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Mark Feather
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Australian Energy Regulator

by email: NetworkPolicy@aer.gov.au

Dear Mark

Flexible Export Limits – Submission to the Issues Paper

AusNet welcomes the opportunity to provide this submission to the Australian Energy Regulator's (AER) issues paper on flexible export limits. Flexible exports represent an important change in how customers access the network in the future, and we support this review to ensure the regulatory framework is designed in a way that unlocks customer benefits while minimising potential harm.

Approximately 25% of AusNet's customer have rooftop solar, and the demand for new connections remains strong, at approximately 20,000 new connections per year. Through our customer and stakeholder engagement over the past decade, customers have expressed strong support for measures to improve the efficient integration of CER on the network, including the ability to export. These objectives are consistent with the Victorian Government's renewable energy policy and a pathway to Net Zero.

To support innovation in export management, we partnered with SA Power Networks on a **Flexible Exports Trial** in July 2021, with approximately 40 customers signed up to date. The Flexible Exports Trial uses dynamic operating envelopes (DOE) to communicate export limits to customers' inverters through a gateway device. This trial is in addition to the industry-leading EDGE trial—an ARENA funded partnership between AusNet, the Australian Energy Market Operator (AEMO), and Mondo—which also trials use of DOEs to set network limits.

As our trials shows, the use of flexible export limits allows networks to unlock additional exports in areas of network congestion that would not be typically available through use of static limits. As part of our Flexible Exports Trial, we have unlocked 90.7MWh of exports since July 2021, that would previously have been constrained to zero—on average, customers signed up to the Flexible Exports Trial have exported up to 3.25kW per year.

While flexible exports unlock value for customers in constrained areas, they will also play an important role the efficient and dynamic management of two-way flows as networks transition to the role of the Distribution System Operator (DSO). Over time, use of static limits is anticipated to be replaced by dynamic limits and network access arrangements that improve network utilisation and increase fairness in sharing of network capacity between customers.

Flexible exports limits can also provide benefits to electricity supply security, e.g. in minimum system load management. During South Australia's two minimum system load conditions in November 2022, SA Power Networks implemented a number of solutions to manage minimum demand, including use of flexible export limits where customer devices were enabled to respond.¹ As the risk of minimum system load continues to increase across the different jurisdictions, flexibility in managing exports will be crucial in managing the system with minimum disruption to customers' electricity supply.

To support the framework review, our submission provides recommendations that unlock benefit for customers in the long term, while providing customer choice and flexibility in the implementation.

¹ SAPN, Flexible Exports for Solar PV, Insights Forum, 21 November 2022

Opt-in or opt-out arrangements should be network specific and based on the justified need

Our Flexible Exports Trial tests an opt-in model where customers are offered a choice between a low or zero static limit and an alternative flexible arrangement. Typically, we would expect the customer's installer or CER retailer would be the entity providing and explaining the choice to the customer, as part of the sales and installation process. However, for the purposes of the trial the offer was made by AusNet directly to the customer, following the connection.

As distributors roll-out their flexible exports in their networks, we support flexibility in how customers are signed up to these arrangements as long as customers are presented with appropriate materials to make an informed choice. In some jurisdictions, due to strong CER connections and growing network constraints, the potentially high benefit that can be extracted from flexible export arrangements should allow distributors to implement an opt-out model, if there is stakeholder and government support. Alternatively, in other jurisdictions where CER connections are not resulting in network constraints, an opt-in model may be more appropriate.

The decision on whether each distributor applies an opt-in or opt-out model should be determined as part of the regulatory reset process and the review of the connection policy. This should be subject to customer and stakeholder consultation and support, as part of the preparation of the regulatory proposal.

It is important to note that the Energy Security Board (ESB) is currently considering mandating 'flexible exports ready' inverters from 1 July 2024. This would mean that from 2024 customers are likely to have to invest in inverters that meet new communications standards, regardless of whether they participate in flexible exports. These customer investments should be considered in the implementation plans by distributors, i.e. ensuring customers get the most out of their investment.

A principles-based approach to regulating flexible export limits is appropriate

We support the AER's proposal to provide flexibility to distributors in implementing flexible export limits, including the calculation of DOEs. Many elements of DOEs are linked to the specific parameters of a network, and flexibility DOE design and implementation would allow distributors or DSOs to leverage their knowledge and expertise of their respective network.

Through our EDGE and Flexible Export Trials, we are trialling different approaches to DOE calculation and implementation, which are providing learnings around the efficiency of each approach and methodologies that unlock the most customer benefit. Notably, the University of Melbourne is assessing a number of different capacity allocation methodologies for DOEs as part of our EDGE trial, testing the limitations and benefits of each approach.

As part of the principles-based approach to flexible export limits, we support the AER publishing the principles for DOEs. This can be done through an update to the Distributed Energy Resources (DER) Integration Guidance Note. No other changes need to be made to the DER Integration Guidance Note, to provide specific guidance on the implementation of flexible exports. The use of flexible export limits is considered to be one tool in the toolbox of managing DER and should be considered against the suite of other options in our DER integration plan and investment proposal.

Given the agreed principles, the AER does not need to approve the selected methodologies by each distributor. Rather, distributors could test potential methodologies with their customers and stakeholders, to ensure the preferred approach is reflective of the preferences and values of their customer base, which may differ across the networks and jurisdictions. It would also be impractical to audit the methodologies against the AER's principles, given the principles require interpretation of concepts such as fairness and equity that are best agreed through stakeholder consultation.

We broadly support the use of Distributed Energy Integration Program (DEIP) Working Group principles for capacity allocation, whether static or flexible; however, we propose:

- principle 2 be amended to include consideration of the National Electricity Objective (NEO), to ensure the capacity allocation methodology is designed to deliver long-term benefits to consumers. We propose the following wording: "The allocation should seek to maximise the use of network export hosting capacity in a way that meets the National Electricity Objectives, while balancing customer expectations regarding transparency, cost and fairness"

- principle 5 be removed from the capacity allocation principles, as this principle is a broader regulatory framework consideration rather than the way in which the capacity of the network should be allocated once a customer is signed up to flexible exports.

For avoidance of doubt, distributors are best placed to set, manage and enforce flexible export limits on their network. Distributors have the required visibility of their networks and are well placed to take these unique factors into account in determining network access arrangements. This is consistent with principle 1 of DEIP's Working Group proposed principles.

We support transparency around the application of the capacity allocation principles and the allocation methodology, both in our DER Integration proposals and through the connection process. However, we have concerns that the proposed data sharing arrangements, including networks publishing all data related to DOEs and conditions under which they are determined, will result in high costs to all customers, as well as privacy and cyber security risks, without the corresponding benefit. While transparency will be important as flexible exports are rolled-out, we support a model where data sharing is introduced marginally at first, for example publishing customers' limits on a daily basis through already established customer portals, until there is further evidence more data is necessary and beneficial.

Connections governance should remain the same with the introduction of flexible exports

The existing connections framework, where the MSO is between the customer and the distributor, should continue to apply to flexible export arrangements, regardless of whether a customer has engaged a 'trader' to manage their CER. This is because the MSO includes technical requirements and network conditions that are specific to the CER/property, rather than the entity managing the same. For these reasons and reasons outlined in the issues paper (pages 27-28), we do not support opening the MSO to add the customer's trader as being subject to the agreement.

It is appropriate to update the MSO to include additional information on operating parameters around flexible exports, such as the DOE methodology, the DOE notice period, etc. However, while we support information sharing with customers to help them make informed decisions, such as how frequently they can expect to be constrained, it is not appropriate that information is included in the MSO as the MSO is set at a point in time while the information on likelihood of constraint would change over time.

A holistic compliance framework is needed around technical standards and static and export limits

CER connecting to the distribution network are subject to technical requirements, in the form of technical standards, as well as network requirements such as static export limits today and flexible export limits in the future. These requirements are included in the MSO and hence the customer is responsible for compliance with these technical and network requirements.

We agree with the AER that in most circumstances the CER customer may not be aware of their obligations under the MSO. As noted in our submission to the Australian Energy Market Commission's (AEMC) review of CER technical standards, responsibility for non-compliance and the liability for enforcement measures for non-compliance (such as loss of export income by the customer), should be with the CER installer/retailer where the installation process results in non-compliance with technical standards and network requirements. This may require changes to commercial arrangements between the customer and CER retailer/installer to formally recognise the responsibility and liability of compliance with technical standards and network requirements. An alternative is a warranty arrangement, where the warranty is specific to compliance with technical standards and network requirements.

Our proposal is that this type of contractual and liability framework should apply to traders when they are managing CER on the behalf of the customer. Distributors should not be required to develop and negotiate new contracts with each customer's trader on the network each time the customer changes a trader. Instead, the regulatory framework should provide sufficient customer protections for customers engaging traders, either in the form of licence requirements for traders or other form of regulation of contracts of service and/or liability.

In the case of flexible export limits, there is an additional layer of compliance with the communications standard, likely to be the Common Smart Inverter Profile Australia (CSIP-Aus) from 2024. This standard depends on internet connectivity to be able to provide a response to a DOE communication. Non-compliance with this

standard (which may be in the form of loss of connectivity) should be treated differently, due to reliance on telecommunications networks. In the case of non-compliance with communications standards, a fall-back measure may be the implementation of a low static limit.

Please do not hesitate to contact me on [REDACTED] about the submission.

Sincerely,



Sonja Lekovic
Regulatory Policy Manager
AusNet Services