



## Department of Environment, Land, Water and Planning

Dear Ms York

### **DER INTEGRATION – UPDATING REGULATORY ARRANGEMENTS**

Thank you for the opportunity to make a submission on behalf of the Victorian Government to the Australian Energy Market Commission's (AEMC) Consultation Paper, *Distributed energy resources (DER) integration – updating regulatory arrangements*.

This submission puts forward the Victorian Government's key priorities and considerations for this reform process, as well as in-principle support for aspects of the rule change proposals.

The Victorian Government supports:

- putting customer outcomes and equity considerations at the centre of the AEMC's assessment;
- the AEMC's proposal to include *robustness to climate change mitigation and adaptation risks* in its assessment criteria;
- recognising the role of distribution network operators in providing efficient export services to customers;
- promoting better outcomes for customers, including through an obligation on distribution network operators to optimise existing export capacity;
- developing regulatory instruments to facilitate efficient DER integration investments and maintain service quality; and
- developing principles to guide more equitable allocation of export capacity.

The Victorian Government does not support export charging, as the case for implementing this element of the proposed reforms has not been demonstrated at this time. As noted in the consultation paper, such a change would require substantial changes to cost allocation principles, evaluating the forward-looking costs and system-wide benefits attributable to export and consumption services "...and potentially between different tariff charging parameters of export services". The engagement of customers in such assessments is likely to be challenging for pricing changes with uncertain benefits, within the 'revenue cap' regulatory framework. The desired outcomes of these rule changes can be achieved by pathways other than export charging for DER, including ensuring distribution network operators are strongly motivated to buy network services from DER owners. While this proposal is not supported, the Victorian Government considers other elements of the proposals clarifying the regulatory framework for DER export have strong merit.

The Victorian Government supports the collaborative approach of the Distributed Energy Integration Program Access and Pricing work package, which brought together a diverse range of stakeholders to build an understanding of the complex challenges, agree on key principles, and develop and test reform options to promote efficient integration of DER.

#### **The Victorian Government's objectives**

The Victorian Government's key policy priorities include energy reliability and affordability, delivery of the Solar Homes program, the Energy Fairness Plan, and achieving carbon emission reduction and renewable energy targets.

Victorian energy customers are investing rapidly in DER to save money on their bills and to generate, consume and share clean energy. The \$1.3 billion Solar Homes program is supporting the installation

of 700,000 solar systems, 10,000 small-scale batteries and 60,000 solar hot water systems in households across the state over a decade. This will bring the number of solar systems in Victoria to around one million by 2028 and will save Victorians more than \$500 million per year on their electricity bills once the program is fully rolled out. The Victorian Government wants to ensure that the proposed reforms support the delivery of this program and deliver benefits to all Victorian DER customers.

### **A principles-based approach focussed on customer outcomes and equity**

The Victorian Government acknowledges that considerable detail on the practical implementation of the rule change proposals still needs to be worked through as part of the AEMC's process. As such, the Victorian Government has taken a principles-based approach to put forward its key priorities and considerations for this reform. Economic efficiency is important but not sufficient to deliver equitable outcomes for all customers. The Victorian Government considers that customer outcomes and equity considerations should be at the centre of this rule change process. It is critical that these reforms are developed, framed and assessed in terms of outcomes for customers. This includes considering how customer views and demand for services should be taken into account, alongside economic tests for efficiency of investments.

The Victorian Government considers that the principles developed under the *New Energy Compact* provide a sound basis upon which to guide the assessment and development of these reforms:

- put the people at the centre;
- think long term and be flexible;
- be just and fair;
- ensure it works; and
- deliver clean and healthy energy.

The Victorian Government also supports the inclusion of *robustness to climate change mitigation and adaptation risks* in the AEMC's assessment criteria.

### **The current regulatory framework needs reform to enable efficient DER integration**

The Victorian Government agrees with the rule proponents that the existing regulatory framework needs reform and enhancement to support the expected future levels of high DER uptake, including rooftop solar, batteries and electric vehicles. The existing framework is not sufficient to accommodate changing customer preferences about their interactions with the electricity system and is not currently meeting community expectations regarding access to supply electricity to the grid.

Increasingly, Victorian residential and business solar customers are being export constrained well below network-wide standard limits, and in some cases are prevented from exporting at all. These constraints may have a significant impact on customer DER investment decisions and are also hindering the realisation of Victorian Government objectives under the Solar Homes program, as well as Victoria's climate change targets.

As the Cambridge Economic Policy Associates (CEPA) *Feasibility of export capacity obligations and incentives* report notes, there is uncertainty about how the Australian Energy Regulator (AER) will consider DER enablement proposals where the primary objective is to increase export capacity rather than to address existing obligations. As DER becomes an increasingly important component of the electricity system, regulatory clarity is critical to enable efficient planning and investment.

### **Ensure reforms consider all DER technologies and services they provide**

Any changes to the regulatory framework currently being contemplated need to consider the full range of DER technologies and services that may be available to networks and markets in future. The uptake of actively managed forms of DER is growing in Victoria and will provide opportunities to

deliver a reliable, diverse and flexible future grid that provides choice, accommodates emerging services markets, supports emissions reduction and meets customers' expectations at least overall system cost. The Victorian Government encourages the AEMC to consider how to ensure that distribution network operators are encouraged to utilise the full value of DER in supporting efficient and effective network services, and are, wherever possible, indifferent to whether they procure required network outcomes from the development of network assets (via capital expenditure) or purchase of grid services from DER resources (via operating expenditure). This approach ensures DER owners have an opportunity to be rewarded for providing these services.

The Australian Energy Market Operator's (AEMO) 2020 technology uptake projections estimate that the number of electric vehicles in Victoria will increase substantially over the next decade from around 4,000 in 2020-21 to over 286,000 in 2030-31 in its Central scenario and over 1.3 million in the Step Change scenario. In addition, projections suggest that between 808 MW (Central) and over 3,500 MW (Step Change) of small-scale batteries will be installed by 2030-31. It is crucial that the regulatory framework enables the efficient integration of these assets to benefit all customers and delivers opportunities for DER owners to maximise the value of their investments.

#### **Recognising the role of distribution network operators in providing export services**

The Victorian Government supports recognition of the role distribution network operators play in providing efficient export services to customers. New types of investments are required to facilitate the integration of high levels of DER into the grid to realise the full value of these assets. The Victorian Government supports these investments where prudent and efficient and considers that the regulatory framework should be explicit in distribution network operators' obligation to provide these services.

The Victorian Government supports proposals to amend regulatory definitions as required to ensure the provision of DER export services is a fundamental part of the service provided to customers by distribution network operators. These reforms should provide a clear framework under which DER integration investments can be proposed and assessed to ensure transparency, consideration of system-wide benefits, and equitable outcomes for DER and non-DER consumers. The Victorian Government also considers that there is likely to be merit in regulatory arrangements to promote the optimal use of existing export capacity, as proposed by the Total Environment Centre (TEC) and Australian Council of Social Service (ACOSS).

Where definitional changes to the National Electricity Rules (NER) are implemented, the Victorian Government encourages the AEMC to explicitly consider and mitigate the risk of unintended consequences having flow-on impacts for other parts of the regulatory framework.

The AEMC should also provide clarity on how the various elements of the rule changes might interact with each other. The Victorian Government requests that the AEMC explicitly considers how the implementation of operating envelopes and dynamic connection agreements by distribution network operators will interact with the proposed reforms.

#### **Improving transparency around DER integration investments**

The Victorian Government considers that assessing proposed investment in DER enablement is challenging due in part to the lack of a consistent, agreed and transparent methodology. The Victorian Government acknowledges the work the AER is undertaking through its *Assessing DER integration expenditure* review. It is essential that distribution network operators are required to explicitly define the outcomes they will achieve for proposed investments. These outcomes could be promoted through the proposed obligation for distribution network operators to undertake DER integration strategies as part of the electricity distribution price review process. The Victorian Government therefore supports:

- the need, identified by South Australian Power Networks, for a clearer regulatory mandate for distribution network operators “...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”;
- an explicit obligation on distribution network operators to prepare a comprehensive DER integration strategy along the lines proposed by TEC/ACOSS; and
- a positive obligation for the Distribution Annual Planning Report and other regulatory proposals provided by distribution network operators to demonstrate how the network will optimise DER utilisation for efficient whole of system outcomes, as proposed by TEC/ACOSS.

### **Incentives to support DER customer outcomes**

The Victorian Government supports the development of regulatory instruments to facilitate efficient delivery of DER integration investments and maintain service quality. This could include benchmarking and provision of publicly available data on hosting capacity constraints. If an incentive mechanism akin to the service target performance incentive scheme for exports is considered the most effective means to achieve desired service levels, it is critical that robust measures be developed and tested over time to ensure baselines can be set accurately and avoid perverse incentives.

### **Fairer allocation of export capacity**

The Victorian Government supports the development and application of principles to guide a transition towards allocating export capacity more equitably. This is not, however, dependent on export charging. Greater fairness between early adopters and those installing later may be achieved through:

- investments by distribution network operators to dynamically manage exports, allowing DER exports most of the time, with restrictions imposed only when networks exceed their operational limits;
- distribution network operators ensuring anticipatory but prudent development of network capacity to meet customer expectations with appropriate regulatory obligations and incentives to achieve whole of system benefits from DER; and
- enabling technologies and standards, including smart meters.

The ‘first come, first served’ basis on which export capacity is currently allocated does not meet community expectations or the objectives of the Solar Homes program. The benefits of solar and the ability to export should be available to Victorian electricity customers regardless of when they have decided to install their system.

### **The case for enabling export charges has not been demonstrated**

The Victorian Government does not support export charging, as the case for implementing this element of the proposed reforms has not been demonstrated at this time. A comprehensive cost benefit analysis would be required to understand customer views, impacts on DER and non-DER customers and potential distortion to efficient generation investment if export charging is considered further.

The Victorian Government supports enhancing customer choice around service access and mechanisms to reward customers where their DER provides material benefits to the system. Enabling export charges is not the only pathway to achieve this and other desired outcomes. As CEPA’s report to the AEMC on reform options noted, the access levels and standards that customers receive must first be clearly defined before charges are introduced. The ability to robustly and consistently measure and regulate the services being provided is also a critical consideration before allowing customers to be charged.

Under current arrangements in the NEM, generators do not pay for the use of the transmission or distribution system. A strong rationale would be required to discriminate and apply charges to only some generation types – small distributed generation – when all forms of generation benefit from the use of the network and impose some costs.

### **Putting customers at the centre through effective engagement**

Finally, the Victorian Government wishes to highlight the critical role of distribution network operators' ongoing consultation and engagement with their customers to ensure customer needs are understood and that their diverse perspectives inform the development of DER integration plans. The Victorian Government considers that it is important to 'take customers along on the journey' to support their understanding of key issues and empower them to participate in decision making processes.

### **Other considerations**

The regulatory framework needs to be flexible to technology advancement, future market designs, and the emerging uptake of electric vehicles which could have profound impacts on the electricity distribution system if not managed proactively. The Victorian Government notes the Energy Security Board's (ESB) Post-2025 work program and asks that the AEMC considers how this reform process would interact with the ESB's Post-2025 market design, including its work on two-sided markets.

Greater clarity around the implications of these reforms for commercial and industrial customers is also required. The regulatory framework should support distribution network operators to undertake innovative DER integration trials, and, where they are successful, it should have the flexibility to promote the implementation of these solutions more broadly.

The Victorian Government will continue to monitor the development of this package of reforms to understand how it might interact with Victoria-specific legislative and regulatory arrangements.

Thank you for the opportunity to provide input into the AEMC's rule change process. If you would like to discuss any of the issues raised in this submission further, please contact Ralph Griffiths, Executive Director, Energy Strategy, DELWP on 0438 175 058 or by email at [ralph.griffiths@delwp.vic.gov.au](mailto:ralph.griffiths@delwp.vic.gov.au).

Yours sincerely



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22 /09/ 2020