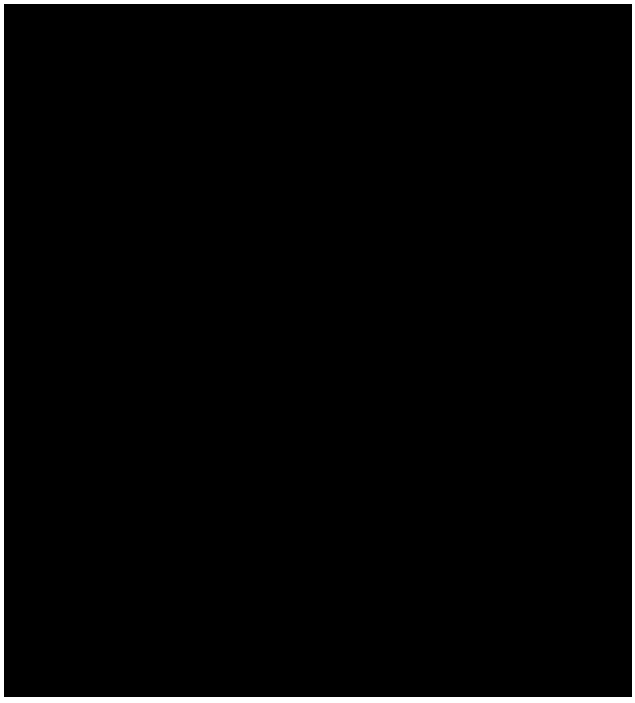
Real-World Consumer Impact

I am a customer of Amber Electric and am exposed to wholesale pricing. Being a software engineer, I use “Home Assistant” – a home automation system, which monitors and controls our solar & battery system. Here is a graph from a typical day – this was a mildly cloudy day, and we only produced about 70% of the solar energy we’d make on a totally sunny day:

As you can see, we export approximately around [redacted] of the electricity our solar system generates to the grid. We imported [redacted] of electricity on this particular day.

Here’s my last bill – this is for January, which is of course one of the better months for solar:



Despite:

- Being a net exported BY FAR
- Generating clean energy
- Contributing to local supply
- Reducing upstream transmission requirements
- Supporting daytime wholesale price suppression
- Exporting EVERY DAY during peak demand in the early evening

… I struggle to break even during one of the best months for solar, once retailer margins, network charges, demand charges, and other fees are applied.

This indicates a structural imbalance.

If network operators are permitted to recover increasing revenues through tariff redesign that shifts more cost onto solar and battery households, the result will be:

- Reduced export participation
- Incentives to oversize batteries purely for self-consumption
- Potential grid defection behaviours
- Erosion of trust in the regulatory framework

It is difficult to reconcile the returns achieved by regulated network businesses — which are protected, indexed, and guaranteed — with the economic reality faced by households who funded and installed generation assets at their own risk.

If tariff reform materially worsens the economics of grid participation for solar and battery households, rational consumers will optimise accordingly — including reducing exports or pursuing partial or full grid defection. This would reduce system-wide benefits currently provided by distributed energy resources.

Distributed energy reduces peak demand, defers network augmentation, lowers wholesale prices during high-solar periods, and increases system resilience. Tariff reform should reflect these system benefits rather than treat DER primarily as a cost-shifting problem.

Market Fairness and Incentive Distortion

Energy is an essential service. Its regulatory framework should prioritise long-term consumer welfare and system efficiency over revenue preservation. However, the market has historically under-served residential consumers. For decades, retail complexity, opaque pricing, and asymmetric information have disadvantaged households.

The National Electricity Objective requires promotion of efficient investment in, and operation of, electricity services for the long-term interests of consumers with respect to price, quality, safety and reliability. Tariff reform that discourages efficient distributed generation or distorts investment signals for DER risks being inconsistent with that objective.

This proposal risks appearing as a mechanism to claw back network revenues lost due to increased distributed generation.

If distributed energy reduces network utilisation and peak infrastructure needs, then networks should adapt their cost structures accordingly. Instead, the proposal appears to preserve network revenue through reallocation rather than efficiency.

This creates a perverse incentive structure:

- Households are encouraged to invest in DER.
- DER reduces network energy throughput.
- Networks respond by restructuring tariffs to maintain revenue.
- Consumers are penalised for responding to policy signals.

That is not a functioning competitive market. It is revenue preservation under a regulated monopoly framework.

Energy as Essential Infrastructure

Electricity is not a discretionary consumer product. It is essential infrastructure.

If the energy market cannot operate in a way that:

- Rewards efficient distributed generation,
- Supports household investment aligned with national decarbonisation goals,
- Shares system benefits fairly,

then policymakers must question whether the current structure remains fit for purpose.

Network businesses operate under government-backed regulatory protections. If those protections are used to ensure investor returns while shifting risk onto households, public confidence in the market model will continue to erode.

Energy policy must prioritise public benefit over guaranteed profit preservation.

Recommendations

I urge the AEMC to:

1. Reject tariff reforms that disproportionately impact solar and battery households.
2. Require transparent modelling demonstrating long-term system cost reductions from DER integration.
3. Ensure that network revenue determinations reflect reduced capital expenditure needs due to distributed generation.
4. Protect early adopters from abrupt economic disadvantage caused by regulatory change.
5. Align tariff reform with stated federal and state decarbonisation policies.

Closing Statement

Households that invested in solar and batteries did so in alignment with government messaging and national energy goals.

Penalising them through tariff restructuring sends the wrong signal at a critical moment in Australia’s energy transition.

Regulatory reform must generate — not undermine — trust in the energy system. In my discussions with friends and workmates, there is very little support for the “energy market”, with most people instead favouring direct government provision of essential services, inline with public health and education provision. Public confidence in the market framework depends on it demonstrably delivering long-term consumer benefit. If it fails to do so, confidence in the current model will continue to erode.