



Media release

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THINKING AHEAD: OPTIONS FOR BOOSTING RELIABILITY AND SECURITY IN THE NATIONAL ELECTRICITY MARKET

A new discussion paper by the Energy Security Board released today outlines key options to make sure the power system has the right essential services it needs at the right time in order to remain reliable and secure in coming years.

The paper considers incorporating an ‘ahead market’ into the broader national electricity market, that would mean traders buy and sell both supply and demand ahead of the real-time market and would give the market – and the Australian Energy Market Operator (AEMO) – greater visibility of what is needed and the time to plan accordingly.

It also looks at the best ways to value essential services such as voltage and primary frequency control, system strength and inertia response to ensure they are available when needed most.

“As the electricity market shifts from a system dominated by thermal generation to one that has, at times, world-leading levels of renewable energy, it faces more technical challenges,” said Energy Security Board Chair Kerry Schott.

“As some of these technical properties – such as inertia and voltage control – were previously provided as by-products of energy production they are not all explicitly valued. We need to invest in and provide these capabilities so we can meet these challenges in an affordable way.”

AEMO Chief Executive Officer and Managing Director Audrey Zibelman said: “As our energy system integrates variable renewable energy, distributed generation and storage resources at scale, it becomes far more complex and the nature of required system services also changes. To ensure consumers capture the benefits available from the changing resource mix, this external complexity needs to be efficiently internalised in the way the energy system operates and dispatches resources.

“Ahead markets will allow better co-optimisation across the range of services that are required to keep the system secure and reliable. Ahead markets will also help co-ordinate the most efficient resource mix, including enabling demand and ‘behind-the-meter’ resources.”


The ESB will recommend by the end of 2020 a design to bring greater aheadness into the market which works with other market design elements currently being developed, such as integrating distributed energy resources such as home solar panels and batteries, and reforming the way generators access the grid.

Australian Energy Market Commission Chair John Pierce said considered planning around reliability and security was an important ongoing priority to be integrated with other fundamental market reform.

“It’s critical we ensure the regulatory arrangements are flexible and adaptive to allow system services to keep up with the needs of the power system and technology innovation without unnecessary regulatory delays,” he said.

Energy Security Board work plan

Ahead markets and system services are part of the ESB’s plan to improve the reliability, security and affordability of the national electricity market. Also today, the ESB has released a



discussion paper on another key arm of this work – the next steps for a two-sided market, where all types of energy users actively buy and sell electricity.

The ESB plan was discussed at the 20 March [COAG Energy Council meeting](#). It will be coordinated through the post 2025 market design project and will involve three key phases:

1. Interim measures to improve the security and reliability of the grid before summer
2. Improving access to the grid for new generators, two-sided markets, ahead markets
3. Examining investment signals needed to ensure a smooth transition to more renewable energy

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Further information:

Read the paper: [System services and ahead markets](#)

Read the paper: [Moving to a two-sided market](#)

COAG Energy Council: www.coagenergycouncil.gov.au

Energy Security Board members

Kerry Schott AO - Independent Chair

David Swift - Independent Deputy Chair (Acting)

Clare Savage - Chair of the Australian Energy Regulator

John Pierce AO - Chairman of the Australian Energy Market Commission

Audrey Zibelman - CEO of the Australian Energy Market Operator