10 July 2025

Ms Anna Collyer
Chair
Australian Energy Market Commission
Submitted via www.aemc.gov.au

THE CENTRE FOR INDEPENDENT STUDIES

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RE: Submission to AEMC's Pricing Review Discussion Paper

Dear Ms Collyer,

The Centre for Independent Studies (CIS) welcomes the opportunity to respond to the AEMC's Pricing Review Discussion Paper.

The CIS is a leading independent public policy think tank in Australia. It has been a strong advocate for free markets and limited government for more than 40 years. The CIS is independent and non-partisan in both its funding and research, does no commissioned research nor takes any government money to support its public policy work.

CIS has published a paper on Consumer Energy Resources (CER) that is highly relevant to this review (see *Rooftop Solar: Paradise Lost* attached). The paper argues that broadscale uptake of CER is not in the long-term interests of consumers. The historically high rates of rooftop solar uptake have been driven by direct government subsidies and indirect cross-subsidies from consumers who do not own solar systems, arising from the structure of network tariffs. CIS analysis showed that rooftop solar customers are receiving savings 2–4.5 times higher than the value their solar generation provides the grid. This translates to outsized savings of $705–$1,186 for Ausgrid solar customers, which networks must recoup from customers without solar systems.

It is crucial that these cross-subsidies are eliminated through shifting from single-rate and time-of-use tariffs to tariff structures that are mostly fixed with a small or no variable charge based on contribution to critical peak demand. This submission outlines several feasible options for tariff structures that would accomplish this, all of which are treated in more detail in the paper. Eliminating solar cross-subsidies will lower bills for those without solar and ensure network tariffs are serving the long-term interests of all consumers.

The AEMC should prioritise the elimination of rooftop solar cross-subsidies in its pricing reforms and should scrutinise the assumption that increased CER uptake in and of itself benefits all consumers by lowering overall system costs.

Yours sincerely,

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Retail Competition

Can we rely on competition in the retail market to deliver the mix of products and services that customers value?

Yes, competition among retailers will continue to drive value to customers, as long as regulation does not introduce inefficiencies.

Retailers are fundamentally fixed-for-float businesses, who manage the volatility of the wholesale market on behalf of the customer, so they can offer a fixed price for power. A retailer that has offered a fixed price contract to a customer is primarily concerned with the cost of procuring this power. However, there are several factors trending in the wrong direction for this, all contributing to the rising cost to supply electricity:

- The average price of wholesale power is increasing, making price-hedging more important, which increases costs;
- The shape of the daily price curve. Power is generally more expensive at the time of day when people use the most, which increases costs;
- Power is becoming more volatile, making volatility hedging (i.e. caps on peak prices) more important, at a time when volatility hedges are becoming more expensive, increasing costs; and
- Instances of negative prices are coinciding with negative demand, which increases costs to supply all solar households, on top of feed-in tariffs.

Importantly, this also increases risks for retailers. Margins will increase in order to compensate for this risk, but this should not be viewed as uncompetitive or price-gouging. It is due to the fundamental service of de-risking power for the customer becoming harder and more expensive. Any move to artificially suppress retail margins will drive competition and new entrants out of the market, and will ultimately result in worse customer outcomes.

How should this review address issues in the retail market to ensure the products and services needed will be available, recognising work already underway?

The presence of rooftop solar is a very large factor in the cost to supply retail electricity. Currently, rooftop solar households are considerably more expensive to supply power to than non-solar households; by up to 50% in some states. CIS analysis has shown non-solar customers are subsidising solar customers on both network charges (see below section) as well as energy charges.

CIS modelling has found that, for several years now, solar demand profiles have been more expensive to supply than non-solar profiles. Prices are frequently negative while demand is negative (i.e. a household is exporting power), so a retailer will have to pay the feed-in tariff to the customer, and then pay to offload that power in the wholesale market.

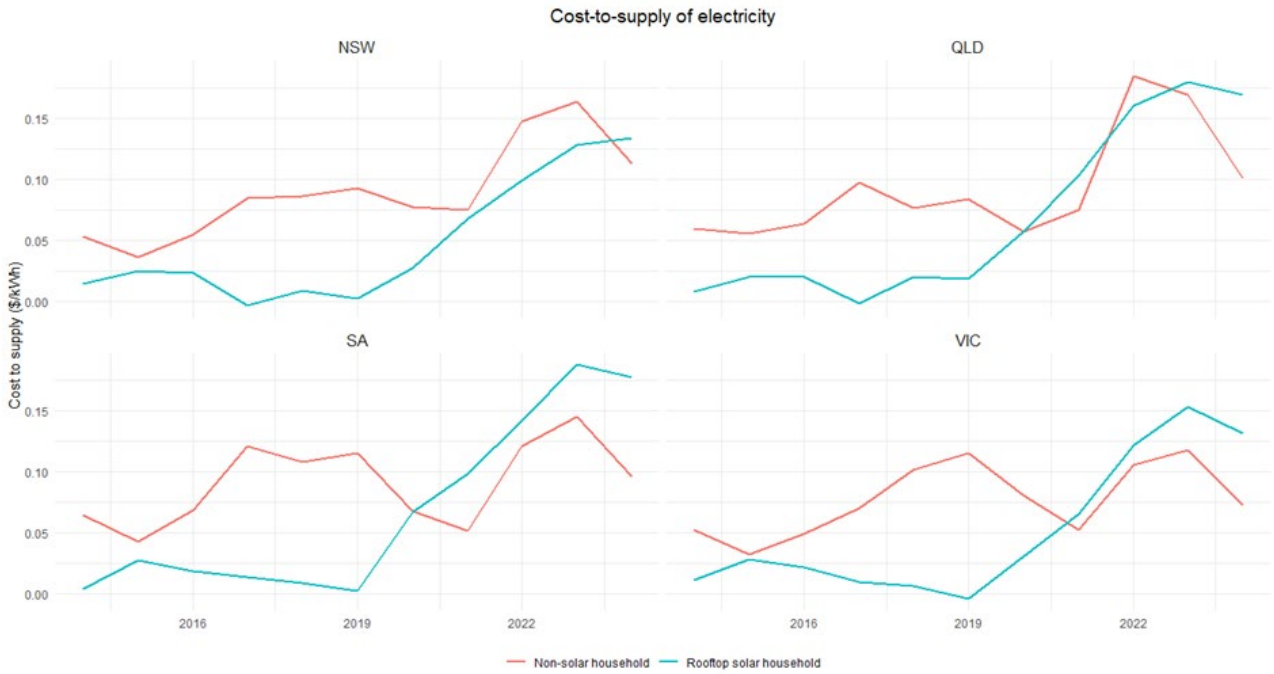

Figure 1. Comparison of cost to supply electricity to solar and non-solar households, assuming a 6.6kW solar system and 3c feed-in tariff.

This means the average retailer must make a greater margin on non-solar customers, and use this to offset the thinner margin from solar customers. The net result is that households without solar are paying more than they should for their power in two ways: through the network charge cross-subsidy (discussed below), and through the energy supply cross-subsidy.

Victorian legislation currently prohibits offering plans to non-solar customers that are not offered to solar customers under Section 23C of the *Electricity Industry Act 2000*. This has reduced retail competition by preventing retailers from designing their products to maximise the benefits for non-solar customers. In the interests of a 'just transition', retailers should be able to offer these households a different price.

What can be improved at the retail and network interface that would contribute to better outcomes for consumers? How can arrangements governing retailers and networks be improved to support better product and service offerings?

The retail market is not serving the long-term interests of embedded network customers, as they are not being given competitive options by retailers. Retailers struggle to price embedded network customers due to complex billing structures and risk exposure, meaning few retailers end up offering energy-only plans, limiting consumer choice. The NERR should require embedded network tenants to be included in standard network tariff setting processes to enable retail competition for these consumers. This will avoid embedded network customers being forced to stay on uncompetitive contracts chosen by the embedded network operator without feasible alternatives. For customers who do find another offer, this change will avoid the confusion of having to pay two bills: one for network use and a separate energy-only bill. The benefits of switching to a more competitive plan with another retailer will therefore be much more apparent.

Network Tariffs

How can better outcomes for consumers be enabled through network tariff-setting processes? What role can network tariffs play in meeting consumer preferences while also efficiently and effectively contributing to lower overall costs?

In order to secure better outcomes for consumers, it is vital that network tariff structures do not allow rooftop solar customers to receive savings on the network portion of their bills through simply averting usage. As quantified in CIS' paper *Rooftop Solar: Paradise Lost* (attached), rooftop solar customers are currently receiving savings 2–4.5 times higher than the value their solar generation is providing the grid, which is shifting network costs onto consumers without rooftop solar, creating unjustifiable cross-subsidies. It is therefore no surprise that, on page 4 of the Discussion Paper, the AEMC cites data that "shows many consumers are satisfied with their current energy services", including those with plans that "allow them to reduce bills by adjusting their energy use… through… utilising CER". It is logical that many rooftop solar customers will be satisfied with their electricity bills, as a large portion of their network costs is being covered by other customers.

As set out in the paper, CIS has recommended several options that would contribute to better pricing outcomes in line with consumers' long-term interests. Expanding current time-of-use and demand tariffs is not recommended. Time-of-use tariffs may make solar cross-subsidies worse, and demand tariffs — while a step in the right direction — are not sufficiently cost-reflective. Network tariffs should instead be restructured to include a larger fixed component to more accurately reflect how network costs are mostly fixed. Better tariff options that would eliminate solar cross-subsidies and improve outcomes for consumers include:

- **Large fixed charge and small variable critical peak charge**: More 'cost-reflective', as customers pay variable charge based on previous year's contribution to critical peak demand, but hard to implement (e.g. past demand during critical peak periods does not necessarily correlate with future demand).
- **Large fixed charge and small variable critical peak charge with SMS**: More 'cost-reflective', as customers can receive an SMS before likely critical peak demand periods and reduce usage to receive a saving, though this will not be feasible or desirable for all customers (e.g. those without smart meters to limit demand during peak periods).
- **Fixed charge only based on land or property value**: Eliminates cross-subsidies but less cost-reflective, requires more customer data and may cause other market distortions.
- **Fixed charge only based on household income**: Eliminates cross-subsidies but less cost-reflective, requires more customer data and may cause other market distortions.
- **Fixed charge only with limited or unlimited peak demand options:** More 'cost-reflective', as customers pay a higher fixed rate to have unlimited usage during peak times, or can opt for a lower fixed rate based on an agreed limit to their peak demand above which smart meters throttle supply, though this will not be feasible or desirable for all customers (e.g. those without smart meters to limit demand during peak periods).

- **Fixed charge based on residence size and type and household size**: Eliminates cross-subsidies but less cost-reflective and requires more customer data (except residence type which is easily accessible public information).

The last option, basing a fixed charge on residence type (e.g. apartment, detached house etc.) is likely to be most feasible as a default option, as it eliminates rooftop solar cross-subsidies, is relatively easy to implement at an administrative level and avoids further market distortions. However, it would be ideal to allow consumers (at least those with the technological capability provided by smart meters) to opt in to tariff structures that are more cost-reflective (thus saving long-term network costs) and require them to reduce consumption during peak times in exchange for bill savings. Consumers could save a portion of their network charges by choosing the SMS option in which they are notified of upcoming critical peak periods and reduce usage during these times, or the limited peak demand option in which they pay a lower predetermined amount and agree to throttling of their instantaneous demand above an agreed limit during critical peak periods. Consumers who want to maintain the convenience of using electricity as normal during these periods can remain on the fixed charge tariff, which would result in a moderately higher network charge on their bills.

Providing consumers with options that allow them to choose the appropriate trade-off between modest reductions in their network bills and maintaining their freedom to use electricity when they want to will improve outcomes for consumers as a whole. Crucially, there must be no tariff option offered that allows rooftop solar customers to continue avoiding network costs through self-consumption. This is especially important given rooftop solar, if anything, increases network costs by contributing to grid stress during minimum demand periods. Ensuring all consumers can receive value for money in paying their share of network costs necessitates the elimination of the existing rooftop solar cross-subsidies perpetuated by tariff structures such as kWh-based single-rate and time-of-use.

In saying that, kWh-based single-rate and time-of-use charges may still be useful options for retailers to offer to customers for the wholesale component of electricity bills. CIS is not suggesting moving to one fixed charge for all components of electricity bills, but rather that the current ratio of variable charges to fixed charges is far too high and must be rebalanced so a greater proportion of bills is fixed. Retailers should be passing these fixed costs on to customers as fixed charges. If retailers can repackage these costs in such a way that solar cross-subsidies are maintained, and face commercial incentives to do this, it would defeat the purpose of such reforms. This risk that they are likely to repackage the fixed costs to become incremental and volumetric can be avoided by lowering barriers to entry for new retailers to ensure sufficient competition.

The AEMC has raised the issue, on page 77, that under NER 6.18.5 (h) the consumer impact principles restrict the rate at which networks can increase fixed fees. Continuing cross-subsidies by slowly implementing a greater share of fixed network charges will be detrimental to consumers in the long-term. Most rooftop solar customers have already benefited from years of direct subsidies and indirect cross-subsidies paid for by other consumers covering the network portions of their bills. It would be unfair to other consumers to delay much-needed tariff reform simply to ensure rooftop solar customers do not see material increases to their electricity bills from one regulatory period to the next. If NER 6.18.5 needs to be amended to allow more rapid tariff reform, this should be prioritised by the AEMC.

A further issue is the AEMC's apparent lack of interest in questioning whether incentives driving sustained rooftop solar and home battery uptake is in the long-term interest of consumers. The AEMC (and AEMO) have yet to produce research quantifying the economic benefits of rooftop solar and home batteries for electricity consumers as a whole. Instead, only the benefits of CER 'coordination' have been measured. Given the large cross-subsidies enjoyed by rooftop solar customers at the expense of those who cannot afford or are unable to install rooftop solar, the AEMC (and AEMO) have a responsibility to provide evidence that incentivising CER uptake through direct and indirect subsidies will provide value for money for consumers as a whole. This is especially important given on page 35 the AEMC has cited an Energeia study that found a single 10 kWh battery in NSW could save the electricity system over $800 in wholesale, network, and ancillary service costs in a year. A typical 10kWh battery costs around $11,000 and comes with a 10-year warranty,[1] which means home batteries do not provide enough value to the grid to cover their cost, let alone provide a return for battery owners. Home batteries are one of if not the most expensive form of providing storage for the grid, with CSIRO's GenCost report finding they are more than twice as expensive as large-scale batteries.[2]

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[1] Sykes, Jeff. 2025. 'Solar Choice Battery Price Index'. https://www.solarchoice.net.au/solar-batteries/price/.

[2] Graham, Paul, Jenny Hayward & James Foster. 2024. 'GenCost 2024-25 Consultation Report'. CSIRO. p 51. https://www.csiro.au/en/research/technology-space/energy/electricity-transition/gencost.