10 February 2022

Ms Anna Collyer
Chair Energy Security Board
Lodged via the ESB website

Dear Ms Collyer,

Submission to the ESB Capacity Mechanism Project Initiation Paper

Tilt Renewables is the largest owner and operator of wind and solar generation in Australia, with 1,313MW of renewable generation capacity, consisting of nine wind and solar farms operating or in the final stages of commissioning, and another wind farm (Rye Park in NSW 396MW) under construction. We are committed to continuing to play a lead role in accelerating Australia's transition to clean energy.

Tilt Renewables welcomes the opportunity to make a submission to the Energy Security Board's (ESB) consultation on the *Capacity mechanism project initiation paper* ("*Initiation paper*")[1]. We acknowledge the ongoing efforts of the ESB to engage with numerous stakeholders and strongly encourage the ESB to assess any changes to the market and regulatory frameworks through the lens of the investment needed to deliver what is a 'complex and accelerating transformation of Australia's energy sector'.

All parties need to be as confident as possible that options and solutions to establish policy, regulatory and market frameworks should be technology neutral, transparent and address real market failures, to ensure competitive markets, provide investment certainty, allow new players to compete to efficiently deliver the services needed, and critically, to avoid any unanticipated consequences.

With this perspective, we remain of the view that more work is required to describe and quantify the reliability challenges that the ESB perceives may emerge – *demonstrating the need for a capacity market* – and if this is demonstrated, can it be addressed through incremental changes to the existing reliability settings and measures, before looking at more fundamental changes – *what is the optimal solution?* As a result, a *capacity mechanism remains unsupported* by a majority of stakeholders.

Demonstrating the need for a capacity market

AEMO's analysis has not found any clear reliability problem under existing frameworks. Expected investment in new thermal projects, coupled with the much larger capacity pipeline of renewable generation and storage, means no obvious reliability shortfall is projected to occur in the NEM over the next decade[2].

[1] Energy Security Board (2021) *Capacity mechanism Project initiation paper* ("*Initiation paper*")
[2] AEMO, 2021 Electricity Statement of Opportunities.

Tilt Renewables Limited
Company No. 1212113

GPO Box 16080
Collins Street West
Melbourne
Victoria, 8007
Australia
Phone: +61 3 9654 3066
tiltrenewables.com

We appreciate the ESB has pointed to longer term reliability issues, associated with participants not having "sufficient incentive to manage long-term capacity risk"[3], associated with the rapidly changing nature of the power system. This is a reasonable concern, given the pace of change to the power system is accelerating at a much faster rate than anticipated, with the Draft 2022 Integrated System Plan (ISP) anticipating that all coal generation will retire by 2040 and up to 14 GW by 2030[4]. However, the ESB has not offered any further evidence or analysis in the Initiation Paper to inform definition of the problem to explain why a capacity mechanism is necessary. There is no evidence to suggest anything above and beyond the existing measures is required to manage reliability in the NEM. Despite persistent concerns, reliability and resource adequacy do not appear to be imminent challenges.

History has shown even when there are forecasts of reliability challenges, the market is able to respond and address these risks. Many renewable energy projects that were yet to be committed less than three years ago have now been constructed and commissioned. The reality is investment in renewable projects has been progressing rapidly and, in some jurisdictions, exceeding the expectations[5]. There is a long and strong list of advanced projects on AEMO's Generation Page[6] and more projects are getting ready to come online over the next decade.

Unlike Northern and Hazelwood power stations, which retired more than 3,000 MW of scheduled generation in quick succession with little notice, today's generators must give 3.5 years' notice of intent to retire. This allows the industry sufficient time to respond by providing new supply or demand side capacity.

The NEM has two major safety nets to manage any forecast reliability challenges: the Reliability and Emergency Reserve Trader (RERT) and Retailer Reliability Obligation (RRO). In the tumultuous period following the retirement of the Hazelwood Power Station, the RERT was strengthened and the RRO was introduced, both intended to support the reliability of the NEM as future generators retire and more variable renewable energy (VRE) came online.

Indeed, with existing safety nets, an emerging demand response mechanism and new essential system services, the market has and will continue to provide pricing and incentives for capacity that will be suited to a changing environment.

It is important to differentiate two key aspects of what a capacity mechanism is designed to do:

I. managing the exit of the existing thermal coal and gas generation fleet; and
II. incentivisation of required renewable generation, storage capacity and firming resources to address any specific reliability issues that are identified.

Further, the power system changes envisaged only a few years ago go beyond addressing reliability during the traditional peak demand periods. It is now clear that the rapid change in penetration of VRE has created challenges around intra-day ramping, seasonal VRE variations and minimum demand (and associated negative wholesale prices).

The ESB has advised in recent engagement that clarity on the problem definition will be a work in progress in parallel to the design of the mechanism, to deliver a solution to Ministers by the deadline in December 2022. This is a 'cart before the horse' approach and will lead to a suboptimal outcome, as well as a significant waste in resources effort and time.

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[3] ESB Post-2025 Market Design Final advice to Energy Ministers Part B.
[4] AEMO Draft 2022 Integrated System Plan.
5 The Clean Energy Council project tracker notes there are (as of 25 May 2021) 98 large scale renewable energy projects and 21 large scale battery storage projects in construction, accounting for 11,761MW, 13,502 jobs and over $19.6B in capital investment. See: https://www.cleanenergycouncil.org.au/resources/project-tracker
[6] AEMO | Generation information

What is the optimal solution?

Notwithstanding Tilt Renewables' view that the case for a capacity mechanism has not been made, Tilt Renewables supports establishment of an Advisory panel and Working Groups to facilitate regular and deep engagement.

Similarly, subject to demonstrating the need, Tilt Renewables supports the *Principles to guide Capacity Mechanism development* (the Ministers' Principles) issued by Energy Ministers to the ESB in 2021. Notably the Ministers' Principles include:

- "focus on…continued emissions reduction" and drive "commitments to new investment"
- "complement existing energy only market design"
- "provide greater certainty around closure dates of exiting generation"
- "enable jurisdictions to opt out".

These Principles reflect concerns expressed by Ministers and industry and need to be followed, rather than investigated "to ensure that the capacity mechanism satisfies them as best as possible while meeting the objective of ensuring investment in an efficient mix of variable and firm capacity that meets reliability at the lowest cost." Not following the Ministers' Principles runs the very real risk of losing the confidence of stakeholders and jurisdictions determining their own pathway and opting out of a system wide approach.

Given the significant scale of investment in renewable generation and storage needed, we stress the need to focus on minimizing regulatory complexity and uncertainty, while focusing our efforts and resources on regulatory frameworks that complement the work of states and seek to incentivise these investments into the power system to continue to provide clean, efficient, reliable, and competitively priced energy to consumers.

A capacity mechanism remains unsupported

The ESB was tasked by Energy Ministers back in March 2019 with the market redesign project with an objective to maintain reliability and security as coal generation exits or retires from the system. Similar to the Physical Retailer Reliability Obligation (PRRO) put forward to the Energy Ministers in September 2020 which was rejected by the States on the basis that it would prolong the life of coal generators, the ESB's capacity mechanism in essence, is proposing to introduce a new obligation for retailers to buy and surrender physical generation certificates. In effect, this will force retailers to pay revenue to dispatchable generators, the majority of which are fossil-fueled.

In practice, this proposal would result in energy consumers subsidising ageing and increasingly unreliable thermal generators; aimed at prolonging the operation of coal generators beyond their efficient technical or commercial lives. Tilt Renewables does not see this proposed scheme delivering the new resources and implementing a complex new market would chill investment. Indeed, with existing safety nets, the introduction of the demand response mechanism and new essential system services, the market has and will continue to provide pricing and incentives for capacity that will be suited to a changing environment.

A capacity mechanism is likely to add significant new uncertainty to business cases for investment in new dispatchable capacity, undermining new investment in storage needed to complement renewables. Not only will this be costly for energy consumers, but it will make meeting state emissions targets more difficult and costly and detract from Australia's commitments to address climate change.

As a result, the capacity mechanism lacks support from a range of other stakeholders across the industry- investors, environmental groups, retailers, consumer advocacy groups, large energy users and

state and territory jurisdictions and even some state-owned coal generators, on the basis that it would be costly, complex, anticompetitive and undermine the clean energy transition.

In closing and as highlighted previously, the current environment for investment in renewable generation and storage is already complex and uncertain. As a specialist renewable energy business, Tilt Renewables and our investors have to navigate an increasingly complex regulatory environment, in addition to the already challenging processes of project development, operation and financing.

Thank you for the opportunity to comment and we look forward to continuing to work with the ESB. Please feel free to contact me at geoff.dutaillis@tiltrenewables.com to discuss any of the issues raised in this submission.

Yours sincerely

Geoff Dutaillis
CEO
Tilt Renewables