



# An energy market plan that neglects Australian workers

Submission by the Australian Council of Trade Unions on the  
Energy Security Board's Post 2025 Market Design  
Consultation Paper

ACTU Submission, 19 October 2020  
ACTU D. No 00/2020

## About the ACTU

Since its formation in 1927, the ACTU has been the peak trade union body in Australia.

The ACTU consists of affiliated unions and State and regional trades and labour councils. There are currently 43 ACTU affiliates. They have approximately 1.8 million members who are engaged across a broad spectrum of industries and occupations in the public and private sector.

## Introduction

The ACTU and Australian unions have been engaged in Australia's climate and energy policy settings for nearly two decades. Our consistent position has been that Australia needs an ambitious and coherent climate and energy policy to limit the impacts of global warming, and that we also need industry planning, support and resources to ensure that no workers or communities are left behind as we make the shift to net zero emissions.

In March 2020, the ACTU Executive, meeting in bushfire-affected southern NSW, reiterated:

*"The international community, through the Paris Agreement, has committed to limiting the rise in temperatures to below 2°C above preindustrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees.*

*The best scientific evidence is that the world needs to achieve net zero emissions by 2050 to meet the climate goals of the Paris Agreement, to which Australia is and should remain a signatory.*

*The ACTU supports a national target of net zero emissions by 2050, and shorter term targets consistent with that trajectory, to ensure Australia meets its obligations under the Paris Agreement.*

*Government and corporations must ensure secure jobs and industry policy are placed at the heart of successful planning and implementation. As a nation we must ensure we deliver justice & employment opportunities for impacted workers, their families and the communities in which they live."*

Inherent in this statement is an understanding that successful efforts to cut emissions are not just about energy markets and technology costs. Other essential ingredients include industry policy, training and workforce development, legislation and standards, cultural norms, support for a just energy transition and government leadership.

The ACTU welcomes the planning work undertaken by the Australian Energy Market Operator (AEMO) and the Energy Security Board (ESB) for a future low emissions energy market in Australia. In the absence of coherent climate and energy policy and leadership from the Federal Government, Australia's energy market bodies have admirably attempted to fill the leadership breach by undertaking detailed planning work for the energy transition. However this approach has its limitations, the main one being that there is not a clear overall decarbonisation objective and that the social and labour market dimensions of the energy transition have been largely neglected given the technical scope of most of the energy market bodies.

In this brief submission we highlight some of the weaknesses of a technical approach to energy market planning, beginning with some broader introductory comments and then addressing some of the seven workstreams of the ESB. Some ACTU affiliates have also made their own submissions to this process. We support those submissions and encourage the ESB to engage with unions in future planning processes.

## 1. Broader comments on the Post 2025 Market Design process.

**1.1 The National Electricity Objective:** The Post 2025 Market Design Process has been designed to comply with the National Electricity Objective (NEO):

*The NEO is: '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.*

Noting that the NEO fails to mention considering the interests of Australian workers, both in the electricity sector or in other sectors, the NEO, the Post 2025 Market Design process and Australian energy policy more broadly all also lack an explicit emissions reduction and transition objective. Rather energy market bodies are assuming decarbonisation and then trying to make rules on the basis of that assumption. As we revisit the rules for post 2025 market design it is time to revisit the NEO and ensure it is fit for purpose in a time of climate change and to guide all sub-objectives of this process.

The ACTU suggests a third element be incorporated in the NEO along the lines of:

*reducing greenhouse gas emissions in accordance with the Paris Climate Agreement commitment to keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius, "taking the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities"<sup>1</sup>.*

### 1.2 Challenges the Market design process is attempting to address

The Consultation Paper outlines 4 challenges that the process is attempting to address:

- 1) Meeting consumer needs
- 2) Managing variability and uncertainty
- 3) Need for capital replacement
- 4) Recognising demand flexibility and integrating DER.

The ACTU does not dispute the need to address these four challenges, but believes there are 2 significant challenges that are not being address by this or any other government process.

- 5) Meeting the needs of workers in the energy sector in a time of rapid change
- 6) Ensuring communities hosting energy infrastructure benefit from and support, the energy transition.

Again, the lack of a coherent national climate and energy plan and transition plan for workers creates challenges for the ESB's market design work. However, assuming the retirement of fossil fuel generation and tens of billions of dollars of investment in new generation and transmission without considering workforce impacts and opportunities, risks the failure of Australia's energy

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<sup>1</sup>Section in quotation marks is an extract from page 2 of the UN Paris Agreement, 2015.

transition. A strategy to support workers impacted by the energy transition is missing from this energy transition plan.

While it is welcome that the ESB is beginning to think along the lines of significant changes being needed for the NEM post 2025, the current proposals fall far short of what is needed to achieve the necessary decarbonisation, and to prevent the development of significant unemployment and inequality in this transition. Clear government targets and structures for emissions reduction, investing in transitioning the energy grid and generation, and planning to ensure a just transition for workers and communities are needed, and the ESB needs to be clear about this with the Federal Government. The market will not deliver all of the necessary objectives on price signals and market tweaks alone, and the ESB should not be assuming that it will.

Further, communities that face job losses and a decline in economic activity as a result of the energy transition are unlikely to embrace that transition without significant support, retraining and diversification. Similarly, communities that are expected to host new energy generation and transmission will want to see the benefits in terms of good quality, secure and ongoing jobs and genuine community engagement. The technical and market-based lens of the ESB process risks failing on these important social and economic dimensions.

### **1.3 Markets for everything except carbon**

The ESB process considers markets for a wide range of services and needs in Australia's energy market and has great faith in the effectiveness and efficiency of these markets. What is not considered in the absence of a decarbonisation objective is the need for, or relevance of, carbon pricing. While the regulators are clearly not wanting to get ahead of government policy, given that many businesses are already operating with a 'shadow' carbon price to inform investment decisions and many experts believe carbon pricing would ultimately reduce the cost of energy<sup>2</sup>, the absence of any consideration of carbon pricing for the decades ahead weakens long-term energy market planning.

### **1.4 ESB needs to consider liquid fuel security**

Energy security has three pillars that intersect with each other - electricity, transport and heating. Given increasing trends for the electrification of energy for heating and transportation purposes, electricity security cannot and should not be considered in isolation to energy security for transport and heating. In this moment of technological transition, the design of market principles in one of electricity, heating or transport fuel will inevitably impact the other two which in turn could rebound back into the originating sector with unintended consequences. The most coherent framework to market-design, therefore, is one which takes a holistic approach to Australian energy use.

Australian unions urge the Energy Security Board recommend to the COAG Energy Council that it be given responsibility to design and implement regulations with respect to energy security that include not only electricity but also transportation, including oil refining.

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<sup>2</sup> Eg see article <https://www.afr.com/policy/energy-and-climate/carbon-price-is-cheaper-martin-parkinson-20190726-p52b33>

## 2. Comments on proposed Market-design initiatives

### 2.1 Resource Adequacy mechanisms

- *Government investment:* Any government investment should be aligned with a net zero emissions objective and signalled as early as possible e.g. Queensland CleanCo's target of 1000 MW of renewables generation. While government investment in and ownership of electricity generation can improve outcomes for consumers and ensure the energy transition proceeds in an orderly and predictable manner, current Federal Government pledges to invest in new thermal generation (which may or may not materialise) lack any longer term alignment with decarbonisation objectives and are likely to create uncertainty and significantly delay investment by the private sector.
- *Large energy users:* Investment in new generation is also imperilled by the potential closure of large sources of demand, in particular Australia's 4 remaining aluminium smelters which employ about 3000 workers. Closure of these smelters would delay new investment and increase the costs of system security for remaining electricity consumers. The ESB and governments should consider how the system security services that large energy consumers provide can be valued and how these energy users can be supported to remain operating in Australia in the process of shifting to lower emissions energy supply.
- *Capacity markets:* The discussion paper flags the possible introduction of capacity markets but does not provide any examples of these markets operating effectively globally. The risk with capacity markets is they make payments for services that were never at risk of not being delivered, and therefore increase costs for consumers and windfall profits for generators. As such, any further exploration of capacity markets should be subject to thorough cost-benefit analysis and global examples where they have delivered efficient and effective additional energy security.

### 2.2 Ageing Thermal Generation Strategy

- *Ensuring compliance with notifications of closure dates*

One of the key risks associated with coal plant exits is that sudden exit can cause higher and more volatile prices, and in some circumstances threaten system stability. The ESB also notes that the market system results in some uncertainty regarding the impact of exit on remaining thermal generation (it may experience better pricing and be more inclined to stay in the market) and that some generators – notably the so-called gentailers- may have different incentives depending on whether they are long or short in respect of generation coverage of their retail load.

While the ESB lists many features of the current NEM that help mitigate risks around thermal power exits, the one that appears most important is the mandatory notice of closure requirements. That effectively requires generators to give at least 42 months' notice of closure.

While the ACTU supports this policy for the same reasons advanced by the ESB, there is a further one. That is, that reasonable notice of closure periods enable various actors in the coal power regions – including multiple levels of government, unions, business and civil society, to plan for and manage the social and economic impacts of closure.

These impacts will be profound, especially in regions that have less diversification in their industrial base. A reasonable notice period is essential to managing those impacts coherently and responsibly.

That did not happen with the closure of the Hazelwood power station with just 5 months' official notice or at the other 11 coal generators that have closed in the past 8 years. AGL has done better with its longer (5 year) notice regarding the closure of the Liddell power station, and with its commitment, now legally-binding in the enterprise agreements covering the workforce, that there will be no forced redundancies. Similarly at Torrens Island A power station in South Australia unions secured a commitment to no forced redundancies with the plant's closure.

A concern shared by unions and the ESB is that thermal generation operators may breach their notice of closure requirements due to technical, market or other reasons. There therefore needs to be strong incentives to comply in the form of financial penalties. The ESB notes the proposal by the Grattan Institute for increasing amounts of money to be held in escrow by the regulator as generators get closer to their nominated retirement date. The ACTU certainly thinks that financial compliance measures are needed to ensure that it is not cheaper for an operator to breach their compliance requirements than to fulfil them.

- *Risks not factored into ESB considerations*

The ACTU has stated above that there are further good reasons to enforce notice of closure requirements – in terms of social and economic impacts in coal power regions.

This leads to the broader point that closing ageing thermal generation is not simply an exercise in technical requirements and market structure. It is a social and political exercise that, if not explicitly managed as such, will lead to local and possibly wider upheaval that threaten orderly transition. There has already been ample evidence of that, so it would be appropriate, even if the ESB thinks it is beyond its mandate, to acknowledge that there are these related risks that need to be managed.

Unlike many other countries, Australia has no national energy transition plan, no energy transition authority, and we are largely leaving it up to the market to determine closure outcomes.

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 Agreement<sup>3</sup>. This will be an essential element of the government's long-awaited Long term emissions reduction strategy. The issue needs immediate attention however with forthcoming power station closures at Liddell, Muja C and Torrens Island. A key demand of affected workers and unions is for there to be no forced redundancies at retiring power stations, with the opportunity for workers to be redeployed to other sites, support for any retraining required, and government and company investment in economic diversification of communities affected by closures. Similarly, new technologies that are replacing emissions intensive plant need to demonstrate that they have social licence, can manage their environmental and social impacts, and will deliver secure jobs with decent conditions and economic benefits for host communities.

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<sup>3</sup> [Just Transition Pledge UN Climate Action Summit 2019](#)

At a minimum, Australia needs a Just Transition Authority or Energy Transition Authority to undertake planning, invest in reskilling, retraining and redeploying workers, and invest in diversifying the economies of impacted communities. Germany has managed to phase out its hard coal mines without a single forced redundancy as a result of significant government planning, investment and institutional support over a period of 2 decades.

In some cases the federal leadership vacuum is being filled by states and asset owners. There have been important efforts by the Victorian State Government in the Latrobe Valley (although the Latrobe Valley Authority is currently only funded to operate until 2021), but very little investment in transition in most other states. As mentioned, planning for the closure of Liddell is so far proceeding well but that has relied on the goodwill of the owner rather than any policy mandate. The Federal government has been completely missing in action when it comes to ensuring a fair and just transition for fossil fuel workers and communities despite the fact that generators in places like the Latrobe and Hunter Valleys are operating in the National Electricity Market, not just to meet state energy needs.

In the energy transition foreshadowed by the ESB many thousands of skilled, well-paid workers will need to shift to other industries or retire. There will be major flow-on impacts to related industries and general industry in the regions impacted, and tens of thousands of dependents.

Put simply, workers and communities in coal power regions need to need to be a key part of planning transition and have their legitimate demands for secure well paid jobs and the immediate and long term social and economic needs of their communities met. It is not only a social justice failure if that does not occur; it also threatens orderly transition. Those who prefer to focus on technology, system technical requirements and markets would do well to acknowledge this obvious problem.

### 2.3 Essential System Services

- *Overly complex system:*

The discussion of Essential System Services in Chapter 6 demonstrates the extraordinary and increasing complexity of operating a market system for an instantaneous product like electricity.

A hint of this is given at page 71, where the ESB notes “feedback from the Australian Energy Council that a shift toward spot market procurement ‘should be accompanied by an analysis of the trade-offs in complexity’.”

The Australia Institute in its 2013 publication “Electricity and Privatisation: what happened to those promises?” notes the extraordinary decline in productivity that has occurred alongside the introduction of competition and privatisation of electricity provision.

What we appear to be witnessing is further rapid growth in the complexity of the market system. Given that increasing complexity is often seen as an indicator of greater risk of failure, unease (rather than objection) is expressed about the proposals here. Unions remain sceptical that the NEM has been or can be the most cost-effective way to achieve the objectives of the national electricity objective i.e. serve the “long term interests of consumers of electricity with respect to: price, quality, safety and reliability and security of supply of electricity.” This is even before consideration of an emissions constraint or a social policy constraint with respect to fair and just transition for impacted workers and communities.

- *Need to value essential system services:*

The ESB says at page 61: “A number of key services are not explicitly valued in the current framework on an ongoing basis (e.g. operating reserves, inertia, system strength). By not valuing these services, or only valuing them when a shortfall has been declared, there is no clear investment signal.”

As noted by the ESB, existing thermal generation providers of these services are not paid for them and newer entrants to the market have, until recently, not been required to provide them.

Unions support the need for Essential System Services to be appropriately planned, valued and paid for through Australia’s energy transition, though note that there are a number of ways of doing this which may not all be delivered by markets.

## **2.4 Scheduling and Ahead mechanisms**

The ACTU has no comments on this section.

## **2.5 Two-sided Markets**

- *Demand response by large energy users:*

The ACTU generally supports policy and pricing that rewards the largest energy users (eg aluminium smelters) for reducing consumption at times the system is under pressure provided that it is safe and in the public interest to do so. However we are concerned that the implications for workers at large industrial facilities that may go offline at times of peak demand is poorly understood and there are not existing mechanisms for consulting with workers about the implications of such decisions. Shutting down a smelter for 3, 6 or 12 hours can be highly disruptive for workers, particularly if the workplace is employing casual labour. If pricing and regulatory regimes are continuing to encourage demand response, energy market regulators should be ensuring that appropriate channels for consultation and negotiation with workers have been established.

## **2.6 Valuing Demand Flexibility and DER integration**

- *Importance of quality installation of DER*  
With growing reliance on DER it is essential that installation work is of the highest quality to guarantee safety and protect consumers. Australian unions are concerned that the small-scale solar industry has a number of work practices, such as reliance on casual and precarious employment, use of unqualified labour to carry out work that should be undertaken by qualified tradespeople, and high turnover in the industry with companies failing, that undermine consumer protection and safety. As energy regulators develop policy to support DER they need to pay equal attention to ensuring best practice safety, performance and employment standards for new technologies. The ACTU supports the new solar inverter technical standards flagged in page 99 as developed in consultation with unions through Standards Australia.
- *Support for energy storage*

The rise of negative pricing events in the NEM highlights the need to accelerate energy storage. The ACTU supports greater deployment of household, neighbourhood and large scale battery storage, and greater oversight of technical standards for battery installation. We would like to see support for increased Australian manufacturing of Australian battery systems. Developing an industry plan for energy storage with Australian manufacturers could ensure that this industry grows sustainably and operates with world's best practice safety, labour and performance standards. Similarly with deployment of energy storage greater coordination is needed to ensure system wide benefits. It may be that aggregated batteries through programs like Virtual Power Plants are a better solution than individual consumers investing in batteries. Again, energy regulators need to look beyond technical issues and ensure that this industry is established on solid foundations and deliver better social and economic outcomes.

## 2.7 Transmission Access and Coordination of Generation and Transmission

- *Support for ISP and REZ's but need to broaden economic tests*

The ACTU broadly supports the network planning work and ISP and REZ process undertaken by AEMO. The fact that so many new generators are experiencing delays in commissioning projects highlights how overdue this work is. We remain concerned that approval timeframes for transmission investment are extremely slow and highly technical. The RiT process is a narrow economic test for new projects. It needs to be overhauled and replaced with a broader economic and social benefit test that considers issues such as community support for transmission infrastructure and the nature and quality of jobs and procurement practices in the build-out of new transmission assets. A broader social and economic benefit test would assist in better determining the value of transmission augmentation and upgrades.

- *Opportunities for greater public ownership of transmission systems*

Transmission upgrades are escalating in cost<sup>4</sup>, and the cost-recovery model is not always serving consumers well. Australian unions support greater public ownership of transmission assets. It may be that a government owned entity or department could develop economies of scale and an efficient model for transmission upgrades and renewal.

Finally the ACTU and Australian unions would appreciate being engaged in future steps of the ESB's post 2025 market design work.

We note that many sectors have been consulted in the development of the Technology Roadmap Discussion Paper, but unions and working people's views have been largely missing so far.

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<sup>4</sup> Eg <https://www.afr.com/companies/infrastructure/cost-blow-out-for-nsw-sa-grid-connection-20201008-p5636h>

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