

Submission to AEMC
Draft Terms of
Reference for Review of
Electricity Pricing for a
Consumer-Driven
Future

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Energy Consumers Australia supports the AEMC review as long as it remains broad and bold in scope

We support the AEMC's review of network tariff and retail pricing arrangements. The current state is leading to poor consumer outcomes and is unlikely to remain fit for purpose moving forward. We also strongly commend the AEMC's extensive open engagement leading up to this review and hope it will set a benchmark for future industry practices.

This review should align stakeholders on the billing outcomes that consumers want and how network tariffs and retail prices will deliver these preferences. There appear to be differing industry views on the role and purpose of network tariffs and retail prices¹, leading to confusion and misalignment on the desired end state.

This review should address some observed poor industry attitudes toward consumer energy use and behaviour. Many in the industry appear to believe that most consumers are highly engaged and have a high ability and capacity to change usage. This review needs to reassess these theoretical assumptions on consumer behaviour.

This review presents the opportunity for the industry to be more realistic about what "behaviours" any incentives are intending to produce. Our expectation is that the actual intended "behaviours" are technology-related (e.g. setting EV charger to run during the day, or purchasing a battery and allowing it to participate in a Virtual Power Plant (VPP)), rather than purely human behaviour (e.g. cooking dinner outside of peak times, or running the air-conditioning at a higher temperature, or not at all, on a hot day).

Finally, this review provides a rare opportunity to examine the future drivers and nature of energy system costs. While certain energy system costs can be avoided or deferred through consumer choices, a significant proportion will still need to be recovered. Consequently, consumers may not see their promised energy bill savings, potentially diminishing support for the transition.

Given the numerous major infrastructure projects set to begin, there is a strong case for a broader review of current cost recovery methods. Several known fairness and equity cost recovery issues exist today, which could worsen if ignored. If the industry's focus remains solely on consumer energy resource (CER) uptake and integration, these inequalities may be further entrenched.

We encourage the AEMC to be bold and broad in the review, facing these pressing issues. As energy is an essential service, necessary for Australians' health, safety, and connectivity, a more holistic discussion on how energy costs are recovered is warranted. We believe this review should explore alternative cost-recovery approaches, including the possibility of socially recovering certain energy system costs.

We have four main recommendations for the review and the terms of reference.

- 1. The review must be evidence-based.
- 2. The review must be driven by bill outcomes and consumer preferences.
- 3. The review must assess the future drivers and nature of energy system costs.
- 4. The review must consider whether current cost-recovery methods are likely to be fair and appropriate moving forward.

¹ Energy Consumers Australia, Industry perspectives on electricity tariffs and retail pricing (2022).



We explain the reasons for our recommendations in greater detail below.

Kind regards

Brian Spak

Director - Energy System Transition



The review must be evidence-based

The Australian energy sector has to date been largely driven by economic theory. Australia's electricity market is among the most liberalized in the world, relying on price signals to not only create incentives for economically efficient dispatch (as is common), but to also incentivize the construction of new capacity (which is globally unique).

While this reliance on fundamental economic theory has its merits, it must be tempered with practical evidence on the experience of consumers and the impacts of various approaches to pricing on their daily lives. We have observed that theoretical expectations of consumer behaviour and engagement have been often found to not reflect the actual daily experience of consumers:

- Many of the recent, randomly controlled time-of-use tariff trials have found that the short-run price elasticity of demand is close to zero.²
- Consumer engagement with the energy sector is low. More than a third of Australian households do not know their retail price structure. Alarmingly, nearly half of households who report as being under financial pressure do not know their retail price structure.³ Nearly half of Australian households say they investigate switching energy companies less often than once every two years.⁴ This is despite the Australian Competition and Consumer Commission finding that 79% of households could be on a better offer by switching.⁵
- Around 33% of Australian households don't own their own home, around 13% of households are units, and 40% of households receive less than \$830 of disposable income a week.⁶ This demonstrates that a large proportion of households will have low ability to purchase CER.
- 40% of households were highly satisfied with the cost of their electricity retailer in the past 6 months.⁷ This demonstrates that the incentives available for shifting usage in response to a time-of-use price structure will be low for many households, and likely less than the inconvenience costs.
- Many of our homes were built before building energy standards were introduced, and as a result
 are highly inefficient.⁸ Therefore, many households have little ability to shift heating and cooling
 load outside of when they need them, and efforts to shift heating or cooling load to save energy
 could have adverse health impacts.⁹

Another key pricing issue that we consider requires greater justification is that mandating "cost-reflective" network tariffs for all customers reduces network costs. This decision has to date been largely driven by theory around consumer behaviour which, as we explain above, has little evidence-based justification.

There are also significant questions on the effectiveness and cost-reflectiveness of the network tariffs that are being passed on to consumers. Peak network demand is a rare event, typically occurring during very hot or very cold days.¹⁰ Yet, current approaches to network tariff reform send within-day signals.

² Soederberg M, An evaluation of TOU-tariffs: a literature review and an open-source simulation tool (2024).

³ Energy Consumers Australia, Energy Consumer Behaviour Survey (2023).

⁴ Energy Consumers Australia, Energy Consumer Sentiment Survey (2024).

⁵ Australian Competition and Consumer Commission, Inquiry into the National Electricity Market - December 2023 (2023).

⁶ Australian Bureau of Statistics, Housing Census 2021 (2022).

⁷ Energy Consumers Australia, Energy Consumer Sentiment Survey (2024).

⁸ Department of Climate Change, Energy, the Environment and Water, Energy efficiency: Residential buildings – accessed August 2024.

⁹ Victorian Council of Social Services, Tackling the energy-health nexus (2024)

¹⁰ Australian Energy Market Operator, Maximum and minimum demand – accessed July 2024; Energy Networks Australia, Heatwaves and electricity supply (2019).



Penalising households for peaky consumption on mild days may not align with the true drivers of network costs.

Implementing price signals to reduce demand during these critical periods raises considerations about their effectiveness and equity considerations. Notably, heating and cooling is essential for comfort and health and consumers are rightfully likely to prioritise comfort over cost savings during these peak demand events.

Even if consumers did materially change behaviour on these peak demand events, it is unclear whether network costs will reduce materially. We observe that distribution networks are highly underutilised¹¹, which suggests that there is already a lot of capacity on many networks to accommodate increased peak demand.

There also needs to be better justification to show that we need to mandate these "cost-reflective" tariff structures to provide incentives for demand response. Certainly, there will be some highly engaged consumers that will act in an economically rational way in response to price structures. However, we imagine these highly engaged consumers are already seeking out these types of products in the retail market. We note for example that Amber Electric and Ovo Energy already provide some sort of dynamic price structure to their customers, and these retailers have seen significant growth in customer numbers over the past year. This suggests that opt-in network tariff arrangements could achieve similar benefits as mandatory network tariff assignment, minus all the costs (such as consumer grudge costs and any costs retailers incur to hedge against the cost-reflective network tariffs).

The review must be driven by bill outcomes and consumer preferences

We support the AEMC's commitment to aligning pricing with consumer needs and preferences. The review must start at the bill outcomes consumers want and then work back to understand what these outcomes mean for retail prices, and consequently network tariffs.

We note that alongside the aim for pricing to align *consumer needs and preferences* is the aim for prices to be *economically efficient*. This could be misguided as consumer needs and preferences will likely be found to contradict theoretical views of "economic efficiency". For instance, you will likely hear some views that equitable allocation of costs is preferred to theoretically efficient allocation of costs.

We encourage the AEMC to be bold and use this review to consider potentially more radical billing outcomes that could deliver consumer needs and preferences. One type of billing outcome that could be considered is subscription-based pricing that is used in telecommunications and insurance industries. We know that some consumers value predictability and consistency in bills as it allows them to budget more easily.¹³

It would be interesting to hear from the industry how an 'energy as a service pricing' model could be delivered to consumers, and costs and benefits of such an approach. Reposit Power's "No Bill" product essentially provides such a pricing model to customers who can access solar and a battery. However, it is unclear whether such a product could be delivered to customers without CER under current arrangements.

¹¹ Australian Energy Regulator, Electricity Network Performance Report (2023).

¹² Analysis of Australian Energy Regulator, Retail energy market performance update for Quarter 3, 2023-24 (2024).

¹³ Energy Consumers Australia, Consumer pricing preferences (2022)

¹⁴ Reposit Power, Reposit No Bil – accessed August 2024



The review must assess the future drivers of energy system costs and the extent to which they will be fixed or avoidable

The Terms of Reference appear to focus the review on the role of pricing to incentivise and integrate Consumer Energy Resources (CER) into the NEM. While prices do incentivise certain consumer actions, and certain consumer actions can reduce system costs, we note that:

- not all system costs are able to be reduced; and
- prices and price structures paid by consumers significantly determine how these fixed costs are shared amongst the community.

Network costs are the largest single cost component of consumer bills. ¹⁵ The largest component of network costs are sunk costs, related to return on previous investments. ¹⁶ A variety of new networks costs are emerging such as costs to mitigate bushfire and cyber risks; these are in some ways, "fixed" costs.

Looking forward, network costs are going to rise significantly over the coming years. The value of the transmission network is going to more than double over the next ten years based on actionable transmission projects from the ISP alone.¹⁷ Distribution network costs dwarf transmission costs, and distribution costs are also forecast to increase materially over the coming years.¹⁸

The wholesale electricity market is also undergoing a rapid transformation. Wind and solar electricity generators are high capital cost generating resources with little or no marginal cost. This could mean that the energy future of the system is characterised as having low marginal costs and high fixed infrastructure costs.

We recommend the review extends its scope to consider the future nature and drivers of system costs. Doing so will ensure that any usage prices consumers pay reflect the true avoidable costs associated with their actions. In saying this, transmission costs must be included in the review. This is because these are a significant proportion of costs paid by consumers, and CER can avoid or defer transmission costs.

The review must consider whether current cost-recovery methods are likely to be fair and appropriate moving forward

Currently, most energy system costs are recovered from consumers via usage charges.¹⁹ As discussed, with a high fixed cost energy system, recovering costs via usage charges may not actually reflect the true underlying nature of system costs in the future.

If consumers seek to reduce their usage in response to price signals (say by purchasing solar and a battery), then there will likely be an under recovery of fixed system costs. As a result, usage or fixed

¹⁵ Australian Competition and Consumer Commission, Retail electricity pricing inquiry (2021)

¹⁶ Australian Energy Regulator, Electricity Network Performance Report (2023)

¹⁷ Analysis of Australian Energy Regulator, Electricity Network Performance Report (2023) and Australian Energy Market Operator, Integrated System Plan (2024).

¹⁸ Analysis of recently published Australian Energy Regulator and Distribution Network Service Provider Post-tax revenue models, available at https://www.aer.gov.au/industry/networks/determinations-access-arrangements

¹⁹ Analysis of Essential Services Commission, Victorian Default Offer price review 2024-25, and Australian Government, Energy Made Easy – accessed August 2024



charges would need to rise to ensure that these costs are recovered. This poses some key equity considerations.

If usage charges rise to recover lost revenue, then consumers that don't have CER will have to pay a greater share of system costs as they will rely more on grid energy. These consumers are unlikely to have CER are lower-income, unit and rental households which puts unfair bill pressure on these already vulnerable households.

If fixed costs rise to recover lost revenue, then the consumers who reduced their usage will not see their promised energy bill reductions, leading to a loss of trust in the energy transition. Higher fixed charges could even incentivise households with CER to consider leaving the electricity grid entirely. Fewer consumers to share fixed costs means higher bills for the remaining customers. Again, those most likely to remain on the grid are lower income, unit and rental households.

These issues highlight the need to review current cost-recovery methods and assess the extent to which they will remain fair and appropriate moving forward. Recent reforms to introduce export pricing may not be sufficient to address these potential looming major equity issues.

This review provides a valuable opportunity for the sector to investigate these issues in depth and consider if alternative cost-recovery methods are required to provide a just transition to net zero. We encourage the AEMC to be bold and promote an open and honest conversation about these potential looming issues.