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Dear Mitchell

Electricity pricing for a consumer-driven future – Submission to the review

AusNet welcomes the opportunity to provide this submission to the Australian Energy Market Commissions' (AEMC) review of electricity pricing for a consumer-driven future.

We support the intent of the review, however the terms of reference are extensive and will require significant resources from the AEMC, networks, industry participants and other stakeholders. Given the sizeable reforms currently underway by the AEMC and in each jurisdiction, the terms of reference should be limited to a few key issues. We recommend the AEMC prioritise collecting and analysing evidence of identified material problems within the current pricing framework, to determine the highest value areas for further review.

In that context, we do not consider the role of distribution networks in electricity pricing needs a substantive review. However, there are areas of network pricing that would benefit from further evidence and evaluation, as discussed below.

Cross-subsidies between customers with and without consumer energy resources

Our data shows material cross-subsidies between customers who are exporting into the grid and those who are not. We've provided outcomes from recent modelling we conducted on cross-subsidies in the appendix. The AEMC should review the extent of cross subsidies under the current framework, and based on collected evidence, consider necessary changes to the regulatory framework beyond export tariffs. This should balance the need to continue to support solar uptake, while ensuring all customers (those with and without solar) can benefit from the transition to renewable energy.

Customer response to network tariff structures and the extent to which this can be relied upon in network planning

Our smart meter data shows customers on different tariff structures exhibit no difference in behaviour during peak hours, and we have conducted studies that show customers mostly prefer convenience over rewards from price responsiveness. We have provided an overview of this research in the appendix. The AEMC should review evidence of customer behaviour using smart meter data and other research, to determine customer appetite to shift behaviour in response to tariffs. This should evidence of automation to respond to price signals.

Outcomes of this research should be used to assess whether customer behaviour / automation of devices can be reliably forecast in tariff design and network planning. Building an evidence-based consensus on this topic would be valuable to ensure aligned understanding and objectives across policy makers, regulators and distributors as to the extent to which peak demand can, and should, be shaped by tariff signals instead of investing to meet the peak. Without this evidence based and alignment, there is a risk that the responsiveness assumed in regulatory approvals is either too high or too low, leading to sub-optimal customer outcomes from either a service level or cost perspective.

The effectiveness of tariff trials

Our experience shows attracting customers to tariff trials is difficult and may result in trials with only a handful of customers. Retailers (understandably) can be reluctant to invest in passing on pricing signals from tariffs that are time bound and can only be applied to a limited number of customers for a particular distribution network. This typically does not provide sufficient learnings to inform tariff design, however the cost to implement can be material. The AEMC should consider the effectiveness of recent tariff trials and assess the benefit of conducting more trials, against alternative ways to implement tariff reform, e.g., by introducing flexibility in the regulatory framework to allow networks to shift customers to new tariffs during a regulatory period, based on meeting certain criteria.

We welcome further engagement with the AEMC on the issues raised in this submission, and to share outcomes of our studies and research.

Please reach out to Eliza Cochrane on eliza.cochrane@ausneteservices.com.au if you have any questions about the submission or to organise further engagement.

Sincerely,



Sonja Lekovic
Regulatory Policy Manager
AusNet Services

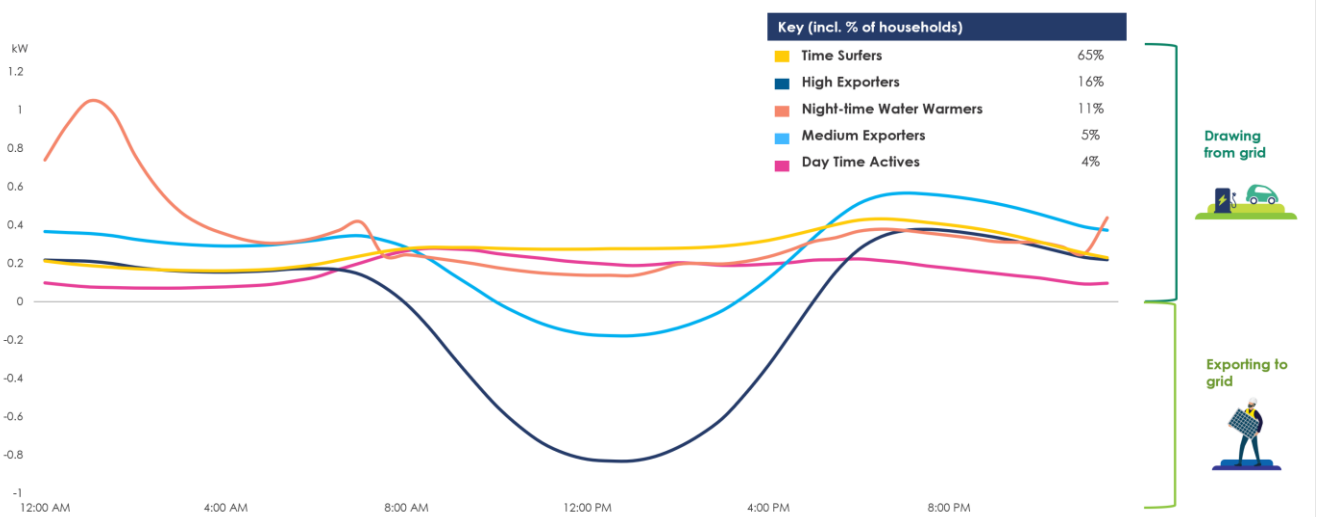
Appendix: Overview of AusNet’s recent customer research related to tariffs and customer behaviour

Customer Segmentation study

In 2022, we conducted an extensive research program which, for the first time, combined smart meter usage data with quantitative and qualitative customer research around customers’ motivators, energy saving behaviours and take-up of new technologies. The research indicated five distinct customer segments in AusNet’s network, including the differences between customers who are exporting and not exporting to the network. The research has provided rich insights into differences between these segments, motivation for investing in consumer energy resources, and overall awareness of benefits of energy saving behaviours. Details of the research can be found [here](#).

Figure 1 below shows the different segments from the study.

Figure 1: AusNet’s five customer segments based on smart meter usage pattern analysis



Note: the segments have stylised names to reflect their usage.
Source: AusNet.

This research indicates many customers are convenience motivated, which may suggest a lower likelihood customers will change behaviour in response to tariff structures. Some interesting insights include:

- Two-thirds of households on our network have a peak in the morning and a large evening peak. These customers are convenience motivated, have the highest percentage of renters, have the lowest energy literacy, and are less interested in changing their behaviour. Less than a quarter of these customers have indicated they shift usage outside of peak hours.
- A fifth of our customers export large amounts of energy into the grid, and they tend to be more engaged and adopting of energy-saving behaviours. However, the data shows that these customers are not maximising usage during the high solar production period, with only 40% saying that they consider shifting usage outside of peak hours.
- Most customers are unaware of their tariff structures, and many customers on single rate network tariff believed they can save by moving usage outside of peak hours. There is a need for

Evidence of cross-subsidies between non-exporting and exporting customers

Using the same Customer segmentation study, we conducted a high-level analysis of the difference in cost recovery from exporting and non-exporting customers based on today’s time of use tariffs. The table below shows there is a significant cross-subsidy between non-exporting customers (Time Surfers) and High Exporters, due to the fact exporting customers do not pay a usage charge when exporting, and the current time of use tariffs include a higher usage price during periods when High Exporting customers are still exporting (between 3-5pm).

Table 1: Difference between exporting and non-exporting customers regarding network usage and contribution to network charges

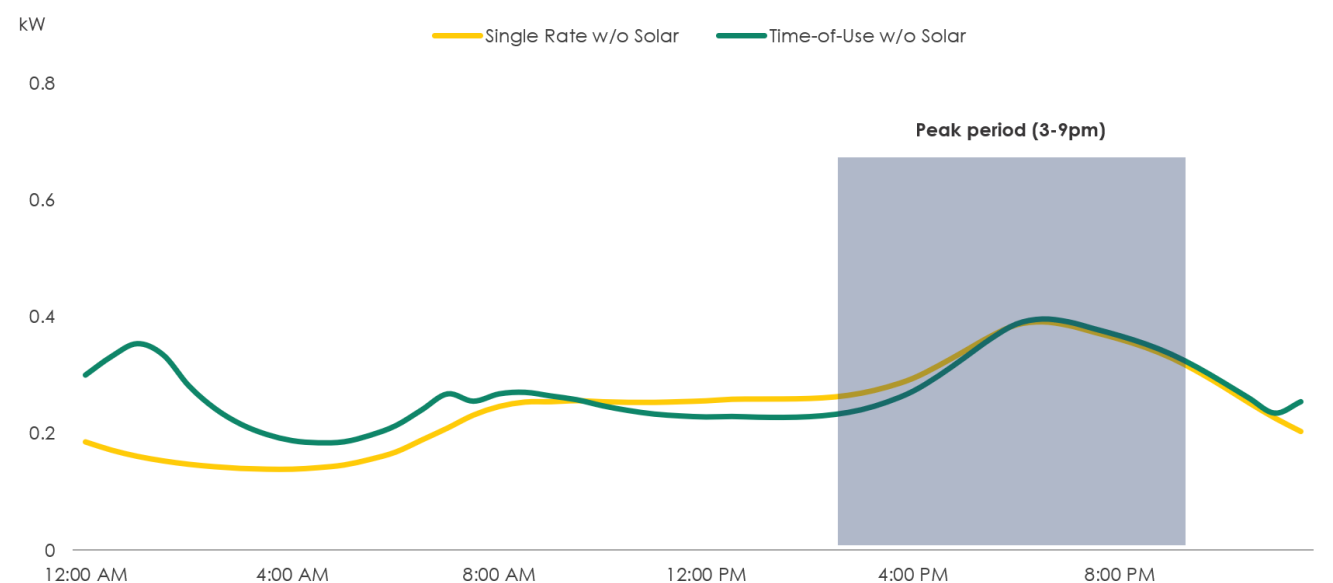
Segment	Maximum demand	Minimum demand	Capacity used Max – min demand	Network charge*
High Exporters	0.4 kW	-0.8 kW	1.2 kW	\$342
Medium Exporters	0.6 kW	-0.2 kW	0.8 kW	\$617
Time Surfers	0.4 kW	0 kW	0.4 kW	\$652

* Indicative network charges based on time of use (TOU) tariffs.
Source: AusNet.

Comparison of evening peak usage between customers on single rate and time of use tariffs

Using the same Customer segmentation study, we also conducted a comparison of average usage profiles between customers on single rate tariffs and time of use tariffs, for customers without solar (as almost all solar customers are on time of use tariffs). The data shows that the evening peak is almost identical between the two customer groups, which indicates some stickiness to evening usage regardless of tariff structures. However, we can see time of use customers are typically larger users, and they are taking advantage of lower overnight prices for some purposes, which is most likely hot water heating.

Figure 2: Comparison of average usage profiles between customers without solar on single rate and time of use tariffs



Source: AusNet.