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Anna Collyer
Chair
Energy Security Board

Submitted by email info@esb.org.au

Dear Ms Collyer

Capacity mechanism project initiation paper

We welcome the opportunity to make a submission to the Energy Security Board's (ESB) consultation on the *Capacity mechanism project initiation paper.* ("*Initiation paper*")[1]

The capacity mechanism proposal is the outcome of the market redesign project tasked to the ESB by energy ministers in March 2019. The task was to present ministers with a new design of the National Electricity Market (NEM) that would maintain reliability and security as coal is pushed out of the market by competition from cheaper, renewable energy supply.

The ESB has not presented a clear plan for the management of coal exit risks and this responsibility has fallen to the states. States are building new capacity for both reliability and security, through Renewable Energy Zones and contracting for network and storage services. The ESB has not offered a problem definition in the Initiation paper to explain why a market mechanism is necessary in this context and how it would complement the work of states.

In the sections below, we address key issues brought up by the capacity mechanism proposal.

Capacity mechanism model lacks support

The capacity mechanism was proposed by the ESB when ministers rejected its proposal for a Physical Retailer Reliability Obligation (PRRO). The PRRO received support from a small minority of stakeholders, generally coal generators seeking a way to extend the life of unprofitable and increasingly unreliable assets. It was also

[1] Energy Security Board (2021) *Capacity mechanism Project initiation paper* ("*Initiation paper*")

supported by the federal government on the basis that it would prolong the life of coal generators.[2]

The PRRO was rejected by investors, welfare groups, independent experts, environmental groups, large energy users and state and territory jurisdictions and even state-owned coal generators, on the basis that it would be costly, complex, anticompetitive and undermine the clean energy transition. It would be difficult for the ESB to gain widespread support for the current capacity mechanism.

Governments have provided conflicting design objectives

Energy ministers have provided detailed and sometimes conflicting directions to the ESB on the process and scope of the capacity mechanism.[3] The notable constraints in the 'Energy Ministers' Principles' are:

- "focus on…continued emissions reduction" and also drive "commitments to new investment"
- be "technology neutral" but only "to the extent that it does not conflict with state and territory [climate] policies"
- "complement existing energy only market design" and also "provide greater certainty around closure dates of exiting generation"
- "[e]nable jurisdictions to opt out" or "determine…which technologies are eligible for participation in a capacity mechanism in their region"

It is difficult to see how these competing priorities could be balanced, even in theory. The design process is supposed to deliver a proposal to ministers in December 2022. It is not clear how the project plan for this reform could resolve all these conflicting objectives over that time given the fraught processes at the policy level, accommodating jurisdictional differences.[4]

Given these conflicting objectives, the ESB should report back to ministers that they have made the problem definition insoluble and rather than pursue a capacity market through a hurried national reform process, states should continue to manage coal retirement risks in their regions.

Flawed design concept for the transition

There is a conceptual problem with the proposal to create a capacity market that would subsidies both the orderly exit of old generators and investment in new ones. If the mechanism successfully encourages investment in new dispatchable clean

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[2] Taylor (2021) *Governments must co-operate on energy policy to send the right signals*, https://www.theaustralian.com.au/business/mining-energy/governments-must-cooperate-on-energy-policy-to-send-the-right-signals/news-story/2ba6cdb85c259fa6386f52e4c6a9eb67; MacDonald-Smith (2021) *Users clash with Taylor over price of energy reliability*, https://www.afr.com/companies/energy/electricity-reforms-raise-cost-fears-20210429-p57nlj

[3] Energy Security Board (n.d.) *Capacity mechanism scope of works document*, Appendix A ("*Scope of works*")

[4] *Scope of works*, Table 1 forward work program, p.8

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energy and storage assets these will compete against existing coal generators. This new capacity will *bring forward* the retirement dates of coal.

The mechanism is supposed to prop up those coal generators that is has made less profitable. In order to achieve that outcome, payments to coal would have to compensate for the payments made to new assets. It is not possible to design an efficient capacity mechanism such as envisaged by the ESB, that can meet the conflicting objectives of the federal and state governments; to both prop up coal and hasten the development of clean energy resources to replace coal. It would require an overpayment that is inefficient and harmful to the long-term interests of energy consumers and thus the National Electricity Objective.

Capacity mechanism is a distraction from higher priorities and better processes

The capacity mechanism may become a repeat of other failed regulatory reform efforts of recent years, such as the Coordination of generation and transmission investment (COGATI), Congestion Management Mechanism (CMM) and PRRO. The only potential beneficiaries of such distractions are incumbent coal generators who might hope that delay to productive reform of the NEM prolongs the life of their stranded assets.

The ESB has considerable flexibility in the matters it can consider. We propose that it looks at Germany's solution to the seemingly intractable political conflict over coal retirement. In 2018 an independent, multi-stakeholder body, the German Coal Commission was established. In just seven months it produced a plan for Germany to safely manage the retirement of coal, by 2038.[5] It is almost three years since ministers tasked the ESB with a redesign of the NEM to accommodate coal retirements and we suggest it now investigates the German process and whether it should be recommended to Australian energy ministers as a preferable approach.

Coal retirements proceeding too fast for capacity mechanism implementation

The ESB has until December 2022 to present the final design of the capacity mechanism to Energy Ministers. This will be challenging because it is such a profound reform. The NEM is an energy-only market and introducing a capacity mechanism would be a fundamental revision of the market. It would dramatically alter the investment environment just when Australia is seeking to attract more investment in clean energy, to replace coal capacity.

The draft 2022 Integrated System Plan (ISP) published by AEMO in December 2021 shows that coal retirements are likely to proceed even faster than the ESB assumed in 2021 when it proposed the capacity mechanism. AEMO points out that the transition has outpaced its own planning cycle.[6] Under the new 'core' ISP scenario, Step Change, the NEM is likely to see up to 14 GW of coal retire by 2030 and all coal

[5] Shields & Campbell (2021) *We can work it out*, pp.5-6
[6] AEMO (2021) *Draft 2022 Integrated System Plan*, Australian Energy Market Operator, p.17

retired by 2040.[7] Victoria's Yallourn coal power station is retiring four years early, in 2028 and AGL is likely to announce an earlier retirement date for Loy Yang A, which are almost 3.9 GW of nameplate capacity. (Yallourn's capacity factor was only about 62% in 2021 and neither power station reached 80% over the past three years).

Given the ESB has been unable to deliver a market redesign proposal to manage coal retirements after almost three years of work and coal retirements are likely to come very rapidly this decade, it is unlikely a capacity mechanism could be designed and implemented in time. AEMO has acknowledged in the draft 2022 ISP that the speed of coal retirements has outpaced the ISP; we suggest the ESB should now acknowledge that the transition has also outpaced its reform process. It is difficult to see how the ESB could develop a capacity mechanism that addresses the objections to the PRRO in the ten months it has left for the current process.

As the draft 2022 ISP makes clear, governments need to quickly develop a plan for coal retirements in the NEM. There are also other regulatory priorities that require the urgent attention of ministers and the market bodies: integration of distributed energy resources, fixing the wholesale demand response mechanism, creating a roadmap for electrification and reform of security and engineering frameworks and the fundamental challenge of integrating emissions reduction objectives into the NEM. We look forward to continue working with the ESB on those issues.

We are happy to provide further detail if required.

Regards

Dan Cass

[7] Ibid., p.45