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ACF Response to ESB Capacity Mechanism Project Initiation Paper

Introduction

The Australian Conservation Foundation (ACF) thanks the Energy Security Board for the opportunity to make this submission about the proposed Capacity Mechanism for the National Electricity Market.

ACF is Australia's national environmental organisation. We are over 700,000 people who speak out for the air we breathe, the water we drink and the places and wildlife we love. We are proudly independent, non-partisan and funded by donations from our community.

The Physical Retailer Reliability Obligation (PRRO) proposed as part the Energy Security Board's April Options Paper was described as a straw proposal for a capacity mechanism achieved through physical certificates. Its key design features would change the nature of the current obligation so that liable entities (retailers and large customers and other customers who opt in would be required to hold sufficient qualifying capacity certificates rather than sufficient qualifying financial contracts to cover their share of actual peak electricity demand.

In effect, it would provide a new revenue stream to generators in the form of capacity payments. Electricity retailers would have to pay generators for simply being available to generate energy in peak demand periods– but not for actually turning on their plants and generating electricity. There are serious concerns about the impact such a mechanism would have on extending the life of coal-fired power plants that are becoming increasingly uncompetitive and uneconomic. These concerns remain are outlined below.

ACF position on proposed capacity mechanism

ACF remains concerned that a capacity mechanism will play a role in undermining Australia's renewable energy transition, prevent Australia from reducing climate emissions and add costs for consumers.



Does the National Electricity Market genuinely need it?

The need for a capacity mechanism has not been clearly demonstrated. AEMO's August 2021 Electricity Statement of Opportunities (ESOO) forecasts that reliability could be maintained under the current market framework if published coal retirement dates are correct.

A first step is needed to better quantify the risk of early exit of coal to reliability to understand the need for an additional resource adequacy mechanism. To the extent modelling has already been conducted, we recommend it be released, including any modelling used by the ESB to underpin their advice about the need for a capacity mechanism.

Coal reliability and unplanned closure are the real issues

We believe the most significant issues causing reliability concerns are the unreliability of Australia's aging coal fleet and the potential for unplanned, early closure of coal-fired power plants.

Therefore, obtaining certainty around closure dates is key to ensuring that replacement capacity can be built in advance of closures. As noted by analysts at IEEFA, "the most effective way to do this would be by introducing a legally enforceable framework of incentives and penalties that locks in coal closure dates and removes uncertainty and risk around early closure."¹ Additional work is needed on a national coal closure plan, including a fair and just transition plan for impacted communities. A capacity mechanism would not address the need to manage coal closure or provide closure certainty.

Further, a capacity market that keeps coal-fired power plants in the market longer, would not prevent against coal-generator failures and breakdowns, which add unreliability to the system. Much of Australia's coal fleet is past its design life and becoming prone to breakdown as they age. The recent fire and outage at Callide C power station, one of Australia's newer coal-fired generators, is just one example of a coal generator failure with serious impacts on the broader electricity system. Increasingly, during extreme weather events such as heatwaves, coal-fired power plants are struggling to maintain capacity, and this is set to get worse due to climate change and age. The solution is not to keep them open longer, it is to replace them as quickly as possible with clean, flexible, dispatchable energy sources, more energy efficiency and more demand management.

¹ <https://ieefa.org/ieefa-australia-esb-reform-of-electricity-system-needs-to-plan-for-a-zero-emissions-future/>



Timing concerns

While a rushed intervention is even worse than one with proper consultation and development process, the timeframe for development of a capacity mechanism could require years – including a lengthy process for rule change and implementation. During this time, there will be uncertainty for renewable energy investors. There will also be continued need for more immediate state actions that can be completed more quickly. The reality is that by the time the new mechanism is in place, the concerns driving it will likely be addressed in other ways, but the market will remain burdened by the new mechanism for many years.

State actions are still needed, and will be more timely

We note that state governments are already taking a range of actions to increase reliability – for example, the NSW Government’s Electricity Infrastructure Roadmap, which commits to underwriting the renewable energy, storage capacity and transmission developments needed to replace retiring coal.

Transmission infrastructure, investment in storage, energy efficiency and demand response are all key elements of reliability and can be acted upon much more quickly than development of a capacity mechanism. State actions also help create certainty for renewable energy and storage investors to build replacement capacity and support transmission and storage. The threat of a capacity market, or any significant market intervention, is instead likely to have a dampening effect on investment.

Recommendation: Key objectives must be embedded if further detailed design is to proceed

Noting that ESB has been asked to do additional work on a resource adequacy mechanism, and this consultation is to support that effort, ACF recommends that the ESB make the following key objectives central to this work: decarbonisation and minimising costs to consumers.

The UK capacity market, for example, has introduced a carbon intensity limit for capacity credits, at roughly the limit of a gas turbine’s emissions, prohibiting coal and diesel from participating in forthcoming capacity auctions².

² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1004874/capacity-markets-emissions-guidance.pdf



Without question, a decarbonisation objective must be a central focus of any mechanism seeking to support Australia's energy transition, or the mechanism will prop up fossil fuel generation and prologue its polluting life.

Decarbonisation must be a key feature of any NEM reform measure

Stakeholders right across the spectrum from consumer groups, environment groups, industry players and experts have all called repeatedly for climate change and emissions reductions policy to be a factor in the post-2025 market reform policy frameworks. Climate change and emissions reduction considerations must be addressed alongside, or within, any policy development to address energy transition and reliability. We strongly recommend that this requirement be a firm red line for all state governments and note that Energy Ministers at their last meeting on 24 September 2021 agreed a set of principles to guide the development of a capacity mechanism which included a "focus on affordability, reliability, security, and continued emissions reduction of electricity supply." They also included an opt out principle to enable jurisdictions to opt out, via the National Electricity Law framework.

Cost to consumers must be carefully considered

Whilst the long-term interest of consumers is enshrined in the National Electricity Objective, we emphasise that energy affordability must be clearly upheld in policy considerations to address reliability. Modelling undertaken by NERA for the ESB did not provide clarity on the costs to consumers of the initially proposed capacity market.

We understand that minimising consumer costs is a complex issue. We believe the ESB's Final Recommendations to Ministers when initially recommending a capacity market presented overly positive interpretations of capacity markets around the world. In fact, heated debate continues over whether capacity markets provide value for money in many settings including:

- Western Australia where over procurement of capacity added \$116 million to consumers bills (over \$100/customer) in 2016/17³
- UK where the capacity market was taken to the European court for discrimination towards flexible Demand Side Response technologies and has failed to incentivise new dispatchable generation⁴

³ https://www.wa.gov.au/sites/default/files/2019-08/Final-Recommendations-Report-Improving-Reserve-Capacity-pricing-signals_0.pdf

⁴ <https://energypost.eu/uk-capacity-market-review-reform-rethink/>



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- PJM (Pennsylvania-New Jersey- Maryland) where a lawsuit over the cost of marginal capacity and capacity requirements has been going since 2019⁵
 - Germany which chose not to implement a capacity market in 2015 over concerns it could be expensive and inefficient⁶

Closing remarks

ACF holds concerns about the impact of a capacity mechanism on Australia's transition to renewable energy and the role it could play in propping up old, polluting generators. The new generation capacity that is needed could be unintentionally undermined by government intervention through a capacity mechanism that creates unnecessary uncertainty and investor risk.

While we understand the need to ensure reliability of the National Electricity Market in the face of accelerated, unplanned closures, a new mechanism may not meet the timeframe required for new investment and could have negative consequences with regards to decarbonising our national electricity grid—unless it is developed with emissions reduction as a central objective.

Both emissions reduction/decarbonising the electricity grid and minimising consumer costs should be top priorities in the ESB's considerations.

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⁵ <https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/070921-court-partially-remands-fercs-approval-of-changes-to-pjm-capacity-market-curve>

⁶ <https://www.cleanenergywire.org/factsheets/germanys-new-power-market-design>

