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NSW Department of Climate Change, Energy, the Environment and Water

3rd March 2025

Dear [REDACTED]

Subject: SAPN response to consultation paper on NSW Emergency Backstop Mechanism and Consumer Energy Resources Installer Portal

I am writing to you to provide SA Power Networks feedback for the NSW Emergency Backstop Mechanism and Consumer Energy Resources Installer Portal. Emergency backstop requirements have been in place for some time in South Australia, commencing with the Government of South Australia's Smarter Homes program in September 2020. At AEMO direction, SA Power Networks have needed to execute the emergency backstop capability multiple times to support system security since implementation. Both the need for a backstop and the complexity of delivering this capability in a way that is sustainable for the whole electricity industry is well understood by SA Power Networks.

SA Power Networks have been actively engaged in the early stages of NSW backstop mechanism and CER Installer Portal initiatives with the NSW government and NSW/ACT DNSPs, facilitated by Energy Networks Australia, and will continue to engage and share learnings from our own experiences. Some key points of feedback included in responses to questions below.

We welcome continued engagement from the NSW Government on these initiatives as national harmonisation of CER integration activities benefits all parts of the supply chain, lowering the overall cost to serve and enhancing the customer experience. To discuss any part of this response further, please contact [REDACTED]

Kind Regards

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Question 1 - Do you support the requirement for NSW DNSPs to harmonise their implementation of the backstop mechanism? If not, please explain why.

Yes, national harmonisation of CER integration activities benefits all parts of the supply chain, lowering the overall cost to serve and enhancing the customer experience.

Question 2 - Are the scope and timelines for the Emergency Backstop Mechanism feasible? If not, please explain why.

Without being well positioned to comment on readiness towards the current timeline, SA Power Networks encourages the NSW Government to account for all of industry when measuring readiness. This extends beyond the DNSPs and to the solar retailers, installers, manufacturers etc. Beyond technical readiness of a solution, training and support must also be delivered to ensure the changes are readily adoptable from the commencement date and the impacts of change are mitigated.

Regardless of the deadline, it would be prudent for the government to explore what a phased rollout of the requirements would look like in NSW. Flexible Exports using CSIP-AUS, the evolution of SA Power Networks backstop mechanism was rolled out gradually across the network suburb by suburb after the government deadline for CSIP-AUS capability. This helped reduce the impact of 'teething issues' for new processes for networks, manufacturers and installers alike.

Question 3 – Do you agree with the order of the hierarchy of measures to increase load in the grid during MSL events? If not, please explain why.

We agree with the ordering of the hierarchy of control, however we strongly suggest the addition of gross generation curtailment after export limiting and prior to solar disconnection. In our experience, export limiting has a much lesser perceived impact than generation limiting and disconnection as it allows customers to continue to self-consume their solar behind the meter during a backstop event. Generation limiting is preferred over disconnecting as SA Power Network has on several instances observed manufacturer specific challenges in reconnecting inverters once the event is over, requiring a site visit to rectify the system. Generation limiting will provide the same net result to minimum system load challenges without the additional risks and impact. Any consideration of disconnection as a further method beyond generation limiting should be weighed up against the customer and cost impacts it carries.

Question 4 – Are the design elements of the Emergency Backstop Mechanism appropriate and feasible? If not, please identify why and provide any alternative suggestions.

Yes.

Question 5 – Are the roles and responsibilities of each organisation appropriate and feasible? If not, please identify why and provide any alternative suggestions.

In our view, the wording is not explicit enough to reinforce that DNSPs are not responsible for providing on site communications, commonly referred to as 'customer internet'. We find that the weakest link is often the internet provided by the customer due to common failures like a changed password or weak wireless signal. Although the DNSPs can play a proactive role in notifying customers of outages to their system, they are not well placed to provide or rectify issues with internet connectivity. There should be sufficient incentives built into the backstop implementation to encourage customers and their installers to maintain connectivity, such as fallback export limits in the event of extended disconnection.

Question 7 - Do you have any concerns or insights into using CSIP-AUS compatible inverters and an

internet connection to control the backstop mechanism?

No, we believe a CSIP-AUS based backstop mechanism strikes the right balance between cost to implement and maintain and customer impact during an event. It also has the added benefit of providing a seamless pathway to enabling flexible export or import connection options or dynamic network tariffs which generate greater customer benefit.

We do note that alternative, blunter backstop mechanisms such as Emergency Voltage Raise, can help reduce the singular reliance on an internet-based method and assist with bringing legacy solar installations under the backstop mechanism until sufficient capacity is captured under the CSIP-AUS scheme.

Question 8 – Is it appropriate for the Emergency Backstop Mechanism to be implemented using technologies and systems consistent with enabling the future use of flexible export limits? If not, please explain why.

Yes, SA Power Networks sees backstops as a transitional tool in order to maintain system security during the transformation of our energy system. A more holistic integration of CER into the system should alleviate the need for this lever. This includes increased market participation of resources, more efficient daytime usage of solar energy and storage to shift usage. Core to these use cases are foundational elements like Flexible Exports which uses dynamic limits to increase the amount of CER on the network while also managing the flows at times of congestion. We also note that CSIP-AUS can be easily extended to support other future customer offerings, such as dynamic network tariffs, to further customer benefit.

Question 9 – Which, if any, existing test protocols should be considered for implementation as the consistent test protocol for NSW?

SA Power Networks has certified a large amount of the solar industry in Australia already as mandates for CSIP-AUS capability have been in place since July 2023. The accompanying Clean Energy Council list of CSIP-AUS approved products is readily available for use in NSW. Alongside this, SA Power Networks continues to support efforts to align on transitioning this scheme to a more national and enduring process.

Leveraging this approach will minimise effort for solar manufacturers who have already validated capability within their products.

Question 10 – Do you think the conditions under which the Emergency Backstop Mechanism could be used are appropriate? If not, why? Please suggest any alternative conditions that should be considered.

Yes

Question 12 – What information will manufacturers, installers, customers and distribution networks require to implement the Emergency Backstop Mechanism?

- I. Who is best placed to communicate this information to the different audiences?**
- II. How should this information be best communicated to the different audiences?**

Solar wholesalers and distributors will need clear information on deadlines for equipment compatibility to ensure they prepare stocks in time to meet the new requirements.

Solar retailers and installers will need information on the changes that impact them such as new commissioning procedures so that they can effectively install their equipment. In our experience, parties

implementing the change are best placed and should be responsible for developing training materials, e.g.:

- Training material related to changes to DNSP processes should be the responsibility of the DNSP, and harmonised across all DNSPs where possible
- Training material related to the proposed CER installer portal should be the responsibility of the NSW Government and DNSPs.
- Training material related to changes to the OEM process should be the responsibility of the OEM.

Customers should also receive simple communications either direct from the DNSP or via their solar retailer that outline their obligations in the requirements, such as maintaining an internet connection to their inverter.

Question 14 – Do you support the functions outlined for inclusion in the CER Installer Portal? If not, please explain why.

Yes, in our experience, implementation of a compliance program is one of the most essential components of ensuring that systems are installed and commissioned correctly and are available for curtailment during a backstop event. This will ensure customers are left with systems that are working, and the correct parties are held accountable for non-compliance and are incentivised to rectify issues in a timely manner.

Question 16 – Are there additional ways that the Portal should be designed to support installers?

The portal design needs to take great care in designing the installer experience of the on site registration and capability testing interfaces. These touchpoints are high volume and critical for the successful commissioning of a system and avoidance of repeat site visits to rectify issues. Failure to have a clear set of instructions and actionable feedback to installers will drive non-compliance and increase calls to the portal support team.

From an installer perspective, the information to pass a capability test will be passing through OEM systems, DNSP systems and finally the NSW Government installer portal. With multiple parties involved in this exchange there will be some complexity to manage. In any case, the NSW Government should ensure a support and escalation process is established to support the use of the portal, particularly while industry is adapting to the change.

Question 17 – Do you agree that the party that applies for a CER connection should be responsible for ensuring the installers they have engaged rectify non-compliance? If not, please explain why.

Yes, there is a chain of responsibility that flows from the applicant selling the system to the party they engage to complete works on site. In our experience, the applicant is the solar retailer selling the system to the customer who is responsible for managing all other warranty issues for a given installation, so backstop compliance is a logical extension of this arrangement.

Question 23 – What information will installers and any other stakeholders require to support the roll out of the CER Installer Portal?

I. Who is best placed to provide this information?

II. What are the best ways of communicating this information to stakeholders?

Aligned to the response to question 12, all changed or new processes need accompanying communications and training where relevant to support a smooth transition. The party implementing or hosting these changes should be responsible for the delivery of this collateral.

When contemplating the different ways of communicating these methods, SA Power Networks took a combined approach of in-person training for those who could attend, followed up with an online recorded delivery to ensure access is widely available for all parties. This was in response to installer surveys that showed a split in preference on the two models.