Mark Feather
General Manager, Strategic Energy Policy and Energy Systems Innovation
Australian Energy Regulator
Submission by email to NetworkPolicy@aer.gov.au

19 January 2023

Dear Mark,

Subject: Australian Energy Regulator (AER) Interim Export Limit Guidance Note

SA Power Networks welcomes the opportunity to provide feedback in response to the above guidance note.

South Australia is at the forefront of the transition to distributed energy, and SA Power Networks is committed to playing our part in enabling and accelerating this transition. We have set a public goal to double the amount of rooftop PV we can accommodate on our network by 2025 and we are working with the solar industry and other stakeholders on a range of initiatives to enable this.

Our previous submission to the AER consultation on Flexible Export Limits[1] outlined our journey in developing and trialling flexible exports to the end of 2022. Since this submission, on 1 July 2023, SA Power Networks successfully launched a business-as-usual Flexible Exports offering that is being progressively rolled out across South Australia[2]. This launch coincided with the introduction of the SA Government Dynamic Export Regulations which require all new and upgrade solar systems in South Australia to be capable of receiving and enacting flexible export limits.

SA Power Networks is also highly engaged in activities to promote national harmonisation on flexible export limit implementations. This includes the establishment of a national test and certification program for solar inverters with the CSIP-AUS communication standard and a national Public Key Infrastructure (PKI) framework to enable cyber secure communications. Harmonisation of these aspects of the solution will reduce cost and complexity for equipment manufacturers and DNSPs which will benefit consumers.

Our high-level feedback and recommendations on the AER's Interim Guidance Note are summarised below, and we have included detailed responses to the consultation questions in Appendix A.

1. **We are strongly supportive of a principle and outcomes based approach to regulating flexible export limits**

[1] https://www.aer.gov.au/system/files/SAPN%20response%20to%20AER%20consultation%20on%20Flexible%20Export%20Limits_Redacted.pdf

[2] https://www.sapowernetworks.com.au/data/315488/sa-government-dynamic-export-limit-requirements-and-sa-power-networks-flexible-exports-expansion-now-live/

We are strongly supportive of the AER taking a principles and outcomes based approach in their guidance on flexible export limit implementations. In this early rollout stage, it is critical to afford sufficient flexibility to DNSPs to adapt their emerging solutions to consumers' evolving needs.

While there are certain aspects of the draft Interim Guidance Note that align with this approach (e.g. the capacity allocation principles), further sections provide prescriptive implementation guidance (e.g. by outlining specific content requirements of Connection Policies and Model Standing Offers and topics for customer and industry engagement). We recommend that the AER modify this guidance to an outcomes based approach, ensuring that DNSPs can develop solutions that are fit-for-purpose for their specific customer bases and circumstances.

We have outlined specific areas where we think the guidance note could be modified to align with this recommendation in Appendix A.

2. We recommend that the AER hold off any rule change proposals until flexible export rollouts are further progressed

South Australia and Queensland are the only two jurisdictions with existing business-as-usual flexible exports offerings. While SA Power Networks has been on the flexible exports journey since 2018, aspects of the offering are being adapted as learnings from consumers and the solar industry emerge.

Given that DNSPs, customers, the solar industry and the AER have very little real-world experience of flexible exports and capacity allocation today, we believe it is premature to seek to prescribe binding rules as to how DNSPs should approach their implementations. Without real-world experience to draw on there is a risk of locking in approaches that may turn out not to be the best, to customers' detriment. It is reasonable to provide general guidelines based on principles and outcomes, but binding and prescriptive requirements should only be introduced when there is a high confidence that they are well-informed, based on sound evidence of best practice, and necessary to address an actual or emerging risk that the long-term benefit of customers will be impacted.

Further to this, there is a risk that if highly prescriptive, binding regulation is introduced too early that flexible export implementations could be materially slowed down in other jurisdictions. The process of starting small and progressively building capability as learnings emerge has been paramount to the success of the South Australian rollout, which could be challenging in other states should a high regulatory bar be set.

For these reasons, we recommend that the AER refrain from any rule change requests and that the interim guidance note remains in place until rollouts are further progressed and learnings bedded in.

3. Any future rule change should afford the AER maximum discretion, rather than codifying prescriptive requirements within the NER

Should the AER determine the need for a rule change in time, we recommend that maximum discretion is afforded to the AER to account for DNSP or region-specific circumstances and ensure adaptability to emerging learnings. This could be achieved by updating the rules to require:

1. The AER to publish the Export Limit Guidance Note; and
2. DNSPs to demonstrate that they have had regard to the guidance note in their CER integration strategies

4. **Predicting future solar system performance for customers is impractical, and could result in setting unrealistic expectations**

In several locations the Interim Guidance Note requires DNSPs to provide customers information about the expected performance of their system, or similar example systems, when signed up to a flexible export connection option. There are many factors that influence solar system benefits including the size of the system, orientation and tilt of the system, age of the system and quality of the installation and the customer's wiring, panel shading, self-consumption level and feed-in tariffs, all of which are outside a DNSP's control. We recommend that the guidance only requires DNSPs to provide information about export limits over which they have control.

Furthermore, predicting future flexible export performance for specific customers is challenging given it depends heavily on the number of other customers with solar on the local low voltage network, which can change dramatically over time. From our experience, 'past export performance' in a customer's area is a useful metric which helps solar installers understand the current state and frame a discussion about how this may change in future.

We look forward to continuing to engage with the AER as work in this area is progresses and would welcome the opportunity to meet to discuss these matters in more detail. In the meantime, If the AER has any questions on any aspect of our response, please contact James Brown, Future Networks Program Manager on [redacted] or [redacted].

[redacted]

Jessica Morris
Chief Customer and Strategy Officer

Appendix A: responses to consultation questions

5.1 Capacity allocation

Capacity allocation principles

What are your views on the AER's proposed approach for amending the DEIP capacity allocation principles? Do you have any specific views on the nature of amendments required to achieve the AER's policy objectives?

We are supportive of the proposed amendments to the DEIP allocation principles, and believe that with these modifications the principles meet the policy objectives.

Should the capacity allocation principles be binding, and if so, should these be codified in the National Electricity Rules or set out in a binding AER Guideline?

No. We do not believe that the principles should be binding at this early stage of rollout as it is critical to afford sufficient flexibility to DNSPs to adapt their emerging solutions to consumers' evolving needs.

Capacity allocation methodology

What are your views on our proposed approach for improving transparency in DNSPs' capacity allocation methodologies? Is the guidance provided sufficiently targeted and proportionate for achieving the AER's policy objectives? Are there any other areas where further guidance is required?

There appears to be some conflation between *hosting capacity calculation methodology:* the process by which available network hosting capacity is calculated in real time from network models or smart meter data and *capacity allocation methodology:* the process by which available hosting capacity is allocated.

In our opinion, it is appropriate for DNSPs to publish information about the *capacity allocation methodology* within the CER integration strategy and on their website. It is also important for DNSPs to publish information regarding network hosting capacity, issued export limits and their utilisation.

However, the *hosting capacity calculation methodology* is subject to change rapidly as DNSPs learn more, and systems and access to data improves. It will be important to ensure this isn't enshrined in DNSPs' regulatory documentation that can only change once per regulatory period, limiting intra-period innovation.

What time periods should DNSPs consider in allocating network hosting capacity? For the allocation model, over what timeframe should capacity allocation be considered?

SA Power Network currently allocates hosting capacity every hour for the next four hours for flexible export customers. In our view, this strikes the right balance between certainty in the calculation, data transfer costs and riding through short communication outages.

The value of calculating operational hosting capacity ahead of time depends on the receiving systems' ability to use that data. For example, a battery storage system participating in a VPP could use a future looking DOE to alter its behaviour to prepare for a market event, whereas standalone solar PV has no use for a DOE forecast.

In our view, the forecast period over which DNSPs calculate and allocate hosting capacity is an implementation detail which does not require regulatory guidance at this time.

5.2 DNSP Revenue determination process

Connection Policy

Has the AER identified relevant issues and matters relating to export limits (static and flexible) that should be addressed in DNSPs' connection policies? Are there any matters that need to be added or removed and if so, why?

Our specific feedback on these guidance areas is as follows:

- *the circumstances in which static export limits will be imposed and their approach for setting static export limits.*
    - Suggest rewording *imposed* to *offered* since in many circumstances customers will have a choice between connection offers
- *their approach for apportioning available network hosting capacity between static and flexible export limits.*
    - By definition, static export limit customers will always be allocated first since they can't be curtailed.
- *the circumstances in which flexible export limits will be used and eligibility requirements.*
    - Suggest replacing *used* with *offered* as above
- *the circumstances in which consumers will have their flexible export limit reverted to static export limits or will not be able to export, the expected duration of this occurrence and the notification that will be provided to consumers when this occurs.*
    - It is reasonable that customers understand that this will occur on loss of internet communications or in emergency situations
    - The frequency and duration of these events is likely to be outside of the DNSPs control, since loss of communications are a product of the customer's equipment and emergency curtailment is typically under AEMO's direction
    - DNSPs' future ability to detect these occurrences and notify affected customers are likely to vary are not clear at this time as systems and processes are still maturing, so it's too early to prescribe requirements around this.
- *the DNSPs approach for notifying consumers currently on static exports of their ability to apply to have their limit changed to a flexible export limit*
    - While there is the potential to notify static customers of the potential to convert to flexible, most will not have the requisite technology available on site to do so. Additionally, the overwhelming majority of customers on static export limits today

would receive no benefit from transitioning to flexible exports unless they increase the size of their inverter. For these reasons, we believe broad stroke notification will create more confusion than add value, and that customers are best to reconsider their export options when upgrading or replacing their system.

5.3 Key considerations in implementing and using flexible export limits

Connection agreements and consumer participation

Model standing offers

What are your views on the key areas identified by the AER as needing to be addressed in the terms and conditions of connection agreements that include flexible export limits? Are there any areas that should be included, removed, or further clarified, if so, what are these?

Our specific feedback on these guidance areas is as follows:

- *Service offering*
  - Appropriate to outline the upper and lower limits of export levels (1.5-10kW)
  - Per feedback on the Connection Policy, we don't think it is appropriate or feasible to include specific service level estimates within the Model Standing Offer. These are best provided as historic export information on the DNSP website.

What are your views as to whether the AER should seek such a rule change regarding model Standing Offer and connection policy requirements?

- Given the immaturity of flexible export rollouts across Australia, and that the AER already reviews and approves all updates to the MSO, we do not recommend a rule change at this time.

Information to help consumer decision making

Is there any additional information DNSPs should provide consumers to enable them to make an informed decision about whether to opt-in to flexible export limit arrangements?

- The information consumers and the solar industry need to make informed decisions about export options depends on the maturity of messaging from a DNSP and their specific audience. For this reason, we recommend the AER provides outcomes-based guidance on this matter, for example 'customers have the information required to make an informed decision about whether to select fixed or flexible exports'.

Consumer and industry engagement

What additional engagement or information do you consider DNSPs should undertake or provide to ensure consumers are well-informed in the decision-making process and continue to be engaged throughout the later stages of the customer journey?

- As above, we recommend the AER provides principles-based guidance for customer and industry engagement with flexibility for specific engagement topics to differ between jurisdictions as required.

- We agree it's reasonable to outline the general situations in which exports will be reduced from the maximum allocation (e.g. network constraint or system

emergency). It's important to note that reducing export limits will not necessarily result in curtailment as this depends on current levels of generation and self-consumption

- The frequency and duration of flexible export limits reductions will vary from customer to customer based on their location, local network construction etc and will change as more solar is connected in a given area.

  We recommend this information is provided on DNSP's website as historic export levels in a specific customer's area so it is able to be utilised by solar installers for specific customer circumstances.

- Notification of reduction in flexible export limits is not practical as the limits could change as often as every 5 mins. Customers can use their inverter OEM app to monitor system performance. SAPN is also trialling a new visibility platform, SmartInsights, to give customers more granular detail on their past export performance.