not connect on the date agreed,
 - b. Increase or decrease the connection cost by up to 30%,

¹²

<http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/ETU%20Response%20to%20ESB%20Governance%20of%20DER%20Technical%20Standards%20Consultation%20Paper.pdf>

- c. Require additional, unspecified system security assets to be installed and at a time and location and price of their choosing, and
 - d. Not guarantee 100% output of the new generation asset.
116. This enormous financial risk sets these projects up to fail spectacularly as has been witnessed by the high numbers of insolvency in the sector and the regular reports of safety issues, worker exploitation and community concerns at the lack of community benefit resulting from these projects.
 117. These connections risks are also leading to stranded assets that either cannot connect to the network or where they do connect, are restricted from delivering their total output delaying the emission reductions and lower prices desperately needed in the energy sector.
 118. One of the big issues with the current regulatory system is the extraordinarily narrow economic test for network expansion and augmentation, particularly the Regulatory Investment Test – Transmission (RIT-T).
 119. The single largest impediment to transforming the transmission network is the RIT-T. The ETU have been arguing for some time this test needs to be a broader economic interest and benefit test.
 120. Victoria dealt with this some time ago by legislating amendments to the National Electricity Laws which in effect “switched off” the narrow RIT-T and replaced it with a broader economic benefit test.
 121. NSW tackled the issue by adopting a more stringent reliability standard. This has the effect of making it a little easier to approve transmission projects within the RIT-T framework but still has its limitations.
 122. If the ESB’s proposed reforms hope to deliver cheaper electricity, a more fit for purpose network and ensure that electricity plans actually deliver for the people of Australia, then an obvious first step should be to do what Victoria have done and opt out of the narrow RIT-T assessment process and replace it with a much broader economic benefit test.
 123. In fact, the ESB should seriously consider the recent policy proposal of a publicly owned transmission investment company to ensure the integrated system plan is delivered with the right planning, coordination, timing and through expanded public ownership guaranteeing the maximum possible economic benefits to Australian consumers, workers, communities and supply chain manufacturing businesses.
 124. Lastly, the ETU would refer the ESB to our submission¹³ on the Renewable Energy Zone (REZ) Planning Framework discussion paper which outlined our views on how to better maximise the opportunities identified in the ISP.

13

<http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/ETU%20Response%20to%20Consultation%20Paper%20and%20Draft%20Rules%20%E2%80%93%20Interim%20REZ%20framework%20.pdf>

9 CONCLUSION

125. Australia's National Energy Market (NEM) operates under the direction of the current National Electricity Objective ('the NEO') which states:

'to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to –

- a. price, quality, safety, reliability and security of supply of electricity; and*
- b. the reliability, safety and security of the national electricity system*

126. On almost every measure, the 'market' has failed to deliver on this objective. Consumer prices have continued to rise year in year out, the quality and safety of the network is in decline and reliability and security of supply continues to be uncertain. Untested over-regulation has driven inefficient outsourcing and the introduction of completely ludicrous regulatory guidelines.
127. The network has not kept up with the pace of change or the augmentation's required to prepare for and connect to new generation sources.
128. From 1914 through to 1955 Australian Governments¹⁴ had the sense to see that the disparate, fractured and privately owned energy system could never serve the best interests of the Australian people and had the courage to take decisive action to nationalise this essential service.
129. Australia desperately needs a Federal Government with the courage and foresight on energy policy that the Governments of the early 1900's delivered for all Australians.

¹⁴ https://www.ewh.ieee.org/r10/nsw/subpages/history/electricity_in_australia.pdf