

sonnen

Mr. Kris Funston,
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Australian Energy Regulator,
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15.05.24

RE: AER'S ISSUES PAPER: SA POWER NETWORKS' ELECTRICITY DISTRIBUTION DETERMINATION 2025-30

Dear Kris,

sonnen Australia Pty Ltd (sonnen) recognises the vast undertaking and efforts within the Australian Energy Regulator (AER) in fostering a regulatory environment that enables an orderly, well-governed transition¹ in Australia. The task of the AER evaluating the Distribution Network Services Provider's (DNSP's) 5-yearly Regulatory Proposals is a critical element to that end. sonnen welcomes the opportunity to provide feedback to the AER's *Issues Paper: SA Power Networks' (SAPN) Electricity Distribution Determination 2025-30* ('Determination') and is encouraged by SAPN's Proposal at this critical time in the transition, where consumers are placed at the centre.

Background on sonnen

sonnen was founded in 2010 in Germany and is now one of the global market leaders in smart solar energy storage with more than 80,000 residential sonnenBatterie systems installed worldwide. We have a rapidly growing Australian presence with an Australian HQ in South Australia. Our vision is for *clean, affordable energy for everyone* – energy is an essential service, and so therefore are committed to the democratisation of energy² – which speaks to 'designing a system that works for the full spectrum of customers'³. sonnen is at the cutting-edge of implementing household (Consumer Energy Resource) CER coordination, and specifically, residential battery energy

¹ A key pillar of the benchmark Finkel Review was an **orderly governance** through this transition: see Chapter 3 in *The Independent Review into the Future Security of the National Electricity Market: Blueprint for the Future*, Commonwealth of Australia 2017
<https://www.energy.gov.au/publications/independent-review-future-security-national-electricity-market-blueprint-future>

² sonnen upholds and **recognises the work of the AER** in designing an energy equity strategy which incorporates the democratic principles of participation, affordability, and representation through the consumer voice and lived experience, see <https://www.aer.gov.au/retail-markets/guidelines-reviews/towards-energy-equity-a-strategy-for-an-inclusive-energy-market> [report, Oct 2022]

³ **Consumer-centricity** was the focus of the speech by Anna Collyer, AEMC & ESB Chair, *Implementing the ESB's post-2025*.



management systems. The sonnen team has institutional lived experience of the costs and the opportunities of this consumer-led system transition – with unique, real-world, Behind-the-Meter (BTM) insights of Australian energy consumers. ^{15.05.24}

sonnen intrinsically supports the CEC in their submission: *‘the greatest opportunities to enhance consumer agency and participation in Australia’s transition to clean energy reside in CER’*. Hence, we provide our submission, given sonnen’s unique position in relation to CER in Australia.

Our review

SAPN appears to be a special case among the DNSPs – physically with respect to grid pressures (older than other jurisdictions’ centralised grids, the volume of PV, and percentage of renewables on the grid, and, for leading globally in the rate of PV uptake), and moreover, there appears to be wider industry advocacy and more robust consumer engagement including a co-design process, which is not limited to SAPNs People’s Panel.⁴ Below we outline our methods, our alignment with SAPN, and then we focus some attention on Export Service Levels, the Innovation Fund with a reference to Piclo Flex. Finally, we outline where we will be seeking further engagement, followed by key points and/or recommendations.

Our methods

In putting together this submission we reviewed the SAPN Proposal and undertook a comparative scan of DNSPs from NSW, VIC, QLD and TAS. Additionally, as part of a qualitative investigation, we have undertaken open and unstructured/semi-structured interviews with high-level Australian industry stakeholders that are close to CER issues. We have proactively engaged with – and had three one-on-one discussions with SAPN on various points of the Determination. -sonnen, among other Clean Energy Council (CEC) members has provided feedback to the CEC on its’ submission to the AER on SAPN’s Regulatory Proposal (2025-30). Additionally, sonnen had a direct line of communication with the CEC on the content and direction of SAPNs Determination.

How our principals are aligned with SAPN’s Determination

- sonnen’s interest coincides with the SAPN & AER focus on energy affordability and the ‘world leading customer energy resources uptake’ as well as ‘electrification driving peak demand.’

⁴ Our review of the SAPN Regulatory Proposal 2025-30, the AER Issues Paper, and our April-May 2024 discussions with industry peers, a policy advocacy organisation, and a SAPN innovation engineer are reflected in this statement.



- sonnen is aligned on providing reliability, providing customer choice and empowerment, unlocking future value and enabling clean energy and equity. 15.05.24
- sonnen is supportive of the 'Integrated customer portal' for 'more accurate and timely outage & electricity supply and 'real time solar and network constraint information.'
- SAPN's Demand Flexibility Program (AU\$6.7m) is promising because it is **opt-in and reward based for customers** and aims to 'create new revenue streams for customers, aggregators & retailers'. The SAPN proposal could provide future opportunities for the emergent CER industry because of the investment and focus on CER. sonnen appreciates this represents a significant investment into CER by SAPN.

Specific areas of interest: Export Service Levels, the Innovation Fund and Piclo Flex:

Cost and Benefit of Export Service Levels

sonnen questions SAPN's proposed target of maintaining export service levels at or above 95% for 95% of customers throughout the 2025-30 Regulatory Period. Our query relates to the method used to arrive at this proposal. Is the proposed service level supported by quantitative economic modelling, if so, how will it strike an appropriate the balance between maximising energy productivity for the state of South Australia against the costs required to provide the export service levels? sonnen suggests that it is important for the AER to consider if the proposed 95% service level is optimised and reasonable.

The SAPN Innovation Fund

sonnen has two queries with regard to the Innovation Fund. First, when considering the Innovation Fund a comparison between SAPN, Ausgrid and Endeavour show vastly different levels of innovation investment through the perspective of dollars per customer spend (based on respective investment and customer bases, these are approximately SAPN \$12/customer, Ausgrid \$25/customer, Endeavour \$21/customer). By this measure, SAPN is not leading. So, though we commend SAPN on the \$20m for the Innovation Fund, more could be done at this critical time to support innovation and translate capability to market. Second, we have a concern around sonnen and other mature aggregators that are ready to respond to DNSP's requirements for network support and management services. sonnen and our partners provide services to support distribution networks in both Europe and the USA. When service providers have demonstrable capabilities to deliver network support, the funding of pilots/trials/sandboxes may deter genuine commercial interests. Further, pilots may delay the opportunity for coordinated CER to lower the expenditure on network augmentation while increasing energy productivity for the State of South Australia. sonnen's customers are ready to be rewarded for delivering flexibility to distribution networks.

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Piclo Flex

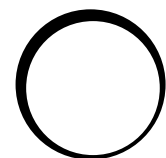
sonnen supports transparency in the market, and Piclo Flex indeed promotes transparency and visibility. However, sonnen would like to see CBA calculations on the optimal size of aggregation to be able to participate in Piclo. For example, participating with sub-MW scale resource may be beneficial whilst aggregators scale-up within the market.

Where we would seek further engagement

- sonnen perceives urgency in industry engagement and discussion on flexible imports and the solar export tariff planned for implementation in South Australia in 2028.
- Although we recognise that initiatives proposed in previous SAPN regulatory proposals have indeed gone onto shape policy landscape on Flexible Exports, there is however, a significant way to go towards providing the regulatory frameworks for CER to be optimised. Two of our industry stakeholders call for more focus on the demand-side of the issue because the long history of focus on the supply-side that harks back to one-sided flows and the purely centralised system of a pre-CER era. Electric Vehicle charging infrastructure is a key example of flexible imports policy uncertainty. This is systemic and not a criticism of SAPN.
- sonnen acknowledge the intent of SAPNs upgrades to the SA low-voltage network, which should decrease the level of PV export curtailment in residential CER (to a maximum of 5% of customers in 5% of daylight hours).
 - However, we would seek further engagement on this because the function of (Virtual Power Plants) VPPs should assist in reducing curtailment.
 - Additionally, we would seek further engagement and understanding on flexible imports. In relation to VPPs and home energy management systems (HEMS) services.
 - sonnen would seek further engagement on the tariff design for bi-directional network tariffs - on flexible exports, imports and DOEs.

Key points and/or recommendations:

- If granted by the AER, the increased SAPN CER spend is 126% of previous Proposal, more than any other area. CER investment by SAPN is significant and recognises the systemic importance of CER.
- Over the 2025-30 regulatory period, SAPN appears to be investing more in percentage terms in CER and by absolute dollar amount: SAPN is investing 3.9% in CER (approx. \$93m of an overall \$5b). By comparison, in



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NSW Ausgrid is 1% investment in CER (\$37M)⁵ and less than 1% for Energex in QLD with an overall \$8.9B spending ask (\$56M)⁶.
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- sonnen commends SAPN on moving towards greater visibility on network capacity, in the form of ‘live’ hosting capacity maps and trialing automated connections assessment tools.
- The AER could encourage all NEM DNSPs to publish the same table format for consistent comparison of DER/CER investment. Alternatively, that the AER Issues papers contain a *Summary for Policy Makers* to this effect because it elevates and highlights CER.
- Similarly, DNSPs could be encouraged to supply social science data; to publish a *Summary for Policymakers on engagement* - e.g. comparing 2 focus groups for Queensland Energy on CER implementation against SAPN’s co-design approach with customers - i.e. who are tax-payers ‘placed at the centre of the energy system transition’. SAPN’s People’s Panel informed their Proposal, and engagement with more than 200 participants that were considered ‘broad and diverse’. This recognises that this consumer investment makes up a broad cross-section of socio-economic backgrounds and diversity.
- sonnen will proactively seek engagement on SAPN’s \$20m Innovation Fund and expects other industry players and new entrants to be interested because it supports ‘new markets and services for the CER industry’. sonnen would be especially interested in aspects of ‘visibility on network capacity’ and delivering customer value.

sonnen is mature in the market and ready to respond to DNSPs in a commercial context. sonnen is already at a level of sophistication whereby we are ready to respond to requests for tenders to provide contracted services, and we already co-optimize across different services for the best price at the time for the consumer. sonnen and other OEMs are acutely aware of the need for a system-wide framework to support VPPs. The OEMs cannot do this alone.

We look forward to further engagement and participation in this vital issue.

Kind regards,

Dr Vervan Hann

Regulatory & Public Affairs

⁵ See P31 <https://www.aer.gov.au/industry/registers/determinations/ausgrid-determination-2024-29/revised-proposal>

⁶ See p107 <https://www.aer.gov.au/system/files/2024-02/Energex%20-%202025-30%20Regulatory%20Proposal%20-%20January%202024%20-%20public.pdf>