

Enabling a distributed energy future

Response to AEMC Draft Rule Determination: Access, pricing & incentive arrangements for distributed energy resources

27 May 2021

Contents

Contents	2
Key messages	3
1 Overview	3
2 Enabling a distributed energy future	5
3 Modernising the regulatory framework	7
4 Pricing of export services	10
5 Reform implementation	13

Key messages

- » Energy Networks Australia **strongly supports the AEMC’s draft determination, which is fundamental to enabling the customer-driven transition to distributed energy.**
- » The draft determination will rightfully **place obligations on DNSPs to provide efficient levels of export services** and require the **development of export service performance incentives**, providing greater certainty for DER owners of the service levels they can expect.
- » Energy Networks Australia **supports the enablement of export charges and rewards as an option** for further consideration, consultation, and design.
- » Export pricing will be **revenue neutral to DNSPs**. However, when introduced under a timeframe and approach supported by customers and stakeholders, it **will address equity concerns and be key to ensuring that DNSPs and consumers make best use of infrastructure at the lowest cost for all consumers.**
- » Energy Networks Australia supports the AEMC’s proposed export pricing transition path, noting that **any introduction of export pricing by individual DNSPs will be subject to wide customer and stakeholder support and final AER review and approval.**
- » The **proposed rules enable the development of options to suit the particular circumstances of different networks and the preferences of their customers and stakeholders. A principles-based approach** is also more accommodating and adaptive to market developments and recognises the different stages of DER penetration between jurisdictions.

However, Energy Networks Australia considers amendments to the proposed rules drafting are necessary to ensure that drafting gives effect to the policy intent, and to mitigate potential unintended consequences.

1 Overview

Energy Networks Australia appreciates the opportunity to provide a response to the Australian Energy Market Commission’s (AEMC or the Commission) draft determination¹ on the three rule change requests that aim to better facilitate the efficient integration of distributed energy resources (DER) for the grid of the future.²

Energy Networks Australia is the national industry body representing Australia’s electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

Distributed energy resources are becoming an increasingly significant part of Australia’s energy mix. As outlined in this submission, Energy Networks Australia is strongly supportive of regulatory reform that explicitly recognises the changing role of the electricity grid; from one of traditionally providing consumption services to one of facilitating the two-way flow of energy.

This reform is key to ensuring that distribution network service providers (DNSPs) can continue to enable the customer-driven transition to distributed energy, which is supporting Australia’s move to a low

¹ Australian Energy Market Commission, [Access, pricing and incentive arrangements for distributed energy resources](#), Draft rule determination, 25 March 2021.

² [Allowing DNSPs to charge for exports to the network](#) (ERC0310) from St Vincent de Paul Society Victoria, [Access, pricing and incentive arrangements for distributed energy resources](#) (ERC0311 and RRC0309) from SA Power Networks, and [Network planning, and access for distributed energy resources](#) (ERC0309) from Total Environment Centre and Australian Council of Social Service.

carbon future and driving down wholesale prices for all customers. The enablement of export charges and rewards as an option is an integral component of the reform, and central to ensuring that we make best use of infrastructure at the lowest cost for all consumers. Future proofing the regulatory framework now can avoid unnecessarily expensive solutions in the future.

1.1 Strong stakeholder collaboration

ARENA's Distributed Energy Integration Program (DEIP) brings together consumer representatives, energy peak bodies, market authorities, and industry associations to maximise the value of DER for all energy users. Energy Networks Australia is a member of the DEIP Steering Group, led by ARENA, and following initial development work by other parties joined as an active participant in the DER Access and Pricing work package in late 2019.

The DER Access and Pricing work package, shown in **Figure 1**, explores how the economic regulatory framework for electricity networks can evolve to meet changing community expectations. The package aims to build consensus on equitable and efficient DER access and pricing models, focused on customer-centric principles.³

Figure 1: ARENA DER Access and Pricing Work Package



Energy Networks Australia welcomed⁴ the three rule change requests that were developed and submitted to the Commission in July 2020 as a result of this extensive work package.

Energy Networks Australia appreciates the collaborative approach that the AEMC has taken as part of this rule change process, including the role of the Technical Working Group in exploring key issues and potential solutions in a greater depth. The Commission's draft determination is a positive example of transparency and collaboration across a broad range of stakeholders working together to develop an overall solution for the future. Energy Networks Australia supports this continued consultation and collaboration as the reform progresses.

³ <https://arena.gov.au/knowledge-innovation/distributed-energy-integration-program/>.

⁴ Energy Networks Australia, *Enabling a distributed energy future: Response to AEMC Consultation Paper*, 10 September 2020.

2 Enabling a distributed energy future

Key messages

- » Customers are rapidly adopting DER, and the role of the distribution network, and the services required of it, has changed – it increasingly provides two-way flows as customers both consume and export electricity. Additional technologies such as electric vehicles and battery storage will create further demand for export services into the future.
- » The wide-spread adoption of DER creates opportunities, including the ability to sell surplus energy or participate in a Virtual Power Plant. As the essential infrastructure providers that connect these technologies, DNSPs are an enabler of these opportunities.
- » To ensure that distribution networks can accommodate increasing two-way flow and support customer-driven change, DNSPs will have to make targeted investments to allow increasing amounts of DER export.

2.1 The energy transformation

Australia's energy system is undergoing a significant transition, moving away from large, centralised coal and gas generation to smaller scale dispersed generation that is increasingly renewable generation.

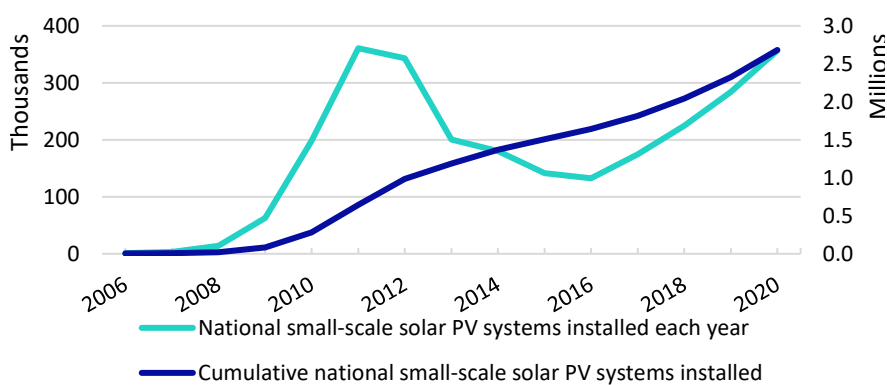
In the last decade, renewable (wind and solar) generation as a share of total National Electricity Market (NEM) generation has risen from 2 per cent in 2009 to 16 per cent in 2019.⁵

This transformation is occurring both at grid scale and at the individual customer level.

Distributed energy resources, or DER, are renewable energy systems that are commonly located 'behind the meter' i.e., located past the network point of supply. They commonly include rooftop solar photovoltaic (PV), battery storage, electric vehicles, and other forms of demand response.

Parts of the NEM have some of the world's highest levels of residential solar PV.⁶ As demonstrated in **Figure 2**, the uptake in rooftop solar PV in Australia has increased significantly over the past two decades. One in four dwellings are now fitted with rooftop solar.⁷

Figure 2: National uptake of small-scale solar PV installations



Data source: [Clean Energy Regulator](#)

⁵ Australian Energy Regulator, *Data – State of the energy market 2020 – Chapter 2 National electricity market – Figure 2.13 – Wind and solar generation share of total generation*, June 2020.

⁶ Australian Energy Market Operator, *Renewable Integration Study: Stage 1 report*, April 2020, page 6.

⁷ Reserve Bank of Australia, *Bulletin: Renewable Energy Investment in Australia*, March 2020.

This transformation has fundamentally changed the role of the distribution network. Traditionally, distribution networks supplied energy downstream to end-use customers ('consumption services'). However, distribution networks are increasingly being used to export customers' surplus energy upstream to other customers or the market ('export services').

In addition to rooftop solar, electric vehicles have the capability to provide flexible DER to the energy system. While March 2021 Electric Vehicle Council figures show that there were only 6,900 EVs sold in Australia in 2020⁸, under AEMO's step change scenario, there are forecast to be over 3 million electric vehicles on the road by 2030 and 22.5 million by 2049⁹. The market for batteries is currently relatively small and immature, however expected declines in the cost of battery systems also unlocks their future potential.

While the pace of transition is not uniform across the NEM, an increasing focus on the importance of export services is shared in all jurisdictions, reflecting the value that many customers are placing on the ability of distribution networks to host DER.

2.2 DER and electricity networks

DER create a number of opportunities for customers, including the ability to sell surplus energy or participate in a Virtual Power Plant. It is a priority for network providers to enable these opportunities, as the essential infrastructure that connects these technologies.

While distribution networks designed for consumption services do have an inherent capacity to also provide export services, this is a finite resource.¹⁰ Increasing levels of DER connected to the network give rise to different types of operating challenges, such as increases in voltage swing throughout the day and a reaching of thermal limits, that require targeted solutions if more hosting capacity is to be established.

DNSPs are increasingly pursuing a range of actions, including investments to improve DER hosting capacity such as those outlined in **Breakout Box 1**. However, there are currently no incentives for distributors to enable an efficient level of export, nor any guidance on the service performance levels that distributors should achieve for DER customers.

This results in a 'first come, first serve' basis to DER exports, with increasing instances of export curtailment and the application of zero export limits, which financially penalises those DER owners that are prevented from exporting.

The current regulatory framework therefore does not reflect community expectations for DNSPs to efficiently provide export services to support DER.

Breakout Box 1: DER enablement

- » CitiPower/Powercor/United Energy's Future Networks Program focuses on dynamic voltage management to increase DER hosting capacity in a smart way.
- » Jemena's Future Grid Program invests in new technology to prepare the network for rapid DER uptake.
- » SA Power Networks' programs focused on improving voltage management, encouraging daytime energy consumption, & implementing capabilities to set flexible export limits/dynamic operating envelopes.

⁸ Electric Vehicle Council, [New electric car sales figures show Australia stalled with hazards flashing](#), March 2021.

⁹ Australian Energy Market Operator, *2020 Electricity Statement of Opportunities Inputs and assumptions workbook*, August 2020 [Electric Vehicles sheet], available for download [here](#).

¹⁰ For example, refer to Figure 7 in SA Power Networks' EA Tech – LV Management Strategy (SA Power Networks, *2020-2025 Regulatory Proposal: Supporting document 5.21*, 18 December 2018, page 14, available for download [here](#)).

3 Modernising the regulatory framework

Key messages

- » The existing regulatory framework is not designed for an electricity network that provides bi-directional flows and is becoming an impediment to networks enabling the ongoing uptake of DER.
- » Energy Networks Australia supports the AEMC's draft determination to update the regulatory framework to explicitly recognise export services. This will place obligations on DNSPs to provide efficient levels of exports services and require the development of export service performance incentives, providing greater certainty for DER owners of the service levels they can expect.
- » Energy Networks Australia supports the AEMC's draft determination that the AER should undertake a review to consider arrangements for providing performance incentives for export services. This is preferable to prescribing the details of a scheme in the NER, which will limit the responsiveness and adaptability of the scheme.
- » Energy Networks Australia supports providing greater transparency of network export service performance. However, we support the AER developing, in consultation with customers and stakeholders, the detailed requirements of the information disclosure arrangements rather than the prescriptive rules-based approach proposed in the draft determination. This alternate approach will allow for the reporting obligations to better reflect different jurisdictional circumstances, and better align the data with the reporting required for later and more formal application of an amended STPIS for export services.

3.1 Recognition of export services

The regulatory framework was developed when energy flows were largely one-way and was originally designed for the provision of consumption services (the conveyance of electricity to end-use customers). The framework does not explicitly recognise the provision of export services as a distribution service provided by a DNSP.

This ambiguity has consequences – it not only provides uncertainty regarding a customer's right to export to the grid but also means that a DNSP does not have a clear mandate to be able to plan and invest in their network to provide these services that customers value.

Energy Networks Australia supports the AEMC's draft determination to update the regulatory framework to explicitly recognise export services by updating relevant definitions and clauses in the National Electricity Rules (**NER**) and National Energy Retail Rules (**NERR**). This will place obligations on DNSPs to provide efficient levels of exports services and require the development of export service performance incentives, providing greater certainty for DER owners of the service levels they can expect.

Energy Networks Australia also supports the Commission's approach to achieve symmetry between the regulation of consumption services and export services to the greatest extent possible. Mirroring the current well-established regulatory framework for consumption services is highly efficient and reduces the risks of material regulatory change to all stakeholders.

Energy Networks Australia supports the Australian Energy Regulator (**AER**) following the current process outlined in the NER to arrive at a service classification decision, as per the current approach for consumption services. This approach is preferable to the NER mandating a particular classification to be assigned to export services.

For components of export services classified as a standard control service (**SCS**) by the AER and requiring an ex-ante regulatory allowance, the capital and operating expenditure objectives in NER will apply.

As shown in **Breakout Box 2** this SCS classification would mean that network businesses will have a new requirement to meet or manage customer demand for export services, which places obligations on DNSPs to provide efficient levels of export services.

Energy Networks Australia supports the AEMC’s draft determination that the existing investment assessment framework in the NER is, in general, appropriate and fit-for-purpose to support the AER in assessing DER integration expenditure.

A DNSP will propose a prudent and efficient level of expenditure that is needed to meet target service levels based on forecast demand over each five-year regulatory control period. The AER will only approve expenditure associated with export services that the AER is satisfied reasonably reflects the pre-determined capital and operating expenditure in the NER.

Breakout Box 2: Capex & opex objectives in the NER

A DNSP must:

1. meet or manage the expected demand for SCS,
2. comply with all applicable regulatory obligations or requirements associated with the provision of SCS, and
3. to the extent that there are no applicable regulatory obligations or requirements, the DNSP must maintain the quality, reliability and security of supply of SCS, and maintain the reliability, security, and safety of the distribution system.

For those export services classified as SCS, the above objectives will then apply.

3.2 Incentive arrangements & service levels

Australia’s energy networks are regulated through an incentive-based system that encourages networks to find better ways to serve customers.

Incentive regulation, administered by the AER in Australia, is designed to replicate the forces of a competitive market and encourage monopoly businesses to further reduce costs and improve efficiency, without compromising the standard of service to customers. It is recognised as a powerful form of regulation as it drives businesses to reveal their efficient costs to serve customers. This information then helps a regulator set even more efficient benchmarks for performance in the future.

3.2.1 Incentive arrangements

Once the regulatory framework explicitly recognises export services, the incentive schemes that apply to distribution networks’ provision of consumption services would apply and could be adapted to a DNSP’s provision of export services. Energy Networks Australia agrees with the Commission’s position that *“the extension of the incentive-based approach to regulation to export services is likely to deliver long term benefits to customers in the form of reduced costs and better quality of service.”*¹¹

Energy Networks Australia supports the Commission’s draft determination that the AER should undertake a review within 18 months to consider arrangements, which may include the Service Target Performance Incentive Scheme (STPIS), for providing performance incentives for export services. While challenging, we consider that an adapted STPIS will play an important role in guiding distributors to achieving levels of service performance that customers value, and as such, this work should be given appropriate and timely attention by the AER.

A standalone rigorous consultation process led by the AER in consultation with stakeholders is considered strongly preferable to prescribing the details of the scheme in the NER, which will limit the responsiveness and adaptability of the scheme. As noted by the Commission, prescribing the detailed design of the scheme in the NER would be inconsistent with the approach to other incentive schemes under the current framework.

¹¹ Australian Energy Market Commission, [Access, pricing and incentive arrangements for distributed energy resources, Draft rule determination](#), 25 March 2021, page 73.

The performance incentive scheme for exports will need to establish a baseline level of service performance that networks are incentivised to maintain and improve upon.

Key considerations in the design phase will likely include:

- » the need to derive service performance measures that, mirroring the approach to consumption, apply as averages across all customers with an export service, or across broad classes of customers, or regions, rather than in respect of any individual customer's service level. The aim would be to avoid systemic poor outcomes to some customers without creating incentives to augment specific parts of the network to improve individual customer performance where this is inefficient. That is, these measures should not imply any level of firm access.
- » how to measure and express service performance.
- » determining how performance targets should be set and adjusted over time to deliver the best outcomes for customers.
- » a Guaranteed Service Level (GSL) inconvenience payment – a GSL scheme may apply to customers of export services who experience service performance well outside of average levels. This should be a payment for inconvenience, mirroring the payments made on the consumption side. It is not considered justified to use a GSL to compensate for lost income due to service interruptions (e.g., lost Feed-In-Tariff revenue), or any other form of financially firm access to the distribution network. As per the current approach for consumption services, these GSL schemes may be defined at the jurisdictional level.

This review will need to consider the different customer preferences and data capabilities of each DNSP and allow for transition paths as necessary. It will be important for the AER to have sufficient time to collect data and decide on the appropriate metrics to measure each distributors' performance, which will build confidence in requisite measurement processes, systems, and datasets.

The current regulatory framework provides the AER with sufficient discretion to implement interim incentive arrangements if the time to develop performance incentives for export services takes longer than other parts of this reform.

3.2.2 Service levels

Energy Networks Australia supports the AEMC's draft determination that separately defined service standards under the national framework are not necessary, especially once performance incentives for export services have been developed. Jurisdictions will have flexibility to develop and apply service standards for export services that better meet jurisdictional circumstances, which would then work alongside the adapted STPIS designed by the AER, and is consistent with the current treatment for consumption services.

Energy Networks Australia supports the Commission's draft determination not to introduce a minimum level of export capacity to DER customers. As noted by the Commission, effective incentive arrangements provided by an adapted STPIS, along with a clear planning and investment framework for exports, will provide for better customer access to export services.

Prohibiting DNSP from being able to set zero export limits *under any circumstance* would limit the tools available to DNSPs to manage their networks. Under some very specific circumstances where it would otherwise be cost prohibitive, it may be efficient for DNSPs to be able to use zero export limits. Without this option, customers would face higher than efficient charges.

Prescribing a national minimum level of export capacity to all DER customers in the rules also does not recognise the differing levels of DER penetration between NEM jurisdictions, nor within individual DNSPs' own networks; thereby limiting DNSPs' ability to cater for diverse network characteristics and circumstances.

3.3 DER reporting

Energy Networks Australia supports providing greater transparency of network export service performance. However, we support the AER developing the detailed requirements of the information disclosure arrangements rather than the prescriptive rules-based approach proposed in the draft determination.

This could be achieved by including a data reporting obligation in the NER that requires the AER to specify the DER reporting details in a guideline/similar style document. This alternate approach will allow for the reporting obligations to better reflect different jurisdictional circumstances, and better align the data with the reporting required for later and more formal application of export service performance incentives.

Energy Networks Australia supports additional transparency on the integration of DER in a DNSPs' regulatory proposal. However, we strongly recommend that the AEMC give further consideration as to whether all the rules-based amendments to elevate DER into the regulatory proposal overview paper will continue to be fit-for-purpose as the management of DER integration transitions into BAU practice for DNSPs. In addition, the purpose of the regulatory proposal overview document is to provide a plain language summary of the DNSP's expenditure and pricing plans for both consumption and export services. Therefore, we would suggest that the detailed requirements on costs and cost allocation approaches (and alternatives) for export services¹² are best provided elsewhere in the regulatory proposal, such as in business case proposals, and specific expenditure attachments.

4 Pricing of export services

Key messages

- » Energy Networks Australia supports the enablement of export charges and rewards as an option. To achieve this, we strongly support the AEMC's draft determination to remove NER 6.1.4 (Prohibition of DUOS charges for the export of energy). Importantly, this removal does not mandate the introduction of export pricing but rather enables it as an option for further consideration, consultation, and design.
- » Export pricing will be revenue neutral to DNSPs – specific tariff designs do not increase revenue for DNSPs after it has been determined by the AER. Instead, export pricing determines how efficient costs are recovered from and between customers. If a DNSP starts to earn revenue from export charges, its customers will see an offsetting reduction in import charges.
- » Introduced under a timeframe and approach supported by customers and stakeholders, export pricing will address equity concerns and be key to ensuring that DNSPs and customers make best use of infrastructure at the lowest cost for all consumers. Future proofing the regulatory framework now will avoid the need for unnecessary expensive solutions in the future.
- » Energy Networks Australia supports the AEMC's proposed export pricing transition path, noting that any introduction of export pricing by individual DNSPs will be subject to wide customer and stakeholder support and AER review and approval.
- » Energy Networks Australia considers that it is essential that the rules are not overly prescriptive, with the AER remaining well-placed to continue to oversee tariff reform.

¹² [NER Draft Rules](#): 6.8.2(c1)(3),(4), and (7).

4.1 Existing regulatory framework

Customers increasingly use the distribution network to export their surplus energy and new investment is being driven by increasing levels of DER penetration. However, given NER 6.1.4 (Prohibition of DUOS charges for the export of energy), all network costs, including the costs for export services, can only be recovered from connection charges and charges for consumption services. This is not consistent with the network pricing objective of cost-reflective pricing.

The AER determines a DNSP's prudent and efficient revenue allowance every five years. Tariffs, including the introduction of any export tariffs, do not increase revenue for DNSPs (under a revenue cap) but instead determine how these costs are recovered from and between customers – therefore, introducing export tariffs is revenue neutral for a DNSP.

4.2 Required reform

Energy Networks Australia supports cost-reflective network pricing reform, and strongly supports the removal of NER 6.1.4 (Prohibition of DUOS charges for the export of energy) so this can be considered during DNSPs' consultation with customers and stakeholders. Recognition within the regulatory framework of the provision of export services to customers is interlinked with the efficient recovery of these costs and cannot be considered in isolation.

As recognised by the AER:

*'More recently, an **important new focus for tariff reform is sending price signals to efficiently integrate distributed energy resources (DER) such as solar PV, batteries and electric vehicles into the grid.**'¹³*

This will enable efficient price signals to be provided to customers upon which to base their DER investment and operational decisions. It also provides options to improve equity in allocating the costs and benefits of DER and provides a mechanism for those that highly value export access.

The AEMC's Power of Choice review highlighted that over the longer term, more cost reflective pricing offers the prospect of lower electricity costs for all consumers.¹⁴ Energy Networks Australia considers that the principle of charging customers on the basis of their use of services, the 'cost reflectivity' principle, is relevant for both consumption services and export services.

If the rule change were made but without removing the restriction on export tariffs, all future network investment in export capacity would be paid for by increasing network consumption tariffs. This would mean that:

- » non-solar customers will pay a higher share of this cost than solar customers, and
- » solar customers will have no price signal to reward efficient use of the network, which will tend to result in over-investment in the network in the long term.

4.3 Consumer protections

Importantly, removal of NER 6.1.4 (Prohibition of DUOS charges for the export of energy) does not mandate the introduction of export pricing but rather enables it as an option for further consideration, consultation, and design.

Through the AER's regulatory determination process, DNSPs must develop and submit a Tariff Structure Statement (TSS) to the AER for approval. The TSS is set for the five-year regulatory control period and

¹³ Australian Energy Regulator, [Network tariff reform](#), webpage accessed 23 May 2021 [emphasis added].

¹⁴ Australian Energy Market Commission, [Power of choice review - giving consumers options in the way they use electricity](#), Final Report, 30 November 2012, page viii.

provides a considerable degree of certainty to stakeholders about the future direction of the DNSP's network tariffs.

In the development of the TSS, a DNSP is required to engage with customers and stakeholders and provide an overview to the AER of how they have sought to address any relevant concerns. Customers and stakeholders are also afforded the opportunity to provide formal comment to the AER on a DNSP's proposed TSS through the regulatory determination process.

The TSS provides an indicative tariff schedule for each year of the five-year regulatory control period but a DNSP is also required to submit annual pricing proposals to the AER that are compliant with the AER's final decision made through the regulatory determination process.

The TSS process requires consultation with customers and stakeholders and would require that export pricing—if deemed efficient under the network pricing objective—is introduced under a timeframe and approach supported by customers and stakeholders, and with AER oversight.

The network pricing principles in the NER require DNSPs to manage the customer impacts of changes to network tariffs. DNSPs typically do this on the consumption side by considering transitions of various kinds, and Energy Networks Australia considers that these measures will also be required for any export tariffs. There will be trade-offs between faster or slower transitions, and these issues should be subject to close consultation with key stakeholders, including jurisdictional governments, through the TSS process.

Energy Networks Australia supports Farrierswier's findings¹⁵ that:

- » The existing TSS process and pricing principles provide for a range of different transitional tools and other mechanisms that DNSPs and the AER can use (in consultation with customers) to mitigate the impact of introducing export pricing on customers.
- » Additional transitional rules to mitigate customer impacts are not likely to be needed or desirable.

Energy Networks Australia supports the Commission's proposed requirement for DNSPs to develop and consult on an export tariff transition strategy, which will outline when and how each DNSP intends to phase-in any proposed export pricing over time. This requirement will be additional to those under the current TSS process.

Energy Networks Australia also supports the development of an AER guideline specific to export pricing, which will promote greater certainty and transparency of the decision-making process. Developing a principles-based, rather than prescriptive, guideline will ensure that DNSPs are able to continue to innovate and develop tariffs to the circumstances and preferences of their own customer base.

4.4 Implementation

As noted above, this proposed reform does not mandate the introduction of export pricing but rather enables it as an option for further detailed consultation and design with consumers and stakeholders, including jurisdictional governments. The implementation of export pricing will be subject to customer and stakeholder support and AER review and approval.

Energy Networks Australia supports the proposed temporary increase for 'in period' tariff trials to promote both technological and market innovation and timely implementation of export pricing. We also support the Commission's proposal to allow DNSPs to design more advanced network tariffs aimed at retailers and other customer intermediaries. These initiatives will support innovation and future market development.

Whilst the rules allow for the reopening of TSS' within period under limited circumstances, DNSPs are not seeking to reopen their TSS mid-period to introduce export pricing. If export pricing is pursued as an

¹⁵ Farrierswier, *Insights report: Effectiveness of the TSS process and options for implementing export charges*, 11 March 2021, pages vi – vii.

option, it will be phased in according to the export pricing transition strategy approved by the regulator through the regulatory reset processes.

Each DNSP’s proposal will be different and subject to their individual network circumstances. For example, it is possible that some may not initially require sufficient DER expenditure to justify the introduction of export pricing in their next regulatory control period. Customer and stakeholder feedback may also support a slower or faster transition.

Figure 3 below provides an example of the potential service options that SA Power Networks intends to explore with its customers and stakeholders, on the basis that:

- » SA Power Networks expects DER customers will be diverse in how they value the ‘export service’, with some valuing higher or lower maximum export capacity limits,
- » SA Power Networks wants to enable customer choice on service levels, as this will drive optimisation of network spend,
- » Each network will have an intrinsic hosting capacity for DER, and therefore customers with DER should all have access to at least this intrinsic level of export capacity, including without facing an export tariff (on the basis that there are no incremental costs driven by this service), and
- » SA Power Networks expects that the implementation of flexible export limit capabilities (i.e., distributors dynamically managing the volume of exports on the network) will enable an increased range of service options with commensurate network tariffs that customers can choose from.

Figure 3: SA Power Network’s initial thoughts on service options

Service option	Inverter required	Export limit	Service level	Standing charge	Variable charge / reward
Basic	Basic inverter	1.5 kW fixed	1.5 kW @ 9x.x%	No	No
Fully Flexible	Smart inverter	1.5 – 10 kW	Min 1.5 kW @ 9x.x%	Yes	No
Prosumer	Smart inverter	1.5 – 10 kW	Min 5 kW @ 9x.x%	Yes	Yes

As demonstrated in Figure 3, two-way export pricing makes best use of infrastructure by rewarding customers where their actions support the grid in managing congestion (export reward) or signalling the network costs where their actions add to network congestion (export charge).

5 Reform implementation

Key messages

- » The proposed rules enable the development of options to suit the particular circumstances of different networks and the preferences of their customers and stakeholders. A principles-based approach is also more accommodating and adaptive to market developments and recognises the different stages of DER penetration between jurisdictions. However, Energy Networks Australia considers amendments to the proposed rules drafting are necessary to ensure that drafting gives effect to the policy intent, and to mitigate potential unintended consequences.
- » Given the timing of the upcoming regulatory resets, a strong focus on the completion of the rules-mandated reviews is required. Energy Networks Australia supports continued consultation and collaboration as the reform progresses.

5.1 Rules drafting

In recognition of the electricity system transformation, all three rule change requests propose changes to the current regulatory framework to recognise the role of, and aim to better facilitate the efficient integration of, DER.

Energy Networks Australia considers that a principles-based approach to Rules drafting for this rule change aligns with the AEMC's rules drafting philosophy and is the appropriate approach. As noted by the AEMC¹⁶, a principles-based approach is best used when there are new products and services, constant innovation, market participants with significantly different characteristics or capabilities, or diverse participant preferences. The AEMC also observes that a principles-based approach may be more accommodating and adaptive to market developments.

As acknowledged by the Commission, where a particular market body is responsible for oversight of a particular area and expected to exercise judgement in the implementation of obligations to achieve a given outcome, that body may be best placed to prepare detailed instruments.¹⁷ Energy Networks Australia agrees with this and considers that the AER is best placed to develop the required detail in close consultation with stakeholders.

5.1.1 Required amendments

Energy Networks Australia, while strongly supportive of the Commission's draft determination, considers amendments to the proposed rules drafting are necessary to ensure that drafting gives effect to the policy intent, and to mitigate potential unintended consequences.

In particular, we strongly recommend that the AEMC give further consideration to the following:

1. *Scope of DNSP liability in relation to export service interruptions:* Current DNSP immunities – as set out in s316 of the National Energy Retail Law (NERL) and mirrored in the deemed standard connection contract (DSCC) – are framed around a “failure to supply energy”. These immunities do not currently extend to a failure to supply export services.

It is Energy Networks Australia's strong view that it is appropriate for distributor immunities to apply equally to any failure to supply energy and any failure to supply export services. We do not think it would be consistent with the AEMC's intent for DNSPs to be exposed to much greater liability in respect of export services, compared to their current exposure in respect of consumption services.

Energy Networks Australia therefore recommends an amendment to the NERL to extend the existing NERL immunity to export services. We consider that making this amendment would be within the AEMC's discretion, given that NERL expressly allows the NERL to deal with immunity from liability. Without this amendment, expanding the scope of distribution services may have the unintended consequence of exposing DNSPs to greater liability for export services than they currently face in respect of essential consumption services.

2. *Proposed transitional provision to address unintended consequence from change to “network” definition:* to avoid possibly triggering the functional separation rules in the Electricity Distribution Ring Fencing Guideline (and to avoid the need for the AER to assess multiple waiver applications), we would recommend a transitional rule to allow for the treatment of export services as direct control services. This transitional rule would operate from the commencement date of the rule change until the start of the next regulatory control period for the relevant DNSP, so as to allow for classification of export services in the next distribution determination.

¹⁶ Australian Energy Market Commission, [Rule Drafting Philosophy](#), 8 October 2020, page 8.

¹⁷ Australian Energy Market Commission, [Rule Drafting Philosophy](#), 8 October 2020, page 12.

3. *Amendments to NERR Schedule 2 (DSCC model terms)*: we recommend additional amendments to the DSCC model terms seek to recognise, at a general level, the flexible nature of export services. These amendments should recognise that DNSPs may need to temporarily interrupt or curtail export services in a variety of circumstances, including where there is network congestion or if directed to do so (e.g., by Australian Energy Market Operator). We also recommend consideration be given to the allowance of distributor-specific terms and conditions that apply to the ongoing provision of export services.

We welcome further collaborative engagement with the Commission on these issues and how they are best addressed.

5.2 Regulator-led reviews

Given the timing of the upcoming regulatory resets, a strong focus on the completion of the rules-mandated reviews outlined in the proposed transitional arrangements is required.

Energy Networks Australia supports continued consultation and collaboration as the reform progresses. The DEIP program, and the subsequent AEMC rule change process, is a positive example of transparency and collaboration across a broad range of stakeholders, and we support close collaboration continuing.