Endeavour Energy
ABN 11 247 365 823
T 133 718
51 Huntingwood Drive
Huntingwood NSW 2148
PO Box 811, Seven Hills NSW 1730

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Dr Kris Funston
Executive General Manager
Australian Energy Regulatory (AER)

Sent via email: exportservicesreview@aer.gov.au

Dear Dr Funston,

AER Draft Report: Incentivising and measuring export service performance

Endeavour Energy welcomes the opportunity to provide this response to the Australian Energy Regulator's (AER) incentivising and measuring export service performance draft report. With a successful energy transition contingent on the efficient integration of more customer energy resources (CER) into the grid, we believe it is important Distribution Network Service Providers (DNSP) 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.

This forms part of a package of reforms aimed at strengthening customer protections and regulatory oversight of export services following the Australian Energy Market Commission's (AEMC) access, pricing and incentive arrangements for distributed energy resources final determination. To best achieve the desired outcomes of the rule, the AER has proposed to:

- introduce a new small-scale incentive scheme (SSIS) to permit DNSPs to propose bespoke incentive scheme for export services. This would be in addition to reputational incentives to encourage export service improvements through the AER's annual export service performance reports;
- require DNSPs to provide data on a range of performance and contextual metrics and used in the AER's export service performance reports; and
- not develop an export services operating environmental factor (OEF). Instead, a future holistic review of the AER's benchmarking models will determine the materiality of export services on productivity results with 'materiality checks' to test the effect of export services on benchmarking results in the interim.

We support the AER's draft report and proposed future actions as outlined below.

Incentive arrangements for export services

We support the AER's draft position not to expand the Service Target Performance Incentive Scheme (STPIS) to export services given the lack of consistent data over a sufficient period of time to establish a standardised financial incentive mechanism.

As the CER penetration levels increase, DNSPs will increasingly manage a variety of network issues and constraints caused by dynamic two-way energy flows. These include the effects of peak and minimum demand, voltage and power quality fluctuations, phase load and export balancing and export hosting capacity. Each of these issues can in part be addressed by restricting the connection of CER and the energy flows from these devices.

Incentives will therefore play an important role in ensuring DNSPs respond appropriately to address these constraints and limit the incidence of export curtailments to efficient levels.

From our experience and customer research findings, and that of other DNSPs and industry participants, customers value CER ownership and expect networks to incorporate CER in their operation of the network and facilitate and support customer choice and use of CER.

The AER notes that to date, reputational incentives have proved sufficient in incentivising efficient service levels and that a standardised financial incentive is not urgently required. Whilst reputational incentives have sufficed to date, we consider the rapid and continued uptake of CER will necessitate regulatory interventions in the form of service standards and/or incentives.

DNSPs should be regulated in a manner that promotes service outcomes that customers value and expect. In the absence of appropriate regulation, there is an increased risk of misalignment between the service levels DNSPs choose to provide compared to the level valued by the average customer. Given the optimal mix of export service cost and service quality cannot be determined or fixed, as is the case for the reliability of consumption services, incentive-based regulation will best promote DNSPs to pursue efficient outcomes.

For an incentive scheme to be effective it must target performance that is measurable, actionable and valued by customers. We acknowledge not all DNSPs have the same data capabilities to meet the requirements for a standardised incentive scheme. Nevertheless, many DNSPs may have sufficient information and customer support to develop a bespoke SSIS that enables DNSPs to be rewarded or penalised for their export service performance. We note the feasibility for a standardised incentive scheme to be developed will be assessed in a future review by the AER, currently proposed for 2027.

This approach allows the AER to gather additional data to baseline export service levels and quantity customer willingness to pay. In the interim a bespoke SSIS, similar to the Customer Service Incentive Scheme (CSIS), allows DNSPs to trial and test different measures that reflect their reporting capabilities and their customers' expectations. These learnings can help inform the AER's incentive review to develop a standardised measure, although this review may need to occur post-2027 in order to provide sufficient time to observe export service SSISs in practice.

In addition to utilising SSISs as an interim measure, we also suggest the AER expand the Demand Management Innovation Allowance (DMIA) scope and funding to account for export services. The DMIA was developed prior to the AEMC's rule change and therefore is focussed on deferring demand for consumption services. We support the increased use of both the DMIA and Demand Management Incentive Scheme (DMIS) for projects which trial and improve export service quality. A broader scope and increased funding that accounts for export services and the increasing need for innovation in network services may therefore better promote dynamic efficiency in export services.

Performance metrics for export services

The AER sets out a number of reporting metrics it intends to gather from DNSPs and report on from the 2023 electricity network performance report onwards. We support increasing transparency around DNSP export hosting levels and service quality. This transparency is a key enabler of understanding and benchmarking DNSP performance which will inform the development of incentive schemes and any adjustments to the AER's annual benchmarking report.

To date, data gathering has been driven by operational needs and recently introduced reporting requirements such as the Australian Energy Market Operators (AEMO) DER register. Given CER penetration and capacity constraints vary between DNSPs the data currently collected by DNSPs differs.

For any new reporting requirements, the value of the data must be weighed against the costs of collecting, storing and reporting it. At the same time, until a more fulsome understanding of export service levels and customer expectations are understood, it is difficult to be precise in what metrics are of value / required.

In transitioning to standardised reporting requirements, we encourage a collaborative and practical approach is sustained. We consider the AER has identified an appropriate mix of metrics, the question will be how accurately DNSPs can report these metrics and from when. In some instances, a best endeavours approach may be necessary where "N/A" responses or estimates are acceptable in the short term where a DNSP is actively working towards compliance.

For Endeavour Energy, the metrics represent a material step change in our CER monitoring and reporting capabilities. This uplift will not only require investment in internal systems and processes but also, in some instances, be contingent on obtaining additional data from third parties through a competitive negotiation process. We note the AEMC's concurrent competition in metering review will have implications for how accessible and costly this data will be.

We also encourage the AER to consult with DNSPs ahead of publishing export service information and commentary to ensure it provides an accurate reflection of the DNSPs circumstances and/or approach to managing exports. Ongoing support and consultation will also be required to provide guidance to DNSPs with nuanced differences between the reporting approaches or interpretations taken by DNSPs likely to arise.

Benchmarking

We support the AER's draft decision not to develop an interim export services operating environment factor (OEF) to adjust their annual benchmarking report results by. We agree that insufficient data is available to reliably estimate the impact export services have on the AER's benchmarking models.

Benchmarking performance will always be an imperfect exercise that involves a trade-off between simplicity and accuracy. Its value has been in promoting transparency and efficiency by enabling comparisons of a DNSPs efficiency over time and between Australian peers. We consider benchmarking has promoted positive management behaviour, for instance through deliberate and focussed efficiency transformation programs we have improved our opex productivity ranking from 10th to 4th from 2016 to 2021.

The AER must balance improving its benchmarking measures and providing stable, fixed 'goalposts' that management can use to set and measure long-term organisational goals with. We acknowledge that benchmarking should also direct managerial effort towards export services to elicit efficiency improvements. As CER hosting levels continue to increase there is an increasing likelihood that the AER's benchmarking results are distorted by export hosting and diminish in accuracy and comparability. Unlike other operating factors, export services may require a more fundamental adjustment to the assumed input-output relationships underpinning the AER's benchmarking.

However, we agree that this issue warrants more detailed consideration once additional data is available and as part of a more holistic review of the AER's benchmarking approach. This review should consider whether benchmarking has promoted efficiency and whether amendments for export services and other new or existing OEFs would collectively improve the AER's approach.

In Appendix A to this response, we provide answers to the questions contained in the draft report. To discuss our submission further please contact Patrick Duffy, Manager Regulatory Transformation & Policy at [redacted]

Yours sincerely,

[redacted]

Colin Crisafulli
Head of Network Regulation

Appendix A: Endeavour Energy question responses

Incentives for export services

We agree that expanding the STPIS for export services or establishing an equivalent stand-alone scheme is problematic in the short-term given the lack of a consistent and clearly defined set of robust and reliable export metrics currently available from all DNSPs. This is a pre-requisite condition which must be established prior to introducing any standardised financial incentive scheme. Nevertheless, we maintain that the incentive framework should aspire to implement a STPIS-style scheme for exports to ensure a proportionate counterbalance to the Efficiency Benefit Sharing Scheme (EBSS) and Capital Efficiency Sharing Scheme (CESS) for DNSP to reduce expenditure at the expense of export services.

This could be possible through continued network investment to improve low voltage network visibility and data capabilities coupled with the AER's guidance on the suite of export metrics that will be collected as part of the export performance reports and as part of the annual RIN/RIO process. However, the challenges faced by non-Victorian DNSPs on accessing export data held by third parties may continue to present an obstacle to implementing such a scheme.

Irrespective of these current challenges and cognisant of the important role of networks to support greater customer uptake of solar, electric vehicles and batteries, we agree that a 'do-nothing' approach is not appropriate. Until the foundations are in place to support a standardised scheme DNSPs should be allowed the opportunity to propose a financial scheme tailored to their specific circumstances (data quality, availability of smart meter data, network constraints, flexible export limits etc.) and reflect the preferences of its customers. A bespoke scheme would also allow DNSPs to utilise data that is available to them and co-design a scheme with customers that is compatible with their specific export connection arrangements, export tariff structures and export service offers.

A bespoke scheme could be given effect via amending the Customer Service Incentive Scheme (CSIS) to include an export service parameter(s) or alternatively by establishing a separate Small Scale Incentive Scheme (SSIS). In our view, a separate SSIS may be preferable as it would cater for situations where a DNSP has stakeholder support for being rewarded(penalised) for export service performance improvements(reductions) but not for changes in general customer service metrics that would otherwise be included in a CSIS (or vice versa).

It may also be more administratively simpler for the schemes to be operated independently. A separate guideline would allow - if needed - for the principles which guide the design of a bespoke scheme to differ from those of the CSIS. It also allows adjustments to be made in one scheme without impacting the operation of the other. This flexibility might be important where the AER decides to suspend a scheme (or a given performance parameter) or to facilitate the eventual transition to a standardised export incentive scheme.

Questions

1. Do you agree that no amendments to the DRMG are necessary?

Yes, this can be reviewed further once additional data is obtained and an amendment to the STPIS is revisited.

2. Do you agree with our proposed timeline for a future review of incentive arrangements for export services? What factors may prompt an earlier or later review?

Ideally the review would occur prior to the preparation and commencement of the next reset process for the NSW/ACT/TAS/NT DNSPs. Although, 2027 may not provide sufficient time to observe export service tariffs and SSISs in operation. As such, we support a late 2027 review which could be delayed to 2028 at the discretion of the AER if insufficient data is available.

Alternatively, the review may be triggered by an operational metric such as the percentage of exporting customers or percentage of customers with smart meters supported by a 'no later than' backstop timeframe.

3. Do you agree that developing a new small-scale incentive scheme is the best way to facilitate DNSPs proposing bespoke incentives?

Yes. Our preference is for standardised incentive arrangements to apply across DNSPs. However, DNSPs are at varied states of CER penetration and a standardised approach requires additional learnings and information. Given this, we agree that SSISs are the best way to facilitate bespoke incentive schemes and the transition to a standardised scheme in the future.

4. What level of revenue at risk (rewards and penalties) is appropriate for a small-scale incentive scheme for export services?

We note the NER caps the total revenue at risk of all SSISs that apply to a DNSP in a regulatory period at ±1% of its Annual Revenue Requirement (ARR). This means the power of an export service SSIS would be impacted by a CSIS which may be operating in parallel. Given the CSIS incentive is capped at ±0.5% of ARR, the incentive of any export service SSIS would also be notionally capped at ±0.5%.

This level of revenue at risk may prove insufficient for DNSPs with higher levels of CER penetration now or in the near future. It is likely that a higher revenue at risk will be necessary as CER ownership becomes ubiquitous or representative of the average customer.

Whilst this can be considered further as part of a future review of incentive arrangements, there could be value in the interim in allowing DNSPs to vary the incentives of both the CSIS and export service SSIS to align with customer feedback so that the total ±1% ARR limit is unconstrained by a scheme specific limit. This would require removing the ±0.5% ARR cap on the CSIS.

5. Do you consider that the benefits associated with a small-scale incentive scheme for export services will outweigh the costs of measuring performance and administering the scheme?

Yes, although for non-Victorian DNSPs this will be subject to DNSPs being able to access smart meter data at a reasonable cost. In our view, stronger regulations are required to improve our access to smart meter data. However, it is unlikely any SSIS will require data that is not already required as part of the AER's export performance metrics.

6. Are there any other factors we should consider when developing a new small-scale incentive scheme?

No.

7. Do you agree that no amendments to the DMIAM and DMIS are necessary?

We consider the scope of the DMIA and DMIS could be clarified and broadened to capture export services and network innovation more broadly. However, we note the AER are of the view that this clarification has already been provided.

We also consider the DMIA threshold should be increased to reflect the increasing viability and need for non-network innovations and the material increase in export services since the DMIA was initially developed. The trend in DNSPs capping out the DMIA and proposing additional, bespoke 'innovation' expenditure allowances suggests the DMIA could be expanded.

Export performance reporting

Questions

8. Is there any data we are missing that should be included in our key metrics?

The metrics do not include visibility of the sample size available for that metric, i.e., C7 – 11.8.3 net export volumes can only be obtained from the smart meter CER customers. Endeavour Energy still has approximately 60,000 basic meter CER customers. For consistency across networks these basic metered customers should either be reported separately in C1 – 11.8.4 export customer numbers or potentially subtracted from the CER customer counts.

Similarly, metrics such as C4 – 11.9.2 Customer receiving over voltage is only possible to obtain using smart meter power quality (PQ) off market data. Endeavour Energy only currently has 50,000 meters providing PQ data. Without visibility of this, the year or year metrics will inflate purely from the addition of more data.

9. Do you foresee any challenges in collecting the new data for the key metrics? Can you identify any additional costs associated with data collection?

Many of the metrics proposed (specifically in 11.0) are not reportable without significant LV visibility from smart meters and analytics platforms to drive the insights.

Measurements related to voltage or inverter compliance will require off market PQ data to be purchased from the metering providers, in addition to the on-market consumption data. Endeavour Energy currently only has coverage of 50,000 off market PQ data meters, which will need to increase significantly to better serve this reporting.

10. Do you agree with the proposed base year for 2020-21 for most metrics and 2022-23 for metrics where data may be less available? Please suggest an achievable timeframe for metrics where the proposed reporting date is not feasible.

Due to the requirement for PQ data in the compliance checks the following would not be available for 2020-21 and 2021-22, and we propose 2022-23 as the starting year:

- C3 – 11.0.1 – Invertor 4777.2 Compliance
- C6 - 11.0.5 Complaints relating to overvoltage

11. Do you agree with the level of data disaggregation in the strawman information request (typically disaggregated by customer type and feeder classification, with some exceptions)? Please provide your views and reasons if you consider specific data should be disaggregated at a different level to that proposed.

We consider customer type to be a useful disaggregation method and consider feeder disaggregation to add additional processing without helpful insights.

Hosting capacity is primarily considered at a LV feeder and Distribution Substation level. Primarily dictated by the LV network limitations and the voltage control schemes operating at the Zone substation level. The HV feeder classifications are not referred to internally in this context and therefore this reporting would not align to BAU practices, and this would be the only instance it is reported in this manner.

We suggest a more useful disaggregation (in addition to customer type) would be the distribution transformer ratings in KVA. This could be bucketed into bands such as less than 50KVA, 50-315kVA, 315-500KVA, 500-1000KVA, above 1000KVA or the like. Ratings have correlation with rural and urban contexts with small sizes being used in rural networks and often also map to overhead and underground networks with 315KVA and below being overhead.

12. Is any of the proposed data ambiguous? If the information request would benefit from additional definitions or specification, please provide your suggestions.

P6 – 11.0.12 Average time to connect CER to the network

Due to the contestable Accredited Service Provider (ASP) market in NSW, Endeavour Energy is not involved in the connection of CER beyond the permission to connect (PTC) request. This approval is then valid for a 12month period for the customer/installer to complete the connection. It is therefore not possible for us to report on this metric as it is proposed.

We suggest for NSW it is clarified that this applies to the average time from request being submitted to PTC being issued.

P4 – 11.0.2 Duration of full export access

This is measured as a % of time and then grouped by customer type classes. Clarifying that this is then an *average* duration of full export access as the metric provided will be the average of all individual customers grouped in that category.

C8 - 11.0.4 Total utilised CER generated

The definitions specify that if this cannot be directly measured it can be calculated from subtracting curtailment from total generation. It should be noted that we intend to use solcast irradiance to back calculate the self-consumption not shown in the export channel. It may be worth expanding on the formulas to derive this metric as it was not immediately clear what was intended by the AER.

Benchmarking

Questions

13. Do you agree that we should not proceed with developing an export services OEF at this time?

Yes.

14. Do you agree with our draft views summarised in Table 2, including on:
    a. the potential impacts of export services on the benchmarking models?
    b. the possible options for addressing these impacts?

c. the early 'indicative' views of the materiality of changes to the productivity results of implementing these options?

d. key issues that would need to be resolved before changes to the models could be implemented?

In providing your comments on each issues, please include any rationales and evidence in support of your views.

We appreciate the AER's transparency in providing preliminary views and our initial view is that the AER have identified the appropriate issues to consider further. However, we note these are complex matters which will likely require review from econometric experts and more detailed consideration before we form a more conclusive position.

For implementation issues, we would be interested in understanding whether obtaining data back until 2006 will be required or whether the benchmarking review will also re-visit the period over which the models are run.

With respect to the commentary on Energy Throughout (ETP) and Ratcheted Maximum Demand (RMD) we do not consider there is a conceptual issue with adjusting ETP and/or RMD for self-consumed energy. The AER note this may not be aligned with the NEL and NER given the electricity is not transported on the distribution network. However, it is the relationship between the distribution network and the customer connection point that, inter alia, determines whether a customer can self-consume at a given point in time. In our view, it is therefore a service enabled by means of, or in connection with, the distribution network. This may require further review from a legal perspective.

15. Do you agree with our revised approach for reviewing if and how benchmarking models can be adjusted to better account for export service, including:

    a. not further considering the option of excluding exports service inputs from the benchmarking inputs?

It is not immediately clear how removing export service import costs is not practical because the interrelated impacts on the outputs would remain in the models. This assumes that the model outputs currently capture export services. Our concern is that inputs are increasing for export services but the outputs do not capture them.

However, the input-output interrelationship in the model is underpinned by some level of export service hosting (a lower one). The suggestion was more to highlight that adjusting the inputs of a model is an alternative to making post-modelling adjustments to the results. We accept though that this may be an impractical difficult task as the impact of export services on inputs may be inextricably linked to inputs for consumption services in addition to the output interrelationship problem noted by the AER.

    b. the materiality checks in Table 2 (column 2) proposed to establish the benefit of options to adjust the benchmarking models?

    c. the final assessment criteria in Table 2 (column 3) proposed to decide whether to proceed with an update or not?

    d. initiating a full review of the benchmarking models by 2027 to determine the materiality of export service impacts, the best combination of changes to appropriately account for export services, and the feasibility of successfully implementing these changes?

As per 14 above. Yes noting this will be consulted on further as part of the broader benchmarking review.

16. For the list of export services data in Box 1 needed to assess materiality of potential export service impacts, considering the uncertainty around which adjustments, if any, may be required and the costs to business of collecting the data:

    a. what data should we start collecting?

    b. what data are you able to / not able to begin reporting?

    c. what data may be feasible to report on in the future?

This matter is still subject to further review, and we will be happy to discuss at a later date.

17. For the list of export services data in Box 1 needed to implement possible adjustments to the benchmarking models, considering the uncertainty around which adjustments, if any, may be required and the costs to business of collecting data:

a. what data should we start collecting?

b. what data are you able to / not able to being reporting?

c. what data may be feasible to report on in the future?

As above.

18. For the Canadian and New Zealand DNSPs currently used in the econometric benchmarking, what are the key issues that would need to be resolved to determine if it were appropriate to continue to use these jurisdictions to update the econometric models for export service impacts? What data and information could we begin to collect to resolve these issues? What alternatives to the Canadian and New Zealand DNSPs could we consider, if their use was not appropriate?

Whilst we accept the AER's benchmarking approach of Australian DNSPs we remain of the view the international data used in the econometric models is not comparable. To date, the AER has adjusted the Target Frontier Score (TFS) used in applying these benchmarking results as a way of addressing these concerns.

The addition of export services further exacerbates this issue with current and potential CER use and ownership levels in Australia varying markedly from Canada and New Zealand. The alternate involves reviewing available data from other countries, like the United States, or not relying on international data.

Ideally, these comparability issues can be addressed but we accept the imperfect nature of benchmarking and will collaborate with the AER on solutions to these issues or pragmatic alternatives like TFS adjustments as part of the more detailed benchmarking review.