



10th of August 2022

Dear Energy Ministers

Re: ESB capacity mechanism ill-suited to creating a clean, affordable, and dependable energy system for all

Dear Minister

We are a broad coalition of business, community, environment, and research sector organisations writing to urge your government not to pursue the development and implementation of the capacity mechanism as proposed by the Energy Security Board (ESB).

The ESB's capacity mechanism will not solve the reliability challenges facing the National Energy Market. It will not provide certainty around coal exits or accelerate renewable and storage replacement capacity in advance of coal exits, it may lock in a high-emissions system and unreliable power stations for longer and discourage new entrants. It is ill-suited to valuing flexibility, demand management and low-emissions resources. It is likely to add to consumer costs, at a time when electricity prices are high.

We urge Energy Ministers and the ESB to thoroughly explore other options that have been put forward and are consistent with the objectives of:

- Reducing emissions in line with our commitments under the Paris Agreement, our Nationally Determined Contributions and the Climate Change Bill 2022;
- Supporting ordered and predictable exit of coal from the energy system;
- Shifting the energy system from fossil fuel based to predominantly renewable by 2030; and
- Ensuring the energy market is flexible, responsive and meets consumer needs.

An **emissions reduction scheme** would simplify the design of reliability reforms that meet the objectives. Options could include turning the electricity sector component of the Safeguard Mechanism into a meaningful cap on emissions that could be reduced over time.

Alternatively, Energy Ministers could pursue two separate mechanisms, to address:

- **The uncertainty around timing of coal exit.** Options include an enforceable, long term coal exit scheme using auctions, “reliability bonds” or opt-in managed phase down agreements.
- **The need for renewable energy and storage at all scales to replace capacity in advance of coal exit.** Options include a storage target and government incentives.

If necessary, a **capacity reserve** could be explored, that would enable new capacity, such as batteries and pumped hydro, to be brought into a “waiting room” and held until it’s needed.

Consideration should also be given to **modernising energy market settings to reflect effective, flexible dispatch and efficient pricing.**

The appendix has more detail on what we view is the problem that needs to be address; a vision, objective and principles to guide development of options and solutions; and a range of options for consideration.

If a mechanism to address capacity does proceed it should be guided by the objectives and principles set out in the appendix.

Finally, regardless of which way Ministers proceed, we urge Energy Ministers to include **an emissions objective in the National Electricity Objectives (NEO).**

Appendix - Objectives, Principles and Alternative Options to ESBs Capacity Mechanism

Problem

The energy system is changing rapidly and profoundly because of the need to decarbonise and new technology. The power system is and will remain in various stages of flux as we replace centralised aging, unreliable and inflexible fossil fuels with a mix of centralised and decentralised renewable energy, storage and demand management.

However, problems are emerging:

- Federal and State Governments need to achieve substantial emissions reductions in line with their commitments and need confidence in the security of supply to ensure the lights stay on.
- The current market arrangements were designed to support a large fleet of inflexible coal-fired power stations plus a smaller fleet of flexible peaking generators (including gas and hydro plant) and constantly increasing demand.
- The arrangements do not do enough to encourage flexible and reliable new generation, storage and demand response to replace coal in advance of its retirement
- Coal-fired power stations are reaching their end of life, becoming less reliable and are at risk of early or sudden retirement. This is impacting energy security, reliability, and prices. Continuing to support them is no longer technically, economically, or environmentally sensible.
- Coal generators are closing and sometimes abruptly, but the Federal and State Governments have no control over timing and have little visibility, because there is no plan, and the timing of closure has been left up to the market.

The ESB’s proposed solution to introduce a capacity market does not address the problems above and does not achieve what we believe should be the objectives and guiding principles below. There is significant opposition and minimal expert or independent support. Concerns include:

- Halting or slowing energy transition without improving certainty, by paying high emissions generators to stay in service without coordination of their exit from the market;
- Potential of leading to excessive investment in new assets to maintain an unnecessary level of reliability;
- Unnecessary and avoidable costs to consumers;
- Risk of stifling effective competition without a common spot market;

- Risk of further departure from national consistency; and
- Does little to incentivise replacement renewables, storage and demand management.

Vision, objectives and principles to guide options and solutions

Vision

An inclusive sustainable zero emission energy system that actively improves outcomes for people, business, communities and the environment.

Objectives

Create market signals and measures to support flexible and reliable new generation, storage and demand response technologies to augment and replace traditional firm sources as they exit the market (due to either technical or commercial factors), and to deliver clean, affordable, dependable energy that meets community expectations.

The market signals, policies, and measures should aim to:

- Reduce emissions in line with our commitments under the Paris Agreement and our Nationally Determined Contributions.
- Support ordered and predictable exit of coal from the energy system.
- Shift the energy system from predominantly fossil fuel based to predominantly renewable by 2030.
- Ensure the energy market is flexible, responsive and meets consumer needs.

Principles

The following principles should help guide the development and evaluation of options and solutions:

- Support the energy system we need for the future, that is flexible, responsive, transparent and reduces future risks.
- Be consistent with the goal of decarbonising the electricity sector noting the electricity sector must, and is capable of, decarbonising further and faster than other sectors to support economy wide emission reduction goals.
- Provide clear objectives and policy certainty to drive investment and innovation.
- Incentivise a mix of generation, storage and demand responsiveness that supports decarbonisation, flexibility, reliability and resilience.
- Support for dispatchable capacity should be focused on resources that can be dispatched on and off when needed with a fast ramp rate.
- Support more affordable energy, by avoiding wasting money and resources i.e. avoiding costs and overinvestment relative to the expected and necessary rate of asset retirement.
- Allocate costs and risks fairly and efficiently. Costs are borne by primary beneficiaries, and risks are allocated to those best placed to manage them.
- Be just and fair, including facilitating a just transition of coal workers and communities.

Options

Rather than the capacity mechanism currently proposed by the ESB, the following options should be considered:¹

1. Provide certainty around coal closure timing:

¹ Not all options are necessarily endorsed by all signatories, but would benefit from further consideration and analysis

- To deliver more certainty around coal exit dates a comprehensive mechanism for closure could be explored, for example through models recommended by [Professor Frank Jotzo](#) and [Blueprint Institute](#).
- An alternative to a comprehensive coal closure scheme is implementing a bond scheme to penalise unreliable large generators, while offering the option for financially distressed generators to enter into managed phase-down agreements that are transparent to the public.

2. Invest in renewable energy and storage at all scales to replace capacity in advance of coal exit

- Energy storage target, which can accelerate the deployment of batteries, pumped hydro and other means of storing energy when it's needed. A target worked for renewable energy in its formative years and can do the same for storage.
- Power more households with clean energy, with targeted support to provide solar and batteries to low-income households who need it the most.

3. Get NEM settings right to drive emissions reductions:

- Mechanisms to reduce emissions in electricity sector. A comprehensive framework for electricity sector emissions could be more efficient and predictable than the current partial proxies pursued by governments. Options could include turning the electricity sector component of the Safeguard Mechanism into a meaningful cap on emissions declining overtime, for example in line with the central scenario of the Integrated System Plan.
- Include decarbonisation objective in the National Electricity Objective (NEO)

4. Modernise energy market settings to reflect effective, flexible dispatch and efficient pricing

- PIAC has proposed to ESB a potential "Capacity market" design option (described as a "flexibility" market design) that achieves this goal by having two Market Price Caps (MPC): one 'scheduled' or 'dispatchable' generators (with a revised definition of 'scheduled' to include 'capacity' or 'flexibility' elements) and one for the remaining 'non scheduled/semi scheduled' generators). New 'scheduled' dispatchable generators would qualify for a higher MPC To qualify as a 'scheduled', the generator would have to be capable of providing flexible capacity services. At a minimum, this criteria would include ability to be dispatched on and off as required with a fast ramp rate. Non-scheduled generators would qualify for a lower MPC. Such a mechanism could be introduced as part of the Reliability Panel's review of the reliability standard and market price settings.

5. Ensure reliability through reserve service if required

- [Capacity Reserve](#) - Associate Professors Tim Nelson and Joel Gilmore have suggested AEMO could build up a reserve of standby dispatchable capacity, in addition to the reserves it holds under the Reliability and Emergency Reserve Trader. New capacity, such as batteries and pumped hydro, could be brought into a "waiting room" and held until it's needed.
- Other reserve suggestions exist e.g. operating reserve, per previous ESB reports, which could be further explored to determine their merit.