



Department of Environment, Land, Water and Planning

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Dear Ms Collyer

ACCESS, PRICING AND INCENTIVE ARRANGEMENTS FOR DISTRIBUTED ENERGY RESOURCES

Thank you for the opportunity to make a submission on behalf of the Victorian Government to the Australian Energy Market Commission's (AEMC's) *Access, pricing and incentive arrangements for distributed energy resources (DER)* draft determination. The Victorian Government appreciates the AEMC's ongoing openness to engage on this reform and reaffirms its support for the collaborative approach undertaken by the Distributed Energy Integration Program Access and Pricing work package.

The Victorian Government:

- supports formal recognition of export services in the regulatory framework and promoting incentives for distribution businesses to deliver export services that customers value;
- does not consider that enabling export pricing is justified at this time because the required analysis has not been undertaken, many unanswered questions remain, and the risk of unintended consequences is high;
- asks the AEMC to include a requirement in its final determination for state and territory governments to consent before export pricing can be introduced in their jurisdictions; and
- strongly opposes the introduction of export pricing in Victoria over the 2021-26 regulatory period, given the case for this has not yet been made.

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 emissions reduction and renewable energy targets. Victorian energy consumers are investing rapidly in DER to save money on their bills and to generate, consume and share clean energy. The \$1.3 billion, 10-year Solar Homes Program provides rebates and interest-free loans to help 778,500 Victorian households reduce the upfront costs of installing a solar PV, hot water or battery system at home. From May 2021, a new Solar for Business Program will support 15,000 small businesses over three years to install solar at their work premises and reduce their energy costs. Solar Victoria is also delivering efficient, lower-cost heating and cooling for 250,000 low-income and vulnerable households through a new Home Heating and Cooling Upgrades Program. The Victorian Government wants to ensure that the proposed reforms support the delivery of these programs and deliver benefits to all Victorian customers.

The Victorian Government supports the first two elements of the proposed reforms

The Victorian Government broadly supports the first two elements of the AEMC's rule change proposal, including formally recognising export services in the regulatory framework and promoting incentives for distribution businesses to deliver export services that customers value. These rule change elements have considerable merit and would support better customer outcomes, increased clarity and regulatory certainty for both customers and distribution businesses, more efficient

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investment planning, and more effective integration of DER into the electricity system. The Victorian Government looks forward to consulting with the Australian Energy Regulator (AER) as it develops guidance on its approach to assessing DER-driven investments and reviews arrangements for export service performance incentives.

The Victorian Government strongly supports new measures to increase transparency around export service performance and new requirements for customer consultation. It is also critical that consumers, industry and policy makers have access to usable information about low voltage network hosting capacity constraints, to 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 other 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. 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.

The Victorian Government also supports lifting the threshold for network tariff trials over the next two regulatory periods and notes the importance of voluntary participation and informed consent. Supporting innovation by allowing distribution businesses to design network tariffs for retailers and intermediaries could also have positive impacts for certain consumer groups, including those participating in aggregation programs or adopting new energy technologies.

But the case for implementing distribution export charging has not been made

The potential introduction of distribution generator export charges represents a major change in the National Electricity Market's established cost allocation principles and could impose substantial new regulatory burden and cost on hundreds of thousands of Victorian homes and businesses. This major change requires more justification and analysis. Implementation would also require clear regulatory guidance in the rules to ensure that pricing delivers the intended incentives, behaviours and outcomes. The risk of unintended consequences is high.

While there is some significant stakeholder support for this reform, there is also credible alternative evidence and perspectives that need to be addressed. The Victorian Energy Policy Centre presents evidence that the wholesale market benefits of rooftop solar far outweigh DER enablement costs for non-solar consumers, and considers that the cost of upgrading networks to accommodate DER are, and will likely remain, small relative to total expenditure. The Australia Institute and Smart Energy Council highlight the importance of considering the full costs and benefits of these reforms, citing evidence from CSIRO and Energy Networks Australia's *Electricity Network Transformation Roadmap* that billions in network infrastructure investment could be avoided by 2050 if networks buy grid services from DER customers, significantly lowering average network bills. And the Clean Energy Council considers the importance of independent behavioural research to understand how customers are likely to respond to these pricing changes, particularly in combination with declining feed-in tariffs.

The draft rule delegates fundamental decisions, including whether to apply export charges; all the detail on how the potential charges would be structured; and what percentage of distribution revenues would be recovered from exports, to future decisions by monopoly distribution businesses, bounded by AER guidelines that have yet to be developed. This makes it difficult to fully consider or understand the potential impacts of this change on consumers and the energy transformation. This is

exacerbated by the lack of any cost-benefit analysis of the potential impacts of introducing distribution export charges relative to the other options to facilitate cost effective DER enablement.

There is insufficient analysis on the impacts across different consumer groups, customer classes (e.g., small to medium businesses, rural customers) and the wholesale market. Further analysis is required to identify risks, unintended consequences, equity impacts and implications for investment and operating signals for distribution versus transmission-connected generators (and between generators connected to different distribution areas), and for energy prices if distribution export charges create an artificial floor price for distributed PV thus increasing daytime electricity prices and emissions.

Pricing exports is likely to have some impact on export and investment behaviour, however it is not clear why a charge that dissuades export of low-cost clean energy will deliver a net positive outcome for consumers. No evidence is provided that export pricing will not have unintended consequences that increase costs for consumers. The analysis in the draft determination assumes customers' feed-in tariffs will exceed network export charges, so networks can tax solar to diversify their revenue without impacting the customers' willingness to invest and export their surplus solar. However, it is well known that distributed solar investments are driving down daytime energy prices for all customers, and thus driving down feed-in tariffs.

As solar feed-in tariffs continue to decline towards zero, it is not clear that solar owners will continue to export their surplus solar to the grid in the future if faced with a network charge. The \$20 per MWh export charge mooted in the AEMC's bill impact analysis is actually a relatively high energy floor price and is likely to be higher than the energy component of future feed-in tariffs. If solar owners respond rationally to this price signal it may increase prices for all customers, cause a wealth transfer from distribution to transmission-connected generators (that do not pay any network charges) and increase emissions. This effect could be exacerbated if distribution export charges were applied to all scheduled, semi-scheduled and exempt generators connected to the distribution grid.

The draft determination's proposal to remove the long-established prohibition on networks charging generator export tariffs raises a number of serious questions. For example:

- what is intended to be priced? What percentage of revenue or what costs are eligible to be recovered by export charges? The draft decision does not limit export pricing to recover only incremental future costs of DER enablement and does not provide regulatory guidance regarding the extent to which revenue recovered through export charges will be used to fund additional DER enablement investments (if any). It is also not clear whether export tariffs would have any impact on the level of network investment in DER enablement under the net market benefits regulatory investment test.
- who will distribution export pricing apply to? Is it intended apply only to households and small business customers, or to all generators and batteries that are connected to the distribution network? This raises many sub-questions:
 - How will these decisions impact risk premiums and commercial viability for all distribution connected generators and batteries? If export charges applied only to customers, is it equitable that they would be the only generators in the NEM that would pay to export via the shared network, even though this group is the only generation source in the NEM that currently makes any contribution to those costs, through their consumption, demand and/or daily network charges?
 - How might export pricing impact opportunities and incentives for local energy or renewable-industrial hubs?

- Is it efficient and equitable for transmission-connected generators, who also ultimately export into the distribution network, to be exempt from these distribution generator use of system charges? Is it efficient for network access to cost a generator more for electricity produced and consumed in a local area, than energy transmitted over large distances through the transmission, high voltage and low voltage distribution network? The difference in approach to export charging at the large-scale end (where customers pay for all shared network costs) and for PV owners is potentially a source of significant market distortions and unintended consequences. The Victorian Government suggests that a consistent approach to network cost recovery from both large scale and small scale generators in the NEM should be the very strong default position, and any divergence of approach needs requires strong justification.
- how will export pricing interact with dynamic operating envelopes (DOEs)? If DOEs are set in such a way as to avoid DER systems imposing costs on the network, would consumers still pay export charges—and if so, what are they paying for?
- what is the intended interaction of these reforms with state-based governance of voltage management?

The draft determination assumes that the expenditure required to deliver additional distribution hosting capacity for exports will rise significantly over time, however the magnitude of these future costs is highly uncertain and will be impacted by existing and planned state-based initiatives to enable DER. For example, technology solutions, including implementation of dynamic operating envelopes, active DER, enhanced inverter standards, dynamic voltage management, virtual power plants, neighbourhood batteries, enhanced data flows and demand response solutions are being progressed over the 2021-26 regulatory period in Victoria, and Victorian customers have already funded unparalleled low-voltage network visibility through the state's smart meter roll-out. These solutions will help to make the best use of the grid, maximise the benefits of DER, reduce future costs of DER integration (including hosting capacity costs) and deliver benefits to all consumers.

Many regions are also approaching minimum demand levels at a bulk supply level, a point at which clean distributed energy may be required to be shed to enable transmission-connected fossil fuel generation to remain online. It would seem particularly inequitable to charge distributed generators to use the distribution network but still turn them off to maintain access for transmission connected generators who do not pay.

State governments should have the final say on export pricing in their jurisdictions

The Victorian Government requests the AEMC to include a requirement in its final determination for state and territory governments to consent before export pricing can be introduced in their jurisdictions.

As the AEMC's draft determination has acknowledged, some jurisdictional governments may not consider the introduction of export charges to be consistent with their economic or social policy objectives, and the regulatory framework must accommodate such jurisdictional differences. State and territory governments will ultimately be held responsible for the outcomes of these reforms for consumers and other market participants in their jurisdictions.

The Victorian Government considers the AEMC's rule change process is limited in its ability to assess important social and environmental factors beyond the National Electricity Objective that will interact with, and influence the outcomes of, these reforms. Reserving the right for jurisdictional governments to determine if and when export pricing is introduced in their jurisdiction enables these

factors to be considered appropriately and provides flexibility to respond to jurisdictional needs and emerging policies. In Victoria, the Solar Homes Program and other government initiatives are supporting both energy affordability and Victoria's renewable energy and climate change targets, and the Victorian Government does not consider that charging for exports is aligned with these objectives at present and may reduce consumer and industry confidence.

Export pricing should not be introduced in Victoria over the 2021-26 regulatory period

The Victorian Government strongly opposes the introduction of export pricing by Victorian distribution businesses over the 2021-26 regulatory period, given the case for this has not yet been made. While the Victorian Government acknowledges that this outcome is unlikely to be pursued by distribution businesses, as it would require tariff structure statements to be reopened and substantial additional consultation, it is important for consumers and industry to have confidence that they will not be impacted by export pricing in the near future.

More Victorian residential customers and small businesses will progressively transition to a simplified and consistent time-of-use network tariff over 2021-26 following extensive customer consultation by distribution businesses. These tariffs will support DER integration by providing price signals to encourage solar customers to minimise network demand at peak periods and incentivise self-consumption of their solar generation.

Approved DER enablement expenditure over this period comprises a very small fraction of total expenditure and has been justified based on net market benefits for all energy users. The Victorian Government will observe the outcomes of trials, technology and market development, and customer outcomes over the next five years, and consider the merits and role of export pricing for future regulatory periods.

Need for further analysis to strengthen reform package and other considerations

The Victorian Government reaffirms its request for the AEMC to undertake further detailed analysis of the impacts of these reforms as outlined in this submission, and seeks further advice on the interaction of these reforms with the Energy Security Board's Post 2025 market design work.

The Victorian Government will review any consequential amendments to Victoria-specific regulatory and legislative regimes that may be required to give effect to these reforms in Victoria.

Thank you again 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.

Yours sincerely



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