

30 September 2022



Dr Kris Funston
Executive General Manger, Network Regulation
Australian Energy Regulatory (AER)
GPO Box 3131
Canberra, ACT, 2601

Dear Dr Funston,

AER CONSULTATION PAPER: INCENTIVISING AND MEASURING EXPORT SERVICE PERFORMANCE

Endeavour Energy appreciates the opportunity to provide feedback to the AER's Consultation Paper (the paper) which focusses on developing fit-for-purpose incentive arrangements and performance measures in relation to export services provided by Distribution Network Service Providers (DNSPs). In the context of increasing levels of network expenditure and new tariffs targeted at better integrating growing levels of Distributed Energy Resources (DER) into the system, we believe it is important DNSPs are sufficiently incentivised to deliver efficient levels of export services and for stakeholders to be informed of the performance of DNSPs in providing these services.

The key issue relates to determining suitable metrics which are representative of the quality of export services provided to customers. Assessing a DNSP's export service performance for either incentive arrangements, the AER's export performance reports or benchmarking purposes requires a clear and accessible set of metrics to be consulted and agreed upon. We generally agree the selection of suitable metrics should be based on the criteria outlined in the paper. However, the capabilities of DNSPs to capture or access the requisite export data differs significantly across the NEM.

These inconsistencies make the implementation of a common financial incentive scheme, including potentially expanding the Service Target Performance Incentive Scheme (STPIS), which relies on a discrete and reliable set of export measures, problematic in the short term. Until these capabilities mature it would be more appropriate to rely on reputational incentives which are capable of improving stakeholder transparency and DNSP accountability with less robust data than is required for financial incentives. Reputational incentives could feasibly operate in parallel with a bespoke export incentive scheme aligned to specific customer priorities and can be flexible around the operational circumstances and data capabilities of the DNSP.

From a reporting perspective, many DNSPs currently have limited visibility of the low voltage network. Although visibility will improve as DNSPs build their data and operational capabilities to facilitate the transition to a Distribution System Operator (DSO) role, this will take time. A set of cost-effective performance and contextual metrics will need to be reported in the interim.

We commend the AER on engaging with DNSPs to understand what export metrics could be feasibly reported in the short-term. However, there are a variety of operating factors which can influence measures and limit direct comparisons between DNSPs. We consider it important for the AER to provide contextual details alongside the reported export service measures in its reports to ensure stakeholders have a clear understanding of the drivers underpinning a DNSP's export performance outcomes.

We expand on our views of the key issues discussed in the paper in Attachment A. To discuss our submission further please contact Patrick Duffy, Manager Regulatory Transformation and Policy at Endeavour Energy on [REDACTED] or [REDACTED]

Yours sincerely,

[REDACTED]
Colin Crisafulli
Head of Network Regulation

Attachment A – Extended response to key issues raised in the consultation paper

Incentive arrangements for export services

In their August 2021 final determination, the AEMC noted that in the absence of an incentive scheme with performance parameters for export services, there is a risk that DNSPs may provide a lower than efficient level of export service that would not be in the long term interests of consumers¹. The AEMC introduced some safeguards against poor outcomes by requiring DNSPs to provide a basic level of export service reflecting the inherent capacity of the existing network to do so at no incremental cost and prohibiting the imposition of static zero export limits (except in limited circumstances).

It is important to note these protections reflect minimum requirements rather than efficient export service levels. Without a sufficiently powerful incentive for networks to provide export services beyond minimum mandatory requirements, DNSPs would not be incentivised to provide a level or quality of export services desired by its customers.

Although the DNSPs have been able to accommodate the connection and two-way energy flows of DER to date with limited impact on the network, constraints are expected to become more prevalent as the projected increase in export volumes eventuates and the inherent network hosting capacity is exhausted. It is reasonable to expect that the relatively low amount of export curtailment currently experienced by the average DER customer will not be sustained, particularly as exports become increasingly controlled by DNSPs within agreed dynamic operating envelopes to manage network congestion and operate local systems within safe, technical limits.

As stated in our submissions to the AER's *Review of incentive schemes for regulated networks*, we consider that the AER's incentive schemes have proven successful in balancing the competing incentives to efficiently reduce expenditure and improve the quality of consumption services. With export services now formally recognised as a distribution service on par with consumption services, we consider the incentive framework should aspire to implement a STPIS-style scheme for exports to maintain this balance. Implementation of such a scheme could be required once export services become more widespread among the customer base and embedded within a DNSPs service offering.

A financial incentive mechanism for export services is reliant on clear and consistent metrics that are representative of the service being provided to customers. A robust set of metrics is critical to ensure DNSPs are being appropriately rewarded (penalised) for delivering improvements (reductions) in export service quality. Nevertheless, there are significant challenges in establishing a single "one-size fits all" financial scheme for exports services which include:

- Several DNSPs have poor visibility of their low voltage network which inhibits the accurate measurement of two-way flows and export curtailment at a granular level.
- Several DNSPs face high costs to acquire the necessary export information from third-party data holders.
- Metering and/or inverter data does not provide sufficient granularity to allow the reason for the export curtailment to be determined (e.g. whether curtailment is due to a constraint on the network or as a result of a change on the customer's side of the connection point such as equipment fault, change of load or self-consumption, or inclement weather).
- Limitations in a DNSPs connection application process which does not allow for approved export capacity to be reconciled with the requested amount.
- Uncertainty over the suite of measures which represents the export services that customers value the most and would value improvements by the DNSP.
- For the purposes of establishing a baseline performance level, difficulties in distinguishing historical export service performance where data was reported as part of consumption services.

Therefore, at this time we believe it may be appropriate to establish the fundamentals of measuring export service performance prior to developing a common financial incentive mechanism for export services. That is, DNSPs should be given an opportunity to develop a robust and consistent dataset capable of measuring and monitoring export service performance to inform future baseline levels and service standards that align to the preferences of its customers.

¹ AEMC, Access, pricing and incentive arrangements for DER – Rule determination, 12 August 2021, p.44

It would be more proportionate in the interim to utilise reputational incentives or allow for bespoke small-scale incentive schemes to drive efficient export service outcomes. CEPA has previously suggested that DNSPs are responsive to reputational incentives as management generally places a high weight on being identified as an efficient provider of distribution services and performing well against peers in benchmarking assessments².

Reputational incentives also have the added advantage of allowing the use of less robust data sources and estimations to provide stakeholders with a clearer understanding of a DNSPs export service trends without the delay that a more robust and NEM consistent dataset would require. In this way, reputational incentives address the disparity in DNSP access to export service data, without the risk of inappropriately rewarding DNSPs. Nevertheless, we agree that reputational incentives will not be sufficient to incentivise DNSPs to improve export service performance in the longer-term, particularly where the costs of doing so are significant.

Alternatively, the opportunity of receiving a financial payment or penalty from a bespoke incentive scheme could provide DNSPs with the impetus to improve export services tailored to reflect the specific priorities of its customers. Where a financial mechanism is supported by customers, we envisage the scheme design including performance metrics and revenue at risk would be negotiated as part of the pre-determination engagement process. A further advantage of this approach over a NEM-consistent scheme is that the design would be flexible around data that is more readily accessible to the DNSP and not be constrained by the data availability of other DNSPs.

Adopting the principles underpinning the AER's Customer Service Incentive Scheme (CSIS), a bespoke export incentive scheme could be developed in collaboration with customers and implemented through the small-scale incentive scheme provisions included in the NER. Such a scheme could potentially operate in conjunction with the reputational incentives inherently provided through the AER's export performance reports.

In summary, we consider there is value if the transition from reputational incentives to financial incentives. This transition is reliant on an uplift in export data and service monitoring capabilities for several DNSPs. It can also be complemented by providing DNSPs and customers and the option to develop a bespoke incentive scheme (and potentially offered in lieu of a formal NEM-consistent export service incentive scheme once developed) as part of their respective regulatory proposal.

Export service performance reports

With the AER required to commence publishing information on DNSP export service performance annually from 2023, it is important that an appropriate balance is struck between the type of export metrics DNSPs can readily and cost-effectively provide and what information can improve stakeholder transparency around the quality of export services provided by DNSPs.

Information which reflects the frequency and duration of exports curtailed for each DER customer due to a network constraint represent the ideal metrics to evaluate a DNSPs export service performance. We believe monitoring export curtailment at the customer level will be integral to the transition towards a future DSO model however, cost and technical barriers currently limit many DNSPs from accessing the requisite granular data.

We appreciate there are ongoing reforms to improve data access such as the AEMC's metering review which is considering ways to accelerate the installation of smart meters and improve the availability of power quality data captured by these meters. However, measuring export curtailment with confidence requires visibility of a range of variables beyond what can be provided by smart meters.

It is unlikely that the various challenges inhibiting the accurate measurement of export curtailment will be easily or promptly resolved, meaning other proxies of export performance should be considered in the short-term. The selection of appropriate proxy measures should be cognisant of the discrepancies in data availability and reporting consistency across the NEM that limit direct comparisons between DNSPs. Comparisons are further complicated as each DNSP will be at a different point in the energy transformation cycle (as reflected by the rates of DER penetration and capabilities facilitating the transition to a DSO model).

It is therefore likely that a suite of performance and contextual measures will be needed to limit the reliance on a single or few metrics based on imperfect, estimated or sample data. The AER should

² CEPA, Expenditure incentives faced by network service providers – Final report, 25 May 2018, p.61

provide clear direction and guidance on the application of estimation techniques and assumptions to facilitate comparability as far as is practicable, particularly where historical data may be required. We also believe any information requests should not be onerous, particularly around proxy measures only affecting a relatively small number of customers.

The utility of proxy measures is limited however. For instance, voltage quality is a useful measure in general but not necessarily suited to a proxy for export service performance. It is a broad measure that affects more than export customers and it is also difficult to discern the extent to which voltage fluctuations are impacted by, or contribute to, export service levels. Similarly, a dependence on customer complaints to identify the possible occurrence and scope of a DER-related service issues is not a sustainable proxy under a high-DER future as it is lagging and likely to understate the impact of export constraint on the system as only engaged customers tend to make such enquires.

We also have reservations on using of measures based the amount of energy exported insofar that they do not appropriately capture customer self-consumption. Encouraging customers to self-consume is integral to the efficient use of the network and if a volume based export measure was used in isolation or elevated to a key performance measure, DNSPs may be incentivised to encourage customers to export. DNSPs which develop innovative tariffs and demand management programs designed to better match a customer's load and generation profiles would in turn be perceived as delivering a poorer level of export service.

In summary, we support further engagement on the provision of an initial set of export service metrics based on what can currently be measured or adequately estimated on a cost-effective basis by DNSPs, noting that data consistency to improve comparability between DNSPs may require an investment uplift for several DNSPs.

Update to benchmarking reports

In response to concerns that benchmarking productivity performance does not adequately account for the growing impact of DER, the AER is considering options to adjust its benchmarking techniques. We accept that export services are not explicitly captured however adjustments to the AER's benchmarking approach should be done sparingly and cautiously.

In the case of updating the AER's modelling specifications to include exports, we remain unclear on how this could be achieved without having the equivalent export data from comparable overseas distributors which is required to populate the models and have them produce statistically robust outputs. Given DNSPs operating in the NEM are generally considered amongst the most advanced in terms of solar penetration and volume of small-scale exports, we consider it unlikely that quality international data could be easily accessed.

We also remain sceptical of whether the impact of exports can be adequately normalised through a post-modelling Operating Environment Factor (OEF) adjustment. Deriving OEFs have proven to be a vexed and contentious issue in the past and there has been limited progress following the 2018 OEF review undertaken by SapereMerz in deriving OEFs for more established exogenous factors with more accessible and robust historical datasets. That is not to say these challenges cannot be addressed, however we are not confident that exports can be appropriately and accurately accounted for.

In our view, progressing work on quantifying a vegetation management/bushfire risk and differences in capitalisation practices OEFs alongside updating estimates on sub-transmission network costs represent more material operating differences to be accounted for.

An alternative would be to carve-out costs relating to the provision of export services from the inputs used in the AER's models to avoid DNSPs for whom export services are material from being disadvantaged in their productivity scores. The major challenge with this approach is that it can often be difficult to extract historical costs relating to exports (if any) as they are inherently associated with providing a standard control service and therefore have not been distinguished from consumption services. From our understanding, this is a significant obstacle and is consistent with feedback provided to the AER from several DNSPs subject to the information request relating to export costs and services.

In summary, we believe the AER should undertake a more holistic review of how best to account for exports in its benchmarking toolkit, perhaps through a working group or external consultancy dedicated to the task.