



1 July 2021

Attention: ERC0296 - Fast frequency response market ancillary service project
Australian Energy Market Commission
GPO Box 2603
Sydney, NSW 2001

sonnen Australia Pty Ltd - Fast Frequency Response market ancillary service Draft Determination consultation submission

Dear Commissioners,

sonnen is at the forefront of innovative, well-engineered home energy storage systems and services empowering energy choice and contributing towards a healthier planet for local communities in markets including Australia, Germany, Great Britain, Italy and the USA. sonnen Australia is a registered Market Ancillary Services Provider (MASP), and our Virtual Power Plant (VPP) provides Frequency Control Ancillary Services (FCAS) in NSW under the AEMO/ARENA VPP demonstration program. Further sonnenBatteries configured as a VPP will soon be brought to market in other National Electricity Market (NEM) jurisdictions.

sonnen Australia Pty Ltd welcomes the Fast Frequency Response market ancillary service Rule change initiative and the opportunity to respond to the Commission's Draft Determination. sonnen supports the Commission's proactive approach to establish FFR markets to facilitate the rapid transition toward greater penetration of variable renewable generation.

As a hardware developer, market participant and energy services provider we believe a competitive and technology neutral FFR market will support further product and service innovation to support a robust and resilient power system. The geographical, vendor and value stack diversity of Distributed Energy Resources (DER) provide an excellent foundation for the provision of services central to the resilience of the power system.

'in market' solution

sonnen supports the Commission's approach of an 'in-market' solution as we believe this approach best facilitates new participants developing innovative products at a scale appropriate for the participant's commercial, technological and market risk capacity before making large-scale commitments. An 'in-market' solution better supports price discovery, agile development and rapid iteration to drive down costs.

new FFR services

sonnen welcomes the Commission's introduction of two new market services categories without modification to the existing contingency FCAS specification. Distributed Energy Resource (DER) assets are typically geographically dispersed and may be comprised of multiple small-scale resources. If VPP asset modifications are required to meet revised market specifications the cost of doing so can be prohibitive. Retaining the existing

six contingency services supports the market making a transition to provision of the FFR when the commercial opportunity arises rather than stranding existing DER assets and reducing the overall supply of these services.

Technical parameters to maximise participation by DER

Market participants with energy storage experience have previously advised the Commission that maximising participation in an efficient FFR market is strongly dependant on a set of relevant technical parameters that support a range of resources, and recognising the full capabilities of those resources.

sonnen acknowledges the important role that AEMO plays in establishing through consultation with current and intending participants the detailed specifications for these services, however the Commission plays an essential role in clearly setting the objectives of the Market Ancillary Services Specification (MASS).

sonnen sees merit in more definitive language in the new Rule requiring AEMO to specifically consider if the proposed technical specifications can adequately incentivise diversity in FFR resources to maximise market depth. Opaque, or unnecessarily restrictive technical parameters do little to achieve the objective of delivering a diverse pool of least cost FFR resources.

A rapid transition

The uptake of variable renewable generation within the NEM has repeatedly exceeded forecasts. While the proposed planning horizon for implementation of FFR aligns with AEMO's view of the risk of diminishing inertia and Primary Frequency Response (PFR) resources the proposed 3-year implementation work programme may not be adequately proactive to address compounding risks arising from:

- the potential for an earlier onset of inertia and PFR shortfalls due reduced commercial availability of synchronous generation in response to greater than forecast competition with renewable generation; and
- the risk of limited FFR readiness at market commencement given market participants need certainty in FFR specifications to build and validate capability before FFR market commencement.

sonnen believe the industry has the capability to respond to a Market Ancillary Services Specification consultation process spanning less than the currently proposed 18-month process.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Nathan Dunn', with a long horizontal line extending to the right.

Nathan Dunn
CEO APAC – Managing Director
sonnen Australia Pty Ltd