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Australian Energy Market Commission
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Dear Commissioners

AEMC Access, Pricing and Incentive Arrangements for Distributed Energy

EnergyAustralia is one of Australia's largest energy companies with around 2.5 million electricity and gas accounts across eastern Australia. We also own, operate and contract an energy generation portfolio across Australia, including coal, gas, battery storage, demand response, wind and solar assets, with control of over 4,500MW of generation capacity.

EnergyAustralia welcomes the opportunity to make this submission to the AEMC consultation on access, pricing and incentive arrangements for distributed energy. The consultation encompasses three proponents' rule changes, St Vincent de Paul Society Victoria' (SVDP), Total Environmental Centre/Australian Council of Social Services (TEC/ACOSS), and South Australia Power Networks (SAPN), to address the economic regulation of Distributed Energy Resources (DER).

The consultation has focused initially on the specific change in the National Electricity Rules (NER) that will facilitate the fair and appropriate allocation of network expenditure required for DER integration. The proponents have suggested specific changes.

SAPN
Updating the regulatory framework to enable DNSPs to efficiently provide export services to support DER. SAPN aim to achieve this by:

- Clear rights for all customers to request and be provided with an offer to access the distribution network to export energy, on a fair and non-discriminatory basis. Customers should be able to receive a service offer that does not explicitly deny their ability to export;
- For small customers, a defined standard capacity level (basic, base, premium) that customers can request and receive a connection offer for; and,
- A clear regulatory mandate for DNSPs to plan for and invest in providing export services commensurate with customer demand and their desired service levels, and incentive schemes that motivate distributors to maintain service levels at averages that customers value and improve these over time if supported.

SVDP
Promoting incentives for efficient/fair investment and operation of export services. SAPN aim to achieve this by:

- Remove impediments in the NER for Distribution Network Service Providers (DNSP) to recover their costs, supporting the export of electricity, from the users who export.

TEC/ACOSS
Enabling export charges as a pricing tool to send efficient signals for future expenditure associated with export services, reward customers for actions that better utilise the network or improve network operations, and allocate costs in a fair and efficient way. TEC/ACOSS aim to achieve this by:

- DNSPs be allowed to include export charges in their pricing structures. This is not intended to change the DNSP's total revenue allowance; it would be 'revenue neutral'.
- The NER be amended to allow for a 'supplementary' connection agreement for a DNSP and its customer to negotiate additional capacity, if that investment is not otherwise justified under a 'net market benefits' test.
- This reform should be adopted on an opt-in basis for prosumers. With an expectation DER customers would adopt it, as the cost-reflective network export tariffs are likely to be offset by the additional income from retailer feed-in tariffs.

EnergyAustralia is generally supportive of the AEMC rule change, and accept it is appropriate for changes to be made to NER clause 6.1.4 to enable DNSPs to impose export charges on DER customers, where there is a direct and relevant need for expenditure to enable the grid to receive those exports.

Fairer allocation of network charges

The proposals have a consistent ideology, the regulatory framework should be updated to enable DNSPs to efficiently provide export services to support the growth of DER and the required service standards. EnergyAustralia supports it is necessary for changes to the rules to ensure the range of services provided by DNSPs to their customers are sufficiently recognised in the regulatory framework.

The proposed change may seem premature for a market that is currently benefitting from the inclusion of DER; however, the issues experienced in the South Australian and – to a lesser extent – the Queensland network establish the need for change. To enable the forecast significant DER integration (by 2050, DER may contribute up to 45% of the energy generation capacity[1]), DNSPs will be required to invest in their networks to ensure they are providing a service that is suitable to customers consuming energy and those that are exporting energy.

Enabling a future where augmentation is routinely required to accommodate the expanse of DER in a network, should include the capacity for the allocation of the associated costs to be apportioned to those that will benefit most:

[1] https://arena.gov.au/renewable-energy/distributed-energy-resources/

- Non-DER customers should partially contribute as they benefit from the generation supplied; and,
- DER customers should incur the majority as they receive the benefits of increased reliability and export capacity.

The amendment to NER clause 6.1.4 will provide DNSPs a range of options for charging DER customers for their export. Cost-reflective pricing for DER will educate and enable customers to participate in DER when preferred/required by the network.

Consideration of potential impacts

The growth of DER in the energy market has benefitted all customers with reductions in the price of wholesale energy and in aiding the decarbonisation of the National Electricity Market (NEM). These benefits should be considered as fundamental when exploring any changes to how DER is considered within the market.

The unified position of the proponents is that minor changes to the NER are required to achieve their varied goals, while these initial changes are minor; they will ultimately alter how the market operates, enabling changes that require significant consideration to the multitude of consequences that may arise.

The varying desires of the proponents provides some indication as to how the market will react to the AEMC's changes; the diverse range of participants in the market (customers, retailers, distribution & transmission networks, generators, DER developers & manufacturers, etc.) will be planning strategies on how to safeguard, comply, and/or exploit the changes.

How the AEMC will enable, restrict, and/or address the additional desires of the rule proponents is unclear, we are hopeful the consultation process will identify any additional rule changes that are required to protect the fundamental benefits of DER in the market, and if risks are identified the AEMC will consider delaying implementation until any additional regulation is established; either to enable one of the proponents specific preferences, or by limiting how market participants may exploit the changes in the NER.

Reducing uptake of DER

DER's flexibility predominantly assists the grid by reducing expenditure in costly network upgrades where under supply or voltage issues are present. This reduction in overall cost to supply should not be diminished by this rule change, i.e. this should not create barriers to DER uptake, where there is no identifiable negative impact from additional DER.

It is conceivable that most DER in the future will be required to contribute to additional network costs, resulting from network augmentation to improve export service standards. Export charges levied by DNSPs will need to be linked to direct and material improvements in hosting capacity; while this is the remit of the AER, the AEMC must ensure the appropriate framework is in place.

In the context of this rule change, SAPN advised any export charges will take expansive engagement with impacted parties and lengthy development, suggesting the first iteration of export charges would not commence until their next network determination (2026). There is no certainty that other DNSPs will follow the same rigorous

development process, and any movement that has not had adequate consideration and oversight is likely to impact existing and new DER customers.

Transitional arrangements

The concept of 'grandfathering' is divisive, with differing views by the proponents on how this should be approached. It is clear that network issues experienced currently result from the current DER in the network, therefore it is reasonable to expect that any changes to address these issues should be applicable to all DER customers that are driving the network issues, not solely new entrants. Any consideration of excluding existing DER and focusing on new entrants will ultimately impede further uptake of DER.

It is paramount that transitional arrangements are consistent with the new and existing uses of DER. While we appreciate the difficulties in presenting change to existing DER customers that have invested based on the principles at the time, a combined approach from consumer advocates, rule makers, DNSPs, and retailers, should educate and provide assurance to customers.

Oversight of DNSP investment

The AER will be responsible for ensuring revenue neutrality, this complex task will be facilitated by the information provided by DNSPs. There are many facets the AEMC should consider in how network investment, and the reporting required to outline the forecast and actual expenditure, may need additional requirements to ensure the AER's assessment is accurate and achievable. For example, DNSP investment in increased hosting capacity will be facilitated by the energy charges imposed on DER customers, the charges must be based off forecast expenditure which the AER deems prudent and efficient. To improve this process, the AEMC should consider imposing requirements on DNSPS to deliver an understanding of the proportion of overall spend and trends over time, by providing:

- clear insight into the nature and the volume of spend undertaken to increase hosting capacity; and,
- historical and forecast spend to be explicitly itemised.

DER pricing

SAPN advised it is not considering locational pricing. EnergyAustralia believes locational pricing can be an effective form of stimulating or disincentivising investment in specific areas, there are however issues with ensuring these triggers are current, and able to be easily provided to customers. Concerningly, SAPNS position suggests that export charges would be applied to all DER customers, regardless of the positive impact they might provide to the network.

DER pricing and the associated charges will need clear definitions, to enable retailers to understand the price signals the networks are setting. We would value a degree of cost reflective locational pricing to enable the correct signals to customers prior to are being investments being made.

How DER customers are charged will continue to evolve, with an anticipated shift from a simple kWh energy structure to dynamic pricing based on elements like voltage, frequency, etc. The AEMC should consider how changes to definitions may enable or be restrictive and impede the shift to this dynamic pricing.

EnergyAustralia appreciates the AEMC's consultation is initially limited in scope and the development of the DER framework is being considered across multiple streams (ESB, AEMC, AEMO, and state governments). While accepting the changes proposed by the AEMC are 'foundational' to further reforms and opportunities, to limit any negative outcomes, we suggest he AEMC consider delaying the implementation of the changes until any corresponding regulation is established.

Answers to the questions posed in the consultation paper are attached.

If you would like to discuss this submission, please contact me on 03 8628 1704 or Travis.Worsteling@energyaustralia.com.au.

Regards

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Regulatory Affairs Lead

Question 1: Approach to Rule Change Assessment

1. *Is the assessment framework, specifically the criteria outlined above, appropriate considering the proposed rule changes?*

   Yes, the NEO and NERO are appropriate in this instance as the changes will traverse a range of areas of impact:

   - price incurred by customers with/without DER, i.e. will export charges be a further constraint for DER adoption by those that are not currently DER connected, or is this the most effective way to achieving parity compared with removing cross subsidies (Feed-in Tariffs and other government incentives); and

   - reliability and security of supply if DER integration is not managed effectively.

2. *Are there any other relevant considerations that should be included in the assessment framework?*

   The assessment, comparison, and weighting of impacts to the framework will be complicated and unlikely to be infallible; however, if the AEMC does not consider the impacts across the spectrum of the framework there will be a pronounced risk to the intent of the NEO and NERO by unintended consequences.

   The AEMC will need to establish how it positions the impact on each aspect of the framework; as an example, there will be impacts to price for customers that have DER – through new export charges – and this will have a corresponding reduction in the network augmentation costs of non-DER customers, this must then be compared with the increase in wholesale costs from a reduction in new DER uptake.

Question 2: Definitional Issues

1. *Should export services be recognised as part of the network services provided by DNSPs to customers?*

   EnergyAustralia is supportive of export services to consumers, where there is a direct and relevant need for expenditure to enable the grid to receive those exports; customers paying for the cost they impose on the network to enable their connection, where the benefits to the network of connecting the DER do not exceed these costs.

2. *Are the proposed definition changes necessary to enable export services to be recognised as part of the services provided by DNSPs to customers?*

   SAPN' and TEC/ACOSS' proposal for definitional changes are both suitable; they are encompassing in nature, which will provide flexibility for the scope of evolution in the DER market.

3. *Are there any unintended consequences that could arise from SAPN's proposed amendments to definitions?*

   While the proposed changes are not overly restrictive in their definition, which will reduce the risk that developments in the DER market, or how retailers

consume/export, could create conflict/contradiction with the definitions in the future, there are potential unintended consequences about definitions that may define unregulated activities as the sole remit of DNSPs; i.e. if export services are defined as a distribution service, does this prevent retailers or third party aggregators from providing differential access rights and pricing at the retail level?

4. *Are there more appropriate approaches to enable export services to be recognised under the framework that are not considered above?*

   EnergyAustralia believe SAPN' and/or TEC/ACOSS' proposal is the suitable format for recognising export services under the regulatory framework (NER, NERL) and have not identified a more appropriate approach under the framework.

   Outside of the regulatory framework there are approaches at a retail/policy level which might reach the desired outcomes of network reliability and reduced costs to non-DER customers:

   - Removal of cross-subsidies that support the uptake of DER that supplies in periods of oversupply, i.e. Feed-in Tariffs reduced to zero during peak supply periods and increased significantly when export is normally reduced, which can be achieved within existing network pricing arrangements.

   - Further consideration of cost reflective prices to address the supply constraints, i.e. financial incentives for historical off-peak controlled load devices to move to periods of oversupply, which can also be achieved within existing network pricing arrangements.

   - Creation of subsidies to support the uptake of DER that can address the voltage and supply issues experienced in areas of the network, i.e. grants for the purchase of batteries.

5. *Are there any other issues related to definitions that the Commission should consider?*

   The AEMC's assessment should also consider the impacts of the changes outside of the NER and NERL, i.e. do export services align with the definition of a distributor under the NEL?

Question 3: Proposed Changes to Definitions

1. *Are the proposed approaches to the classification of export services necessary and appropriate?*

   The proposed classification is appropriate and necessary to provide certainty to market participants; specifically, allowing DNSPs to appropriately assign export services under their 'regulatory asset base'. However, the AER should be allowed to apply the current framework to determine whether new services should be subject to lighter regulation, and how new services are priced; e.g. DNSPs could charge and AER could determine ancillary services fees for additional export capacity based on a rough cost estimate, rather than provide such a broad scope for DNSPs to charge

within the standard control bucket/ overall revenue cap. Also depends on whether augmentation costs are for shared or dedicated assets.

The AEMC should consider how the classification could be restrictive in an evolving DER landscape, e.g. will the classification of export services impact a move to voltage instead of energy export?

2. *Are there more appropriate approaches to enable DNSP expenditure on export services to be economically regulated that are not discussed above?*

   The proposed approach enables DNSPs to directly assign their expenditure for export services; however, potentially there isn't a need for change here as the AER has flexibility under its guidelines (including the STIPIS and CSIS) to set KPIs for allowing export. Despite this we recognise the benefit in explicitly recognising export, as well as providing for minimum access rights, which sets a concrete basis for determining expenditure needs.

   There is a broader interest in tracking DER-related costs for networks and customers as part of the transition/ feeding into policy discussion, and benchmarking how DNSPs are enabling DER integration. The AEMC should consider the Cost Allocation framework, and ring-fencing, when assessing service classification, this is to ensure no double recovery of regulated costs, and tracking costs for pricing purposes.

3. *Are there any other issues related to service classification that the Commission should consider?*

   It is vital the AEMC consider that service classifications are required to be broad in nature, with the onus on DNSPs to substantiate their expenditure in their regulated revenue allowances. Specifically, EnergyAustralia cautions the AEMC on any service classification that may define all export service as a detriment that DNSPs are due recourse via their regulated revenue allowances, as there are many instances in which connected DER is providing a benefit to DNSP's network, or non-network DER solutions could resolve any network concerns; e.g. installation of batteries.

Question 4: Obligations on DNSPs

1. *Should the NER be amended to impose obligations on DNSPs to provide export services as proposed?*

   EnergyAustralia supports the updating of the definition of a 'distribution service' to mandate for DNSPs to provide export services.

   TEC/ACOSS' proposal is the preference as it requires that an obligation should be introduced in the NER for DNSPs to provide export, services and that augmentation to provide capacity for export services would be assessed via a net market benefit test; while this may be considered excessive for a common connection request, it will ensure that customers are not disincentivised from connecting DER where there is a benefit to the network.

2. *Would it be appropriate to impose obligations on DNSPs to consider network planning solutions in relation to DER integration?*

   Yes, it is a reasonable consideration for DNSPs to assess network planning solutions to integrate DER. While this should avoid being overly prescriptive, it is important to reduce the risk of a blanket assessment for all export customers by DNSPs, as this has the potential to negatively impact the uptake of additional DER.

   a. *Is there a need for the introduction of specific arrangements to guide network planning and investment decisions around additional DER hosting capacity?*

   EnergyAustralia believes that the appropriate arrangements to guide network planning and investment exist currently under the Distribution Annual Planning Report, and that it would create significant complexity for the AER to assess, apportion, and approve the extra resources to meet additional reporting obligations of a new specific arrangement (DER Integration Strategy); DNSPs are currently producing business cases that generally cover this currently, to meet the requirements of the AER's expenditure guidelines and information reporting requirements.

   b. *Do you consider that a net market benefit test is a useful way to guide DNSP network planning and investment for export services?*

   EnergyAustralia considers that market benefits analysis may be suitable as it ensures that new DER customers - which are improving the network by connecting DER - are not adversely impacted. The consideration of a net market benefits test embodies the RIT-D framework. It is inadvisable that this market benefits analysis be overly prescriptive, as it will create inefficiencies which will ultimately result in delays and increased costs.

3. *Should a principle for the allocation of export capacity in the NER be introduced? If so, what principle should be included?*

   EnergyAustralia supports the fair allocation of export capacity; however, it is unclear how TEC/ACOSS's proposal will work in reality. It is foreseeable there will be significant issues in allocating export capacity 'fairly' in an evolving and diverse DER market. We therefore do not support (based on the information provided to date) a principle for the allocation of export capacity to be included in the NER, as we cannot establish the full impact of the proposal; e.g. how will grandfathered customer arrangements be treated? Is their allocation of existing capacity set, with no prospects of augmentation?

Question 5: Efficiency Incentives

1. *If 'distribution services' expressly include export services, are there any regulatory barriers to adapting existing incentive schemes to export services?*

   EnergyAustralia supports the AEMC's assessment that the only incentive scheme which is not adaptable to the inclusion of export services, is the scheme for service quality.

2. *Should the STPIS be extended to export services or is a new incentive scheme required?*

   EnergyAustralia support the AER having the discretion to factor export services into the STPIS, and to establish the specific measures required to satisfy.

3. *If the STPIS or a new incentive scheme is to apply to export services:*

   a. *What are the practical challenges of designing relevant performance measures and collecting robust data? Can these challenges be overcome over time?*

   There is a challenge in identifying potential overlap/over-incentivisation with the Efficiency Benefit Sharing Scheme, which might lead to overbuild.

   Defining "export" will be a challenge, is this measured in capacity, curtailment, etc?

   Additional challenges include considering PV and battery uptake, role of policy, feedback effects from pricing etc that will affect measured export amounts, and at different times of day when constraints are likely to arise.

   b. *Should the details of the scheme be prescribed in the NER or is it appropriate for the AER to design the scheme?*

   It is appropriate for the AER to design the scheme, as they will be responsible for approving the STPIS and for assessing the impacts (overlap/over-incentivisation) on other incentive schemes. The AER can also determine if STPIS scheme should exist if all the practical issues cannot be overcome.

   c. *Are there any additional factors the AER should be required to take into account (e.g. under NER clause 6.6.2 relating to the STPIS)?*

   EnergyAustralia has not identified any additional factors under NER clause 6.6.2 for the AER to consider.

   d. *Do export service standards (to meet customer expectations) need to be established to set a performance 'baseline' for the incentive scheme?*

   It is unclear how the AER would establish the export service standard, and how this would be appropriate for all DER customers across the NEM. We therefore do not support (based on the information provided to date) the AER establishing export service standards, as DNSPs will have a greater understanding of their (location specific) customer's expectations.

Question 6: Pricing Arrangements

1. *Should DNSPs have the option to propose to the AER charges for export services?*

   Yes, DNSPs should be able to propose charges for export services to the AER; however, any export charges levied by DNSPs needs to be linked to direct and material improvements in hosting capacity, whether that be solar, batteries, EVs or any other distributed resources that influence loading on the grid.

2. *What are the potential benefits and costs of enabling export charges?*

   Accurate price signals will benefit the network in enabling retailers and customers to participate in export at times that are conducive to limiting impacts (voltage, oversupply) or improving outcomes (undersupply) on the network. It will enable retailers to more accurately apportion network and wholesale price signals, which will establish opportunities for scaling up DER in the network.

   Retailers will need to accommodate a wide range of export charges that are proposed by DNSPs and then determine if the actual price should be passed through or simplified by a retail tariff. There are benefits in retailers providing simplified tariffs to customers, as this limits the range of offers that need to be consider in marketing, training required for staff, and reduces confusion – and the corresponding complaints – from customers; historically, cost reflective prices have had limited adoption because retailers were held solely responsible for the implementation, and despite benefits to the market they have not received support from networks and government when faced with any negative customer feedback.

3. *If customers can already negotiate 'deeper' connection agreements, is a 'supplementary' connection arrangement required to allocate DER-related costs – as proposed by TEC/ACOSS?*

   No, the capacity for additional hosting capacity is already available under the connection agreements.

4. *If NER clause 6.1.4 is removed, and DNSPs are able to develop tariffs for export services:*

   a. *What are the implementation issues?*

   SAPN's proposal outlines a delayed timeframe for the implementation of cost reflective tariffs, following consultation with consumers, consumer advocates, and other impacted stakeholders; with the expectation that the initial export charges or variations to current tariffs would commence during their next determination reset (2026); however, as suitable as this prolonged period is for the development of SAPN's cost reflective tariffs, the changes to clause 6.1.4 will enable all DNSPs to complete their changes without an equally long deliberation on impacts, i.e. DNSP determination resets[2] in NSW in 2024.

   b. *Should the existing tariff structure statement process and pricing principles apply? For example, is a principle required to guide DNSP decisions on cost allocation between consumption and export services – as proposed by SAPN?*

   EnergyAustralia supports a considered approach to the application of cost reflective tariffs, with a particular emphasis on ensuring DER customers are not adversely impacted by a potential double exposure of export and consumption charges.

   c. *Are transitional or 'grandfathering' arrangements needed and, if so, should they be prescribed in the NER?*

[2] https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements

EnergyAustralia does not support 'grandfathering' arrangements, as the impacts of DER on the network (positive and negative) predominantly result from existing DER. We appreciate the impacts on customers that have invested 'in good faith'; however, expect that any imposed export charges will result in increased benefits that will offset the negative impacts, i.e. cost-reflective tariffs which will guide DER customer's choice on when to export and consume, and improved capacity to export with increased expenditure of DNSPs to improve network reliability and export services.

An extensive outreach and information campaign will be required by networks, consumer and industry groups, and retailers, to educate existing DER customers of the requirement for the changes, and how export will be charged. The burden should not fall on any one participant.

5. *Should the regulatory framework better recognise the benefits DER services provide to DNSPs? For example, does SAPN's proposal to allow for negative prices address the issue?*

   EnergyAustralia strongly support the appropriate consideration of the benefits that DER services provide to DNSPs, we believe this can be achieved through a combination of SAPN's proposal for negative prices and the TEC/ACOSS proposal for a market benefits test to considered the potential benefit DER may have on the network.

6. *Should these reforms only apply to small customers?*

   The reforms should apply to all customers that have export requirements due to DER, based on the impact their DER will have on the network (positive of negative); this would include large customers if they have not adequately apportioned augmentation costs during installation of their DER (such as a large customers installing a small PV system, <5kw).