Essential system services and scheduling and ahead mechanisms

Many of the essential system services that support the grid, such as frequency response and inertia, have traditionally been provided for free by thermal generation. But as thermal plants retire, the supply of these critical services could dry up.

As recognised by the Energy Security Board (ESB), critical work needs to be done to value and procure essential system services like frequency, system strength, inertia and operating reserves that are key to supporting a changing generation mix.

These services are necessary to keep the electricity grid in a safe, stable and secure operating state. They influence the ability to balance supply and demand, deal with disruptions to this balance and address any other technical issues in real time.

Much of this work is in train through rule changes with the Australian Energy Market Commission (AEMC), and will be delivered promptly to support a more secure and reliable system.

Rule changes that have recently been completed include:

- Fast frequency response market ancillary service
- Efficient management of system strength

Rule changes underway include:

- Primary frequency response incentives
- Operating reserve market & Introduction of ramping services
- Synchronous services markets & Capacity commitment mechanism for security and reliability services