Submission to the AEMC pricing review – discussion paper

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Confidential information has been omitted for the purposes of section 24 of the Australian Energy Market Commission Establishment Act 2004 (SA) and sections 31 and 48 of the National Electricity Law/ sections 223 and 234 of the National Energy Retail Law.

Reference:

https://www.aemc.gov.au/market-reviews-advice/pricing-review-electricity-pricing-consumer-driven-future

https://www.aemc.gov.au/sites/default/files/2025-06/The%20pricing%20review%20discussion%20paper.pdf

Preamble:

Ross is the former Head of Energy and Infrastructure at the Electric Vehicle Council, and has recently founded a new business, Vehicle Charging Solutions Australia.

Ross' background includes:

- Detailed work in the National Construction Code (NCC) to create EV readiness requirements in new buildings,
- Submissions to the Australian Energy Regulator (AER) that have shaped the AER's advice to ministers on consumer protections for EV charging.
- Input into regulatory reset processes, shaping the tariff structures applicable to public charging infrastructure operators in WA, NSW, Victoria, SA, and QLD.
- Close engagement with NSW government on the majority of EV charging programs currently in operation, including the kerbside program.
- Participation in the development of Australian Standards relating to demand response, electric vehicle maintenance, vehicle to grid, and the national electrical wiring rules.

For the avoidance of doubt, this submission is not to be considered the position of the Electric Vehicle Council. It is the position of a very active industry expert.

Picking up on one of the central themes:

13. Lower costs for all consumers can be achieved by having some CER operated in a coordinated manner. If done well, this could unlock savings for both the owners of the CER and for the system.

This is not an incorrect statement, but it's overly narrow, and highlights a persistent cultural bias towards centralised control of consumers assets on the part of market bodies and DNSPs.

A broader statement would be to substitute 'co-ordinated' with 'grid-friendly'. This acknowledges that it doesn't matter *how* the majority of the temporal shift in load and generation is achieved, merely that it *is achieved*.

As an example, according to AGL's submission to the recent NSW parliamentary inquiry in to EVs, there are now well over 20,000 Australian consumers with EVs on the AGL Night Saver plan. This is a retail plan that discounts the price of electricity between midnight and 6am to 8c/kWh – a saving of well over 50%, on a significant amount of energy - so that EV drivers willing to set their cars to charge when network utilisation is at a minimum, and wholesale prices are low, see a significant benefit.

For clarity on the size of the benefit – a typical EV driver who can charge at home will use 2000kWh for their car. A high-mileage driver might use up to

This creates a long run benefit to all consumers – because increased load in the middle of the night increases network utilisation, which *should* put downward pressure on the network component of everyone's energy bills.

Importantly, there's no orchestration or control involved over the EV charging apparatus at the site. AGL tried that approach with an ARENA-funded program, determined that while the technology worked, it cost a lot to do it that way, and built a retail product to achieve the desired outcome without the overheads. It's simple, it works, and consumers have opted-in in droves.

For the consumer that wants orchestration, Origin's 'Power Up' plan does that, via direct control of the vehicle, with the consumer's consent, and with a similar level of benefit shared with the consumer. That retail plan also has thousands of customers.

Also worth noting – the AGL EV night saver offer is structured the same way in every jurisdiction it's offered in, irrespective of the detail of the underlying network tariff structure. AGL are demonstrably capable of creating and offering a plan that is entirely aligned with the *objective* of the network tariff structure, but is not precisely aligned with it temporally or financially at a detail level – because the message to the customer is easier if doesn't change based on a DNSP service area map that the customer doesn't understand (or need to understand, or have any interest in understanding).

The key obstacle to an EV owning consumer accessing a retail plan of this nature, and then changing their behaviour (for everyone's benefit), is whether the retail market in their jurisdiction includes plans that provide this strength of price signal. As far as I know, Western Australians, Regional Queenslanders, Tasmanians, and Territorians (both ACT and NT) are out of luck in this respect. This is largely a matter for the respective state governments to address; the specific impediments vary in each jurisdiction.

The key obstacle for consumers *without* EVs from engaging in this type of arrangement is that they typically will not have a sizable load, that is extremely easy to time shift without any loss of amenity. Absent that, a typical retail ToU tariff offers little actual benefit over a flat tariff.

Offering a typical residential customer a sharply constructed ToU tariff, when their main load is heating and cooling, is a waste of everyone's time, unless the objective is to use price to pressure consumers into accepting being hot in summer and cold in winter – because they will use large heating and cooling appliances at peak times; that's what they're for.

To the questions raised:

Should network tariffs be designed for retailers or consumers? If retailers, how much weight should networks put on the recommendations and views of retailers?

In residential contexts, they should be *designed for* retailers, because the retailers are the ones using them. The network tariff is invisible to the residential consumer, and largely irrelevant to them. These tariffs should be *informed by* representatives of consumer organisations and industry stakeholders, in addition to retailers.

In commercial and industrial contexts, the network tariffs should be designed for retailers, but informed by the needs of the end users and their representatives.

For example, a fast EV charging site operator, faced with demand charges on a lightly utilised site, will not be able to make the business case pencil.... so, the carve out from mandatory assignment to network tariffs that include demand charges, below a suitable volumetric level, should remain in place.

It's worth noting that over the course of the last few regulatory resets, achieving the above was attempted by the EVC with Ausgrid, SAPN, Energex, Ergon Networks, over their objections, and was ultimately achieved through engagement by the EVC with the regulator. In Victoria it took intervention with the Energy Minister after the last tariff reset (2021-2026) to achieve through an order in council, and is now on track to incorporation in the 2026-31 reset.

My direct experience is that DNSPs prioritise their own interests in network tariff design and need to be forced by the regulator and governments to consider the legitimate interests of the wider community... while retailers generally face competitive pressure, which means that they're far more likely to respond to actual consumer expectations in their tariff design work.

To the extent that DNSPs fail to take into account the views of retailers and end users, they will continue to design tariffs that lack utility, and which are therefore disregarded to greater or lesser extent by retailers.

A common cry I've heard many times from DNSPs is "The retailers just need to pass through our signals".

This misses the point that the retailers are in a competitive market. If the DNSPs pricing structure doesn't lend itself to the creation of an attractive offer, then the retailer needs to offer (indeed, has a duty to its shareholders to offer) something different in order to survive.

The DNSP, by contrast, is guaranteed both survival and profit, irrespective of what signal is passed to whom.

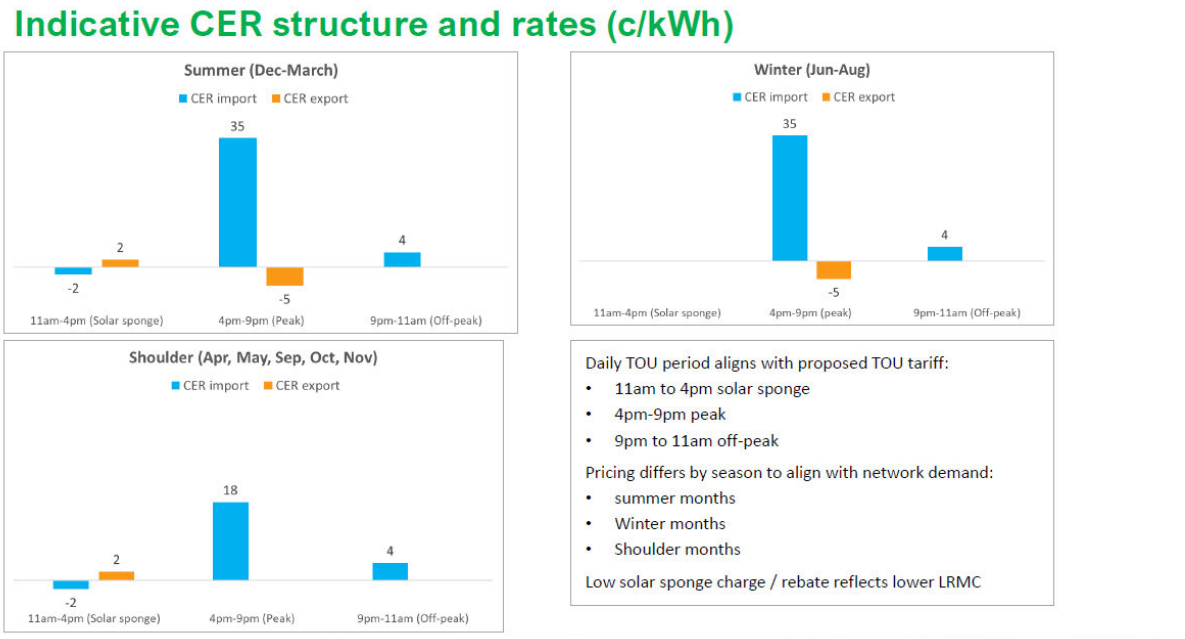
Should any or all of the following be key design features of network tariffs: support competition in the retail market, avoid imposing unnecessary additional costs, and deliver lower overall costs over time?

Yes to all.

And: Design of network tariffs should be required to align with the National Energy Objective.

The Victorian DNSPs, as an example, are currently falling well short with respect to the NEO, when it comes to tariff design for residential CER that will include V2G over the next regulatory reset period (2026-2031).

The proposal for their CER structure – which is the mechanism by which consumer participation in V2G might be encouraged – looked like this, the last time I saw it:



If passed through by the retailer to the customer, what that structure means is that the consumer exporting at peak time would have access to a 5c/kWh export reward through their network tariff, for 7 months of the year but that export reward is contingent on the customer incurring:

- A 2c/kWh export charge for solar in the 9 months of the year when the most solar is generated - up from 0c/kWh on the default structure.
- A 35c/kWh import charge for the 7 months of the year where they are most likely to be using electricity to heat or cool their homes - up from 16c/kWh in network charges at peak time on the default structure.

If we consider two customers in a street on this tariff, one exporting at peak time from a vehicle battery (which they'll recharge off peak overnight, after the discharge), and the other importing, then:

- the exporter gets a benefit of 1c/kWh from the network tariffs (the arbitrage difference between the 5c/kWh reward for peak-time exports and the 4c/kWh off-peak charge) – in

exchange for which his/her solar exports are penalised at 2c/kWh. They might break even, they might not.

- The importer pays 35c/kWh in *network charges* for the energy that just came out of the vehicle battery down the street.

The exporter is provided, in effect, approximately no incentive from the network to participate in this way, despite this being precisely the type of CER participation that will reduce load on distribution transformers and all the upstream assets in the system, enabling significantly more efficient operation of the network (ie, higher asset utilisation) and reducing the need for augmentation expenditure.

To the extent that the exporter participates anyway (perhaps because the retailer shoulders the entire burden of providing the consumer incentive, based on wholesale prices), the margin between what the network pays per kWh for the export, and what they get paid for the import of the *same energy in the same street*, is 30c/kWh.

For each kWh of participation, the customer who invested in the kit to make it possible gets paid 1 cent, and loses on their solar exports – while the network picks up 30 cents.

This approach to tariff design will fail to encourage V2G, and thereby fail to meet the intent of the NEO by:

- The choice to not share the benefits created with the consumer investing in the hardware and changing their behaviour for the common good, and then
- Sequestering the bulk of the economic benefit that arises from V2G participation into DNSP revenue.

For the avoidance of doubt, as a proponent of V2G and the benefit that V2G participation by EV owners stands to bring the entire community, I have already raised this specific issue over the course of the last 18 months with:

- the AER
- senior management at the Victorian DNSPs
- the Victorian state government (DEECA)
- the Victorian energy minister's office.

It is not clear to me that this matter is actually on track to being resolved in a fair and equitable way for the 2026-31 regulatory reset in Victoria.

I have also not addressed this issue in detail in other jurisdictions, where it can be expected to play out similarly.

So, I'm raising it here as part of the AEMC pricing review.

On offer complexity and customer switching.

From the discussion paper:

Consumers consistently report dissatisfaction with the complexity of electricity market offers. Many consumers find it difficult to compare alternative offers and decide whether to switch offers and/or retailers.

This dynamic is not limited to consumer choice in the purchase of electricity.

Humans have always faced choices between courses of action, with imperfect information, limited understanding of the circumstances, time pressure to act, and predatory interests seeking to sway their choice.

This dynamic doesn't just pre-date the Australian electricity market, it pre-dates civilisation. It is the basic way of the world, which some elements of civilisation seek to correct for and to de-risk, for the common good, and for the benefit of the least advantaged among us.

With respect to choice in the energy market, it is going to remain that case that not all consumers get the best possible deal on offer to them. Not all consumers are willing to engage, even if you pay them - see the Victorian government's approach, paying $250 direct to the consumer just for looking at alternative retail options.[1]

Forcing the retailer to switch consumers to different plans might help in some cases – but it will almost certainly harm in others. We've seen what happens when consumers are switched without their consent, or without even being informed, over the last 12 months. It ends poorly.

Among those willing to invest the effort, many do not understand, and will not invest the effort to understand, how energy is measured, priced, and sold. Life is busy for many people. Even experts in the domain often struggle to explain the difference between power and energy in a way that an average person without a technical background can grasp – assuming the person without the technical background is interested in putting in the effort to grasp the difference in the first place!

With this in mind, it's worth considering the roles and responsibilities of the participants.

Commercial participants like generators, DNSPs, retailers, etc, can be expected to conduct themselves in furtherance of their own interests. This is actually a responsibility they have to their shareholders.

It should *not* be assumed that the for-profit market participants will willingly and effectively prioritise the minimisation of their own profit for the benefit of the consumer.

Competition is one mechanism by which we ensure that for-profit enterprises produce offers that deliver good outcomes for customers, in addition to what benefits themselves. This doesn't mean that all customers will find a good deal, or that a good deal will automatically be provided to every customer – merely that good deals will be available for the customer that seeks them. This applies to retailers.

In the absence of competition, effective regulation is needed to ensure that the for-profit enterprise doesn't simply take the customer for every dollar they can. Refer to my commentary in the previous section on the Victorian regulatory reset process for an example of this type of

[1] https://compare.energy.vic.gov.au/languages/english

failure mode. The correction for this is an actively engaged and effective regulator, ensuring that tariff structures like that one get challenged, so that networks are required to share the benefits created by useful CER participation, empowering the retailers to build tariffs that are good for everyone.

Ensuring that the population is comprised of customers they are sufficiently competent to find a a deal that is good for them is an education question. It's doubtful that the AEMC is in a position to address this matter; a better place to start with be the early high school curriculum.