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Kris Funston
Executive General Director
GPO Box 3131
Canberra, ACT, 2601

Send via email: SAPN2025@aer.gov.au

CEC Submission to AER's Issues Paper:
SA Power Networks' Electricity Distribution Determination 2025-30

Dear Kris Funston,

The Clean Energy Council (CEC) welcomes the opportunity to provide feedback to the AER's Issues Paper: SA Power Networks' (SAPN) Electricity Distribution Determination 2025-30 (the Determination).

The CEC is the peak body for the clean energy industry in Australia. We represent and work with Australia's leading renewable energy and energy storage businesses, as well as accredited designers and installers of solar and battery systems, to further the development of clean energy in Australia. We are committed to accelerating the transformation of Australia's energy system to one that is smarter and cleaner.

The CEC's response analyses and proposes recommendations surrounding SAPN's Consumer Energy Resources (CER) Integration Strategy within the Determination. This is supported by five business cases including, CER Integration, Network Visibility, CER Compliance, Demand Flexibility, and an Innovation Fund. SAPN's proposed CER Integration Strategy is strongly supported by the CEC and viewed as an essential step in the continued integration of CER into Australia's energy systems.

We believe the outlined CER integration strategy and associated themes are appropriate and have been extensively researched, engaged with, and proven as priority by SAPN within their business cases.

The greatest opportunities to enhance consumer agency and participation in Australia's transition to clean energy reside in CER, and the CEC commend SAPN for making a significant commitment to accelerating the realised benefits of CER over the 2025-30 period. By improving approaches to CER compliance, demand flexibility, network visibility, and integration we can make the energy transition faster, cheaper, smoother, and more secure.

The CEC's soon to be released *Powering Homes, Empowering People: National Consumer Energy Resources Roadmap* will highlight if we successfully integrate CER into the system, we will save at least $20b in large scale investment and drive down energy prices for all consumers. The key to successful integration will not only occur through measures proposed by SAPN to open the supply side of the industry to effectively manage CER assets but will also require extensive reform on empowering consumers with knowledge, agency, and flexibility on how they want to take advantage of CER.

Key Considerations within the CER Integration Strategy

CER Integration Business Case

Whilst investment in extra network capacity will be critical over the 2025-30 regulatory control period (RCP), this should only form one aspect of a universal approach to CER integration when addressing excess solar production. This model would provide customers with the choice to unlock and maximise network capacity through additional measures such as price signals, network support contacts and solar soak tariffs. We commend SAPN for taking this approach with the introduction of flexible export arrangements for customers, resulting in a greater utilisation of the available network capacity, increased benefits for CER owners and greater use of de-centralised renewable energy. When considering a system wide perspective, expenditure towards the effective integration of CER and subsequent consumer participation will further increase network reliability against growing extreme weather risks.

The proposed expenditure outlined in SAPN's CER Integration business case appropriately captures the required activity needed to add additional export capacity, maintain current export levels and ongoing operational provision of the export service through the 2025-30 RCP.

Export Service Targets

The CEC is supportive of SAPN's proposed target of maintaining export service levels at or above 95% for 95% of customers throughout the 2025-30 RCP. Outlining a clear target regarding export service levels builds social license and trust. This ensures customers are provided a clear indication of how much curtailment of their export they can expect when taking up solar on a dynamic connection agreement over the next 5 years.

We commend SAPN on their ongoing engagement with solar customers regarding their expectations surrounding curtailment and export service levels. However, we do note that a majority of stakeholders favoured the highest service level of 98%. It is recommended that SAPN considers what it would entail to achieve this target of 98% within the next RCP based on the export service outcomes and realised customer benefits over the next 5 years.

Whilst a higher level of export service (>95%) would be preferable, the CEC acknowledges that SAPN has produced this target through consultation with customers and aligned the level of required expenditure with forecasted net benefits to all customers.

Cost Benefit Analysis

As outlined in the 25-year cost/benefit analysis, the export capacity program's forecasted benefits will reach $113.3 million due to the value of avoided curtailment. This outcome strongly supports customer preferences of reduced frequency and duration of curtailment and reduces loss of CER energy production throughout this period.

It is worth consideration that the cost and benefits proposed in the CER Integration business case, are modelled from the CER uptake forecast in the Australian Energy Market Operator's (AEMO) Integrated System Plan (ISP) 2022 Step Change scenario. This includes an

estimated 69GW capacity of rooftop solar, accounting for 65% of homes by 2050.[1] The introduction of new distributed energy policy and targets will be required to ensure this forecast is met. Hence it is recommended that SAPN work closely with the SA Government to support ongoing uptake and realisation of consumer benefits over the 25-year period.

As noted above, the CEC will be releasing a National Consumer Energy Roadmap, *Powering Homes, Empowering People* indicating the potential of at least $20b value of CER to be realised through consumer-focused policy and regulation.

Innovation Fund Business Case

The CEC is supportive of SAPN's proposed $20M Innovation Fund, promoting the trial of new markets and services within the CER industry.

The implementation of Innovation Funds by Ausgrid and AusNet since 2019 has set a precedent for distribution network expenditure to consider the benefits of innovation-driven initiatives.[2] Given these funds contain similar governance, funding, and committee structures, it is reasonable for the AER to grant SAPN this additional expenditure as it holds the potential to positively influence the industry. The CEC also notes that Ausgrid and Endeavour have proposed $45M and $25M Innovation Funds, respectively for their 2024-2029 RCPs, suggesting SAPN's $20M expenditure is appropriate.[3]

Additionally, we recommend that SAPN consider broadening the functionality of the Innovation Fund once governance and consultation processes have been established. This could be expanded to include funding towards educational and community engagement programs, particularly in regions with low penetration or barriers to CER uptake. These programs could relay the benefits of new products and services, build communication channels, and deepen consumer understanding of the role SAPN plays in the energy system.

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[1] 2022-integrated-system-plan-isp.pdf (aemo.com.au)
[2] Ausgrid - Determination 2019-24 | Australian Energy Regulator (AER) and AusNet Services - Determination 2021-26 | Australian Energy Regulator (AER)
[3] Endeavour Energy - 0_01 Regulatory Proposal - January 2023 | Australian Energy Regulator (AER) and Ausgrid - Determination 2024–29 | Australian Energy Regulator (AER)

Governance

We encourage transparency and continued community consultation in the implementation and spending of the proposed Innovation Fund. As outlined in the business case, the CEC is supportive of the governance of the fund by both customers and industry representatives. Whilst programs findings will be shared with customers, we recommend the AER encourage the publishing of annual Innovation Fund initiatives and expenditure. This would be paired with a final report available at the end of the RCP, highlighting the amount of unspent funds to be returned to customers. This will ensure customers are easily able to access information regarding the fund and better understand the consumer benefits of this expenditure. This could fall under the responsibility of the Community Advisory Board Sub-Committee.

Proposed Projects & Benefits

The Innovation Fund business case outlines the proposal to develop a network services marketplace, enabling the procurement of support services from VPPs, aggregators and retailers. The development of such platforms is a positive step by SAPN in exploring options to solve network constraints through seeking flexible energy capacity from CERs across their networks.

In March 2024, CitiPower and Powercor announced a partnership with Piclo, a flexibility services and market access service provider, to deliver a cloud-based local flexibility platform.[4] We encourage SAPN to seek partnerships to develop a network services marketplace. However, we would recommend that any provider selected by SAPN ensures there is interoperability capability between service providers and that consumers (or their agent) can switch service providers with limited to nil friction. This ensures greater national consistency across distribution businesses and reduces the additional expenditure needed for the development of an entirely new service/system to manage different marketplaces.

[4] Piclo launches grid flexibility solution in Australia through partnership with CitiPower and Powercor.

Demand Flexibility Business Case

The CEC is supportive of the proposed Demand Flexibility program, enabling the progression of flexible export arrangements. Greater use of flexible export arrangements should be encouraged by the AER, with distribution businesses offering these services being required to publish the level of export consumers are currently experiencing and future changes.

SAPN's proposal to achieve current export service of 95% for 95% of customers, is a good example of how distribution businesses can provide more certainty to consumers of expected access to the network for their flexible energy. We deem the proposed expenditure as appropriate for the development of opt-in, reward-based programs for participation and new flexible connections for customers, allowing increased reliability and reduced network augmentation costs.

We also note the CEC's participation in the Distributed Energy Resources Integration Working Group (DERIWG). Throughout this consultation we have expressed strong support for a comprehensive approach to CER that integrates load flexibility, cost-reflective price signals and market-based solutions.

Flexible Imports

We call to the attention of the AER, the intention for SAPN to contribute some of the $6.7M flexible load connections and systems expenditure towards the expansion of flexible imports. As evidenced in SAPN's Demand Flexibility business case, flexible imports are fast approaching and have already been explicitly enabled through CSIP-Aus. Further exposure is expected once the initiation of the CSIP-Aus Handbook into a formal Standards Australia Handbook is completed. These changes will allow distribution businesses to introduce import controls, without any pre-existing regulation or governance. It is our recommendation to the AER that SAPN works closely with the Distributed Energy Integration Program (DEIP) Working Group on their assessment of flexible imports and collaborates closely with customers prior to trialling and implementing flexible import limits.

This should be accompanied by the release of a statement by the AER, highlighting the need for more information surrounding consumer benefits, costs, and consistent application across distribution businesses to inform the introduction of flexible imports.

CER Compliance Business Case

It is encouraging to see that SAPN is progressing their compliance strategy from 2025 onwards to continue to build supporting systems for CER compliance. Standards compliance should focus on certification and ensuring compliance at the time of installation, through the installation and commissioning process, rather than relying on assessments of compliance post installation (i.e., after problems have occurred). We note that Phase 2 tends to shift focus towards detection and correction of compliance by installers and customers. This highlights the importance for the AER to support clearly defined roles and responsibilities when addressing compliance.

This body of work would clearly outline the roles and responsibilities across distribution businesses, retailers, installers, original equipment manufacturers (OEMs), aggregators, and consumers when addressing compliance. Governance frameworks are particularly relevant for corrections on compliance due to limited consumer interaction with distribution businesses, creating clear pathways to which market participant is responsible in supporting consumers with non-compliance assets.

Additionally, we recommend that SAPN collaborate with other distribution businesses to progress national compliance. This process would see less expenditure from the development of individual programs and supporting systems and result in a more efficient pathway to SAPN's proposed compliance targets.

Network Visibility

SAPN's proposed work program on network visibility is supported by the CEC, emphasising the importance of network modelling and capacity allocation to be informed by consistent and high-quality data.

Visibility of data enables the transition of the electricity network to a high penetration CER grid, and we commend this work program's alignment with key objectives outlined in the industry supported DER Visibility and Monitoring Best Practice Guide.[5] This includes

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[5] DER Monitoring

forecasted benefits from SAPN, such as increased customer safety through automated fault detection, reduced export curtailment due to accurate hosting capacity data and energy bill savings from improved voltage management.

Digital Twins

The integration of the Innovation Fund towards visibility on network capacity and streamlined connection processes will allow for better accommodation of additional solar PV exports and provide CER consumers and aggregators better access to information. We recommend SAPN continues partnerships with service providers, such as Neara, for the implementation of 'digital twins' and network digital modelling to assist with the development of capacity allocation.[6]

The 'digital twin' currently focuses on the visualisation of distribution network structures (e.g. poles & wires), however the Innovation Fund investment could develop this technology to identify areas of constraint and allocate capacity accordingly. The implementation of shared 'digital twins' between DNSPs would allow a greater understanding of regions and provide a holistic overview of hosting capacity in difficult to assess areas.

Next Steps

We offer the above considerations as a means of supporting the impact that SAPN's next regulatory period will have on the development of CER integration in South Australia. These measures will promote consumer choice and benefits, effectively unlocking and maximising the use of network capacity.

We are interested in ongoing consultation with the AER in the development and acceptance of SAPN's determination 2025-30 and view this an important step in securing the best practice implementation of CER in South Australia.

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[6] Electric Utility Software | Neara

If you have any queries or would like to discuss the submission in more detail, please contact Con Hristodoulidis at christodoulidis@cleanenergycouncil.org.au.

Kind regards,

Con Hristodoulidis
Director of Distributed Energy
Clean Energy Council