



*The Hon Peter Malinauskas MP*  
*Premier of South Australia*

Dear Premier,

Energy Networks Australia (ENA) is pleased to support the South Australia Power Networks (SAPN) nomination for the prestigious South Australian Government's Premier's Award for Innovation.

South Australia is well known as a global leader in the per capita uptake of residential Solar PV and in Australia, many of the other distribution networks around the country look to SAPN as a key source of innovation in low voltage electricity networks.

The Flexible Exports program is a glimpse of a renewable future where the traditional role of networks to provide safe, reliable and affordable power must also extend to helping customers and the broader community benefit from the optimal use of their assets, also known as Distributed Energy Resources (DER).

Implementing Dynamic Operating Envelopes (DOEs) at scale is a world first. Overcoming the technical and regulatory challenges to innovate should not be understated. To support the program's implementation SAPN has had to develop many foundational capabilities such as a robust, digital DER compliance framework, developing appropriate regulatory approaches with the Australian Energy Regulator (AER) and establishing key partnerships with smart inverter manufacturers.

It is highly likely that these learnings can be leveraged by other networks around the country and indeed, ENA acts as a knowledge-sharing platform to facilitate this.

In summary, ENA believes the SAPN Flexible Exports program is not only a highly innovative tool to enable real world benefits for South Australians, but has the potential to assist other electricity networks in the global journey towards Net Zero.

We would be pleased to answer any questions regarding our letter of support.

Yours faithfully,

A handwritten signature in black ink that reads "DvAB" followed by a flourish.

Dominique van den Berg  
Chief Executive Officer



“SA Power Networks' Flexible Exports for Solar PV Trial is a pioneering project in the distributed energy space. The findings from the trial have led to significant policy change and has led the direction of Flexible Exports innovation across the nation.”

**Australian Renewable Energy Agency**



“Flexible Exports was the critical missing piece in our energy transformation. With rooftop solar now on 1 in 3 homes, most households were being artificially constrained by static export limits in how much solar they can install, and how much can be sold back into the grid. By pioneering the elegant and efficient flexible exports solutions, SAPN have paved the way for cheaper, greener electricity for everyone. And importantly, they brought industry with them, ensuring that despite some speed bumps, this was implemented cost effectively in a timely manner.

Analysis of our customer base indicates that if the rest of Australia follows the SAPN lead, Australian families will save an additional \$109 million each year, and that this will increase as we electrify everything and seek even larger rooftop solar systems. This is a big win for both solar owners and households without solar.”

**Stefan Jarnason**  
Solar Analytics



“SA Power Networks' work on Flexible Exports has laid the evidence base for additional customer benefits enabled through dynamic operating envelopes for distributed energy resources such as solar. SAPN has long been at the forefront of innovation and prototyping of new initiatives, enabling very high degrees of solar and DER penetration, integration and ultimately optimisation. Network integration and optimisation are critical to grid stability as well as realising benefits for customers. SAPN's leadership on adopting the CSIP-Aus (Common Standard Inverter Protocol) in 2023 and work with OEMs on these changes was a first for Australia and sent a clear market signal on the need for interoperability and optimising inverter settings for dynamic exports. Solar Victoria works closely with SAPN and has since moved to mandate CSIP-Aus in its Notice to Market which sets the rules for participation in the Victorian Government's Solar Homes Program – with a view to ultimately catalysing a national position. I commend SAPN on its continued leadership and innovation.”

**Stan Krpan**  
CEO Solar Victoria



“It's close to one year since I've installed my solar system with Flexible Exports, but I'm still in front financially. If it wasn't for Flexible Exports, my solar export would be capped at 1.5kW instead of the 8.2kW that is achievable with my inverter.”

**Darren Nissen**  
Flexible Exports Customer



“The Smart Energy Council (SEC) is a national industry peak body representing the full solar energy value chain, from manufacturers, distributors, retailers and installers of solar inverters and solar solutions. It also represents the agents who offer coordinated control of inverter systems remotely. SAPN's Flexible Export Project has showcased global best practice in solar industry engagement and collaboration. The technical problem being solved is a global first, and could only succeed with a collaborative approach between industry, government and SAPN.

In this case this is exactly what has happened. By engaging industry early in the process, and being responsive to industry feedback and concerns, the solution being delivered has strong industry support. Working together we are showing the world how we can reach very high solar penetration rates while delivering on security of supply.

SAPN should especially be congratulated for having a responsive implementation plan that allowed product changes to be made and fully tested prior to deployment and to give distributors time to prepare for the improved stock to be available.”

**John Grimes**  
CEO, Smart Energy Council



“I have been following SA Power Networks' development of the Flexible Exports connection since 2019. I have observed how a team of dedicated staff turned an embryonic idea into something that is now implemented as part of SA Power Networks' suite of product offerings. I am particularly impressed with the SA Power Networks team's openness in sharing their ideas, technical concepts and trial learnings with a broad section of the electricity industry. Their collaborative approach was instrumental in influencing changes in policy design at market bodies and government and encouraged other distribution network operators to adopt similar approach in managing network congestions caused by increasing distributed solar PV export.

I also applaud SA Power Networks in leading the work in developing a nationally consistent approach to implementing the technical aspects of flexible export connections. Through industry groups such as the ARENA Distributed Energy Integration Program, SA Power Networks has championed the development of the *Common Smart Inverter Profile Australia* (CSIP-Aus) – a common communication protocol for solar inverters. They have also been active in supporting the industry and others through developing testing procedures and certifying compliance to the new protocol.

SA Power Networks' work in this area is crucial in helping Australia integrate more and more renewable energy, and in ways that deliver benefits to as many customers as possible. I highly support SA Power Networks' application for this award.”

**Ed Chan**  
Director, Australian Energy Market Commission  
ARENA Distributed Energy Integration Program Steering Committee Member



“We greatly appreciate SA Power Networks' collaborative approach to the flexible exports project, which allowed for extensive testing and validation to be conducted in a controlled test environment, leveraging the Redback API and the SAPN Test Utility server. Throughout this collaboration, the transparent exchange of test results and insights between Redback Technologies and SA Power Networks enabled us to evaluate performance, refine the technology, and improve overall system efficiency. The ready availability of SA Power Networks personnel for regular triage and information sharing meetings with our team was invaluable, ensuring a seamless and successful implementation.”

**Adrian Knack**  
CEO, Redback Technologies

## DERI-API Technical Working Group

“ Since 2019 the DERI-API Technical Working Group's (Distributed Energy Resources Integration Application Programming Interface Technical Working Group) development of CSIP-AUS has been built on the learning and key insights of our DNSPs members and their DER management trials. As a founding member of the working group, SAPN and its Flexible Exports trial (and now program) have made an enormous contribution to both the guide and the newly-developed test procedures, and helped enable CSIP-AUS to be adopted in jurisdictions across Australia. As working group chair I have highly valued the technical expertise and insights of our SAPN members, and am excited to see the continuing development of this world-leading DER management program. ”

**Tim Moore**

DERI-API Technical Working Group Member



“ As participant in SA Power Networks Solar Industry Reference Group and Network Connections Group in the lead up to the Flexible Exports rollout, I observed committed focus and broad stakeholder engagement. SA Power Networks sought to identify and resolve roadblocks in technical practicality and understanding, whilst prioritising timing and communications to both industry and consumers alike.

This project represented a critical step change in the energy space, where there has already been a lot of change triggered by complex factors that are difficult to explain in the face of rising energy bills for an already anxious consumer base experiencing rising cost of living pressures on multiple fronts.

Without SA Power Networks dedication to widespread engagement in this project, the impacted stakeholder groups would not have had the platform, nor balance of technical capability, industry and customer focus to chaperone this project into fruition within the required timeframe, and ensure its success.

I witnessed SA Power Networks as the clear centre point of the Office of the Technical Regulator, OEM inverter manufacturers, solar installers and industry. It acted to mitigate risk to industry and consumers, enable optimisation of the project impacts, bringing forward the removal of barriers (both technical and practical) to ensure a successful world first flexible exports program, providing an advanced template for replication across Australia, and the world, for a smarter electricity grid.

Well done SA Power Networks and personnel, on their investment in technical expertise, and well considered and open-minded leadership in this space. ”

**Ben Lovell**

RAA Solar & Battery Senior Manager  
Solar Industry Reference Group & Network Connections Group Member



“ South Australia is rapidly transforming its energy supply as part of the government's ambition to achieve net-zero carbon emissions by 2050, with uptake of rooftop solar technology by 1 in 3 households a key part of the transition. The Department for Energy and Mining has appreciated that it has been able to work with a willing partner in SA Power Networks to deliver world leading tools to ensure that the community can maximise the benefits from investing in solar while maintaining a secure and reliable energy system.

The successful launch of Flexible Exports would not have been possible without the significant commitment by SA Power Networks to develop standards and systems to support its delivery while working closely with equipment manufacturers and retailers to provide the technology that can be utilised seamlessly by consumers. Importantly, this work is leading development nationally with Western Australia, Queensland and Victoria implementing projects that utilise these capabilities as we move towards a smarter, two-way grid. ”

**Vince Duffy**

Deputy Chief Executive Officer, Department for Energy & Mining  
Government of South Australia



“ In 20 years' time, this is how it'll be for everyone in the world. ”

**Eddy May**

NRG Solar



“ I have been working with SAPN as a representative on both their Solar Industry Reference Group and Community Advisory Board and commend the team for their open communication and consultation with the solar PV industry. Flexible Exports was the first of its kind in Australia and SAPN have set the bar for other states in regards to development of a pilot and then execution into the mainstream. It has been no easy feat to develop, test and execute this project, while consulting with numerous stakeholders, all who have their own needs and priorities.

I'd like to thank SAPN for a considered approach, looking at the impact on numerous stakeholders while also working on meeting the objectives needed to ensure a more stable network in South Australia. ”

**Jenny Paradiso**

Managing Director, Suntrix