

Victorian Energy Distribution Businesses
By email to talkingelectricity@jemena.com.au

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Future Network Forum – Network Pricing Design

Submission to the network tariffs consultation paper

Dear Victorian Energy Distribution Businesses

Thanks for this opportunity to continue our engagement with the tariff reform process.

Renew (formerly known as the Alternative Technology Association) is a prominent advocate for all Australian residential energy consumers. As a member of the National Energy Consumer Roundtable, we work closely with other consumer advocacy organisations, bringing expertise and experience in energy policy and markets. We also conduct independent research into sustainable technologies and practices.

As well as advocating on behalf of all residential consumers, we are the direct representative of our 11,000 members, who are mostly residential energy consumers with an interest in sustainable energy and resource use. Our members share our passion for a just transition to a clean energy future, through a policy and industry framework that supports households that are investing in making that transition, while ensuring that those unable to invest are not left behind – or left with the bill. Fairer tariffs are a critical part of such a transition, and of ensuring that the cost of maintaining and evolving our energy system is shared fairly.

Renew commends the Victorian Distribution Businesses for collaborating with each other on tariff reform, and for comprehensive and proactive engagement with consumers and consumer reps. The remainder of this submission comprises Renew's responses to the consultation questions, and other matters pertaining to network tariff design and the tariff reform process.

Responses to consultation questions

Before addressing the specific questions from the consultation paper, we'd like to address the overarching question (from the second consultation workshop) of **who should the pricing structure be targeted towards, the retailer or the end customer?** In Renew's view, it is the role of retailers to give customers tariffs that they can understand and respond to. (The fact that retailers are not necessarily very good at this is beside the point.) A retailers' role includes managing their portfolio and hedging against several variables, including wholesale price fluctuations and both predictable and unpredictable changes in demand. Network costs already vary according to customers' usage. If new network tariffs vary according to other characteristics of customers' loads – such as peak demand – retailers just need to hedge against this as well. That may require giving certain types of retail tariffs to certain types of customers, and the retailers are in the best position to know who those customers are and what those tariffs should be.

Because customer energy costs have some relationship to the network charges they face, it is certainly appropriate for DNSPs to consider the customer impact of network charges when developing new tariffs. But the design of those tariffs should be done with retailer responses in mind, not end-users.

Tariff structures

1. Which network pricing option do you prefer? Are there any changes you would want to see to how we have structured your preference?

Since the aim of cost-reflective tariff design is to increase the degree to which network tariffs are based on cost drivers, Renew supports price option **4** (demand tariff), but is open to option **2** (time-of-use tariff) depending on which more accurately reflects costs and taking into account expected customer impacts.

Our understanding is that aggregate customer demand on the network during peak periods is closely correlated with the network capacity required, and is thus both a useful metric for allocating sunk and ongoing costs, and an indicator of share of augmentation costs when required. This supports a demand basis for cost-reflective prices – noting however that the interplay between fixed, demand, and volumetric components is critical. **We would like to see some clear analysis of the relationship between individual customer demand and network capacity cost drivers**, to inform decisions on the structure of demand tariffs, such as:

- Whether there is any rationale for a volumetric charge at all
- Whether the demand charge should be simple (i.e. the same charge for each kW) or progressive (e.g. a higher per-kW rate for higher demand)
- The relationship between the fixed component, the demand component, and any volumetric component

We recognise that a time-of-use (ToU) tariff can be a proxy demand charge; but in our view there is no need for a proxy when a demand charge can be used (bearing in mind our view that network tariffs are targeted at retailers, not residential and small business customers). However, we are open to analysis that shows a ToU tariff is more reflective of network costs.

(Option **3** – peak usage subscription – is overly complex for no apparent benefit, unnecessarily requiring either customer engagement on a complex technical issue, or considerable administrative overhead for retailers. We can see no reason why it is superior to a demand tariff.)

2. Are there any other network pricing options you would recommend exploring?

As discussed above, **demand tariffs with no volumetric component**, and **progressive demand charges**, are worth exploring.

We also believe that **critical peak charges and rebates** are a useful complement to cost-reflective network tariffs when targeted at customers in areas of significant constraint. As discussed in our [Consumer outcomes of tariff reform](#) report,¹ while network operational and capital costs primarily comprise expenditure to maintain and operate the network at its current capacity – and thus cost-reflective tariffs should primarily focus on equitably sharing that regular, ongoing cost – augmentation costs are still significant, but mainly occur in a limited number of specific parts of a network. Critical peak tariffs – whether charges or rebates – are really useful in these situations to give strong price signals for behaviour change that helps defer expenditure, and to raise revenue to meet the expenditure when it can no longer be deferred. This is the appropriate usage of critical peak tariffs. We also note that research suggests that while critical peak pricing is generally more effective than critical peak rebates, rebates are far more effective at driving behaviour change in low income and vulnerable customers.²

The transition

3. What is the appropriate pace of change that complements your preference? If you support an option that includes opt out, to what other pricing structure should the customer opt out to?

The pace of change

The transition to cost-reflective network tariffs is a significant change and will lead to some consumer impacts that need to be managed. It also requires significant change for energy retailers, and they need time to adapt their approach to managing their

¹ Dean Lombard, *Sharing the load: Understanding consumer outcomes of network tariff reform*. ATA, 2018. (https://1drv.ms/b/s!Al08m3BYiwY0m1R9oQDZ_QaD-VZx)

² Frank Wolak, *Increasing the IQ of the Smart Grid Through Active Consumer Participation in Wholesale Electricity Markets*, presentation to ACCC/AER Regulatory Conference, 26 July 2013

customer loads, and to make changes to their billing systems which, I'm told, can cost many millions of dollars even for simple changes. For these reasons, a gradual transition is desirable. Renew recommends a transition plan over the entire regulatory period, with new tariffs applied by default to new and changed connections, and adjustments to tariff structures each year for other customers – so, for example, the demand component of a new demand-based tariff would progressively replace the volumetric component each year of the period until by the end of the period, the tariff structure is fully the new structure.

Opting out (or not)

Because the objective of cost-reflective pricing is to allocate costs more fairly, allowing individual customers to opt out is problematic. As the Consumer Utilities Advocacy Centre noted in 2015:

Mandating uptake of cost reflective tariffs is crucial to the success of network tariff reform. If, at the conclusion of the reform, consumers are not required to have a cost reflective tariff, they will naturally seek to avoid it where it is not in their interests; that is, consumers whose behaviour would be more expensive under cost reflective tariffs will avoid them. The costs they are incurring will continue to be borne by the broader system, in an inequitable outcome that damages the justification for the reform.

While it is vital that low income, vulnerable, and disadvantaged groups be able to afford adequate essential services, it is also crucial that people who incur high networks costs are unable to manipulate the system to avoid paying their fair share. This requires mandatory implementation of the reforms.³

Impacts on vulnerable consumers need to be managed through judicious application of the customer impact principle and complementary measures. The long history of energy market reform has shown that you can't fix financial hardship with tariffs. Well-designed tariffs at least make it easier to predict what types of households are vulnerable to price impacts, to better target remediation.

And this is critically important in network tariff reform because it's very clear that, for a range of reasons including poor quality housing and cheap, old appliances – as well as the regressive linear relationship between volume and peak demand for typical consumption patterns – low income households are more likely to be negatively impacted by demand-based tariffs than others.⁴ Assessing customer impact and ensuring complementary policy can adequately deal with the financial impacts of price rises is an essential part of tariff reform.

Accordingly, Renew supports **mandatory reassignment to cost-reflective network tariffs over a five-year transitional period**. DNSPs and the Victorian Government should work with retailers to ensure detrimental impacts on vulnerable customers are managed through the Victorian hardship framework. One contribution DNSPs can make to this work is to undertake comprehensive customer impact analysis of proposed tariffs in order to both help identify customers most vulnerable to financial impacts, and determine whether and how tariff design can be adjusted to ameliorate such impacts.

Peak time rebates

5. Do you consider that we should further develop peak time rebates as a complementary measure to be used on an ongoing basis?

As discussed above, critical peak-based tariffs has a key role to play in deferring and revenue-raising for augmentation in constrained parts of the network. We refer the Victorian Network Businesses to the work of Frank Wolak⁵ and others who have studied customer responses to critical peak tariffs and determined that pricing and rebates both work, for different types of consumers. Renew recommends that these approaches are explored and trialled as complementary measures.

³ Martin Jones, *Cost Reflective Pricing: Engaging with Network Tariff Reform in Victoria*, CUAC, 2015 (<https://www.cuac.org.au/research/cuac-research/400-cost-reflective-pricing-engaging-with-network-tariff-reform-in-victoria/file>): p. 27

⁴ Dean Lombard, *Sharing the load: Understanding consumer outcomes of network tariff reform*. ATA, 2018. (https://1drv.ms/b/s!Al08m3BYiwY0m1R9oQDZ_QaD-VZx)

⁵ Frank Wolak, *Increasing the IQ of the Smart Grid Through Active Consumer Participation in Wholesale Electricity Markets*, presentation to ACCC/AER Regulatory Conference, 26 July 2013

Customer impacts

6. What information would you like to see on customer impacts?

We would like to see two types of information on customer impacts:

Comprehensive customer impact assessment

So far in the tariff reform process, information on customer impacts has been rudimentary at best. Victorian networks have access to so much rich energy usage data, there's a real opportunity to undertake detailed and comprehensive customer usage analysis. We refer the networks to the studies undertaken for the Victorian Government on the customer impacts of flexible pricing (<http://www.smartmeters.vic.gov.au/about-smart-meters/reports-and-consultations>) and our own research on the customer impacts of cost-reflective network tariffs (*Consumer outcomes of tariff reform*)⁶ as examples of the kind of detail that is required. A study of a representative sample of customers that collects both key demographic data (including socio-economic indicators, age group, cultural and linguistic characteristics, dwelling type, fuel mix, appliance types) and meter data (including volume as well as characteristics of load such as the ration of peak to typical demand) would be of enormous value, enabling the networks to understand the price impacts on key customer groups of different approaches to tariffs. This is what Renew did in its study (referenced above) with the limitation that the only customer dataset available was from Ausgrid.

Judicious application of the customer impact principle

Once detailed customer impact assessment has been done, the networks should apply the customer impact principle of the cost-reflective tariff framework. As we understand it, the customer impact principle should go far beyond simply consulting with customers or acknowledging that some will be impacted. It explicitly requires that compromises be made between pure cost-reflectivity and customer impact. We would like to see the networks document and explain how understanding the impact of cost-reflective tariffs on different types of customers has led to changes in tariff design and application to mitigate impacts where practical, or better enable them to be managed.

Conclusion

Thanks for the opportunity to contribute to this process. Renew looks forward to further work with the Victorian Energy Distribution Businesses and other stakeholders in the tariff reform process. Please don't hesitate to contact me if you wish to further discuss anything raised in this submission.

Sincerely yours,



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⁶ Dean Lombard, *Sharing the load: Understanding consumer outcomes of network tariff reform*. ATA, 2018.
(https://1drv.ms/b/s!Al08m3BYiwYQm1R9oQDZ_QaD-VZx)