Mr Kris Funston Executive General Manager, Network Regulation Australian Energy Regulator GPO Box 3131 CANBERRA ACT 2601

By electronic lodgement: exportservicesreview@aer.gov.au

Dear Mr Funston

DRAFT REPORT - INCENTIVISING AND MEASURING EXPORT SERVICE PERFORMANCE

Thank you for the opportunity to make a submission on behalf of the Victorian Government to the Australian Energy Regulator's (AER's) *Incentivising and Measuring Export Service Performance* draft report. The Victorian Government appreciates the AER's ongoing engagement on the important role of energy networks in the provision of export services.

The Victorian Government strongly supports the measures being proposed in the draft report to increase the transparency of Distribution Network Service Provider's (DNSP) export service performance. In addition to the currently proposed metrics, the Victorian Government would also recommend that the AER consider inclusion of:

- additional voltage metrics, to complement the currently proposed metrics of customers receiving overvoltage (C4) and customer complaints relating to export services and/or overvoltage (C6).
- metrics related to household and neighbourhood-scale battery exports.

The Victorian Government's landmark \$1.3 billion Solar Homes Program will support 778,500 households over ten years to install solar photovoltaic (PV) panel systems, solar and energy efficient hot water systems or solar batteries at their home, with more than 220,000 systems installed since the program's launch in 2018. It also includes a Virtual Power Plant (VPP) Pilot Program, which is supporting customers to participate in innovative battery aggregation projects. The Victorian Government's \$10.92 million Neighbourhood Battery Initiative (NBI) is the first of its kind to fund trials and demonstrations of a broad range of neighbourhood battery ownership and operational models. Additionally, the Victorian Government has committed \$42 million to install 100 neighbourhood batteries across Victoria, in conjunction with the Commonwealth Government commitment of \$224.3 million to deploy 400 community batteries across Australia. This large-scale rollout of batteries at the distribution scale will play a significant role in the energy transition while delivering benefits to consumers and communities. These commitments will drive a growing need for DNSPs to manage two-way energy flows, and consequently the need to measure and incentivise export service performance.

The Victorian Government recommends that the AER collect more detailed voltage data

The Victorian Government sees effective voltage management in distribution networks as a key enabler of increased export services in a high distributed energy resources (DER) future. In support

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of this, the Department of Energy, Environment and Climate Action (DEECA) undertook extensive consultation in 2022 on Voltage Management in the Distribution Network.

Although the final recommendations from DEECA's consultation are yet to be published, a key theme in stakeholder submissions was the role of transparent performance reporting to ensure distribution businesses are held accountable for delivering on approved investment in network voltage. Stakeholders also discussed that coupling voltage performance data with export performance data could help to contextualise this information, and ensure robust reporting that avoids perverse outcomes that could result from considering only voltage, or only export performance.

For export performance metrics to tell a complete story they must be paired with additional voltage metrics to ensure customers and local networks are not adversely impacted. This has equity implications because managing exports without also managing voltage issues risks adverse impacts for both DER and non-DER customers. Although the proposed metric of customers receiving overvoltage (C4) goes some way to doing this, this appears to be a highly simplified metric that will not indicate the actual voltage levels being experienced by customers, or how these are changing over time.

As the AER has noted in their draft report, Victorian distribution businesses have the advantage of excellent visibility of customer voltages in Victoria due to the near-universal roll out of smart meters. The currently proposed metrics only minimally seek to leverage this data. Rather than designing metrics that can be met by all distribution networks in the National Electricity Market, the Victorian Government recommends that the AER consider metrics that leverage the benefits of high smart meter coverage in Victoria, with other jurisdictions working to gradually meet this standard as smart meter penetration increases.

The AER should establish a pathway for collecting performance metrics on battery exports

The Victorian Government has committed to delivering Energy Storage Targets of 2.6 gigawatts (GW) of renewable energy storage capacity by 2030, with an increased target of 6.3 GW of storage by 2035. In addition, both the Victorian and Commonwealth Governments have made commitments to rollout large numbers of neighbourhood-scale batteries. Coupled with growing uptake of behind the meter batteries and the development of VPPs, the importance of optimising utilisation of battery assets to ensure their full benefits can be realised is rapidly increasing.

DNSPs are required to manage their networks in a way that maintains and optimises power quality for all consumers. With a significant amount of additional energy storage imminent, this necessitates careful consideration of battery capacity and operation, particularly in areas experiencing network constraints. A consequence is that DNSPs are likely to take a 'worst-case scenario' approach to ensure that batteries do not exacerbate demand constraints by importing during the evening, or risk overvoltage by exporting at times of maximum voltage, rather than use batteries as part of the solution. This can lead to significant unutilised battery capacity, which compromises revenue generation as well as the potential of batteries to alleviate network constraints.

The Victorian Government recommends that the AER specify a pathway for collecting data on battery exports. There is a current lack of incentives and requirements for DNSPs to operate batteries to enhance export capability, improve integration and support a smooth transition. Enhanced battery export capability can provide benefits to consumers through lower bills and improved network performance, and this can be incentivised by requiring DNSPs to report battery export metrics to the AER.



The importance of enabling more exports through maximising the use of battery capacity is highlighted by the AER's consideration of a class waiver to DNSPs under its electricity distribution ring fencing guideline. Waiving the current restrictions on DNSPs leasing battery capacity to third parties for batteries funded under the Commonwealth Government's Community Batteries for Household Solar Program recognises that the roll-out of the 400 batteries will involve some DNSP-led projects. However it must be complemented with strong reporting requirements to ensure the DNSPs use the capacity in the interests of consumers to support greater exports services. Leasing capacity will expand the services the battery can provide to the grid through the third party being able to use the battery in wholesale energy markets, and therefore promote consumer and community benefits.

The Victorian Government strongly supports the AER publishing a consistent suite of metrics on DNSP export service performance to ensure transparency and incentivise improved performance

The Victorian Government engages with DNSPs on solar exports to optimise customer outcomes as part of the Solar Homes Program. This engagement has demonstrated that energy networks respond positively to reputational incentives, with demonstrated improvements in the metrics that are collected. The Victorian Government strongly supports the AER in using reputational incentives that require DNSPs to collect and report information about export service performance. The public reporting of this information as part of the AER's annual network performance report will encourage energy networks to improve on their provision of export services.

The Victorian Government strongly supports the inclusion of the proposed contextual and performance metrics in the AER's annual performance report. The contextual metrics on the number of export customers, installed solar and battery capacity, proportion of compliant inverters and number of customers receiving overvoltage provide stakeholders with an overview of local network characteristics. The contextual metrics are necessary to enable a comparison of performance between DNSPs, which will enhance any reputational incentives.

Export service metrics enable a deeper understanding of local DER hosting capacity constraints, and support enhanced DER integration

It is critical that consumers, industry and policy makers have access to usable information about low voltage network hosting capacity constraints. In May 2022, the Victorian Government made a public submission to the AER's Network Information Requirements Review calling for the regulated provision of low-voltage network data. This will support understanding of where exports are being limited; where investments are being undertaken; and opportunities for non-network solutions, such as neighbourhood batteries and aggregation that can support the integration of DER and provide additional benefits to energy users and communities. This type of transparency is increasingly important as our energy system modernises and DER are increasingly able to participate in existing markets and offer solutions for new markets and services that provide value to customers and the grid. This includes the imminent rapid uptake of electric vehicles (EVs) in Victoria, where AEMO's 2021 Inputs, Assumptions and Scenarios Report predicts EV uptake of 905,000 by 2030-31. Victoria's full household smart meter penetration can support these outcomes, providing increased visibility of the low voltage network and data to support network operation and planning, as well as customer benefits through access to energy usage data and cost savings.

Thank you again for the opportunity to provide input into the AER's draft report. If you would like to discuss any of the issues raised in this submission further, please contact Katie Brown, Acting



Executive Director, Energy Strategy, DEECA on or by email at

Yours sincerely



Elizabeth Molyneux Deputy Secretary, Energy Department of Energy, Environment and Climate Action

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