





Version history

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Overview

Affordability continues to be energy consumers' number one priority. Great care needs to be taken to ensuring that an over-emphasis on the reliability of electricity networks is not used to justify overinvestment and inappropriate price rises for consumers.

Energy Consumers Australia is the national voice for residential and small business energy consumers. Established by the Council of Australian Governments Energy Council in 2015, our objective is to promote the longterm interests of consumers with respect to price, quality, reliability, safety and security of supply.

We appreciate the opportunity to provide the Australian Energy Regulator (AER) with a detailed response to the regulatory proposals submitted by the Victorian electricity distributors for the revenue each business proposes to collect from its customers through distribution charges from 1 July 2021 to 31 June 2026.

In place of the usual public forum which was cancelled due to COVID-19, Energy Consumers Australia provided detailed <u>preliminary feedback</u> on the distributors' proposals in April 2020 which the AER has published with other presentations. Energy Consumers Australia also responded to questions from the Consumer Challenge Panel (CCP) which are also <u>available</u> on the AER website. This submission builds on these contributions.

There is substantial alignment between the distributors proposals and the interests of household and small business energy consumers. However, in our view there are outstanding matters, where further assurance is needed, to enable the proposals to be considered capable of acceptance.

Specifically:

- Efficient operating expenditures (OPEX)
- Incentive schemes justification
- Depreciation plans
- Information technology value for money
- Bushfire related insurance and other costs
- Clarity about costs associated with supporting consumer investments in solar and other technologies
- Innovation in network tariff design.

Thank you for the opportunity to make this submission. If you would like to discuss the issues we raise further, please do not hesitate to contact Shelley Ashe, Associate Director – Networks, via email at shelley.ashe@energyconsumersaustralia.com.au.

Our approach

Energy Consumers Australia welcomes the commitment by the Victorian distributors to engage with consumers and advocacy groups, and the efforts made so far to find the appropriate balance between affordability and the future needs of their infrastructure. We have also reflected on the impact of COVID-19 on consumers and the distributors as part of our assessment of the proposals.

As noted in our <u>response to the draft</u> regulatory proposals from the businesses, affordability continues to be consumers' number one priority. Great care needs to be taken to ensure that an over-emphasis on the reliability of electricity networks is not used to justify overinvestment and inappropriate price rises for consumers. In seeking the right balance, our principles are the following.

- Affordability must be a constraint on investment and decisions about energy – an explicit criterion in decision making up and down the supply chain.
- Energy services must be built around individuals to reflect their own use and costs – whether that is consumers who are innovating and engaged; or the majority of consumers who are focused on affordability and costs; or consumers with vulnerabilities.
- Investment in the power system networks, generation and retail must be *optimised* together with consumers' investments on their side of the meter.
- In reviewing the revenue proposals and the proposed network tariffs put forward by the Victorian electricity network distribution businesses, we start with consumers and the decisions they make that have implications for their power bills.

Energy Consumers Australia undertakes research into the consumer experience in the energy market today, and consumers' expectations about what a future energy market could deliver to them. What is clear from our research is that consumers want a better energy market, that enables them to use the power they need at an affordable cost.

The current experience of Victorian energy consumers

Our Energy Consumer Sentiment Survey (ECSS) reports trends over time in a range of consumer metrics, expressed as a percentage reporting positive scores of more than 7 out of 10.

Figure 1 shows the trends in value for money, reliability and consumer confidence that the market is working in their interests.

From a low in December 2017, there has been a recovery in value for money and trust, amongst Victorian households.

This has occurred at the same time as price growth has slowed and reforms have been implemented to improve energy retailers' communications and assistance programs for people experiencing payment difficulties.



Figure 1 Victorian household trends





Source; 6401.0 Consumer Price Index, Australian Bureau of Statistics

On the other hand, the recent experiences of outages are being reflected in consumers viewing reliability less positively, notwithstanding that reliability of most Victorian distributors remains high.

Figure 2 shows the trend in energy prices, with price growth slowing over the same period as the ECSS.

Over the period to 2018, reliability of electricity distribution networks has either been maintained (duration) or improved (frequency) – shown in Figures 3 and 4.

Figure 3 Outages (duration), Victorian electricity distribution networks



Source; Regulatory Information Notices data, Australian Energy Regulator





Source; Regulatory Information Notices data, Australian Energy Regulator

Consumer expectations of the future energy market

Consumers are telling us in our research that in the future they want power that is cheap and clean.

As power is necessary for their lives and livelihoods - in their homes, their jobs and their businesses – they want managing it at an affordable cost to be simpler.

Consumers cannot 'avoid' grid supplied electricity cost effectively and have been willing investors in electricity generation and storage assets on their side of the meter. They are already 'integrated' into the energy market, more so than ever before.

The uptake of a range of technologies – all of which require electricity for charging – are shown in Figure 5 and the CSIRO projections for uptake of solar, batteries and electric vehicles are shown in Figures 6, 7 and 8 respectively.

Figure 5 Consumer uptake of technology



Source: Cameron Tonkinwise, Transition Design, Foresighting Forum 2021



Figure 6 Projections of roof-top solar systems (moderate scenario)

Source: CSIRO, Projection for small scale embedded technologies, June 2018



Figure 7 Projections of residential batteries (moderate scenario)

Source: CSIRO Projection for small scale embedded technologies, June 2018



Figure 8 Projected electric vehicle numbers, Australia

Source: CSIRO Projection for small scale embedded technologies, June 2018

In its report for AEMO, CSIRO projects that electric vehicle numbers in Victoria could increase from 3,500 in 2020-21 up to 220,000 by 2025-26. On our "rough" calculations, depending on how many electric vehicles per home, that is between 5-10% of Victorian homes.

It is critical that Victoria establishes retail off-peak charging rates now, that incentivise social practices that will enable current assets to be utilised effectively, and only invest what is needed in additional capacity.

Trusted technology and services

Consumers say they are willing to use technology to manage their power use, but it also has to be convenient and trusted. Investing in home energy management systems, controllable electrical appliances, generation and storage technologies or in electric vehicles with vehicle to grid capacity are potentially all ways in which consumers can control their energy use and avoid bill shock. Most consumers are not energy experts and nor should they be expected to be. They say that they want technology to be set and forget that is easy to over-ride or change settings if something in their lives or their business changes.

Given the significant changes that are facing us as a community – including changing technology but also greater extremes in our weather which is being seen in more intense bushfires and prolonged drought – consumers are also telling us that they want to have their say in the design of the future energy market.

The cumulative experience over the past decade of repeated power bill shocks and the negative impacts on the cost of living of higher power prices have all contributed to low trust in decision-makers generally in the energy market, whether industry, government or regulators.

Navigating the future of the energy market, requires engaging with consumers and responding to their views. This goes beyond simple engagement on specific decisions and proposals, to building trust through a new compact with the community to demonstrate how their values will be incorporated into the design of a future energy market that delivers the outcomes they want.

Designing for flexibility to reduce costs for everyone

A critical element in the design of the future energy market is how consumers will be rewarded and provided with incentives to be flexible in their electricity use, and/or electricity production (from solar systems, home or community storage or electric vehicles with vehicle to grid- capacity.

Without well-designed pricing and incentives that recognise and respect social practice and ways of working in our homes and our businesses, we will fail to unlock the immense potential on the consumers side of the meter.

This means changing the way we think about 'capacity' – which has almost exclusively focussed on the supply chain made up of large scale electricity generation and network assets – and thinking about not only the capacity that can be avoided by energy efficiency but also the capacity that can be released by voluntary load shifting, shedding and shaping in every home and every business.

This 'demand' capacity can be unlocked to contribute in a range of ways to reducing costs in the energy market, including reducing future investment in electricity generation and network assets, increasing the utilisation of current assets, dampening volatility in electricity prices and incentivising storage.

We have reviewed the expenditure and tariff proposals of the Victorian electricity distribution network businesses in this broader context.

Response to the revenue proposals

Overview

The views of Energy Consumers Australia on the revenue proposals have been informed by detailed analysis by the expert consultancy Spencer & Co. The Spencer & Co analysis is attached for the information of the AER and stakeholders (Attachment 1).

Energy Consumers Australia acknowledges the complexity of revenue determinations for electricity distributors. There remains considerable ground to be covered in discussions with all parties. While there are points of difference between us and the distributors at this stage, it is important to acknowledge areas of alignment.

- Engagement the Victorian distributors have generally undertaken strong and collaborative engagement with their customers. We note they have committed to further engagement as a normal business activity and to deepening relationships.
- *Lower prices* the distributors' proposals mean that consumers in Victoria can expect lower prices during the next regulatory period.
- Affordability those proposals reflect genuine attempts to consider the impact of distribution charges on consumers.
- Drivers for change it has been helpful for advocates to have the distributors present proposed expenditure alongside the detail of expenditure in the previous period and an explanation of what is driving change.
- Distributed Energy Resources (DER) programs all the Victorian distributors have engaged in a constructive manner to realise more benefits from rooftop solar for households and businesses.
- Metering costs it is positive that the cost of metering for consumers in all networks will fall significantly in the 2021-26 period.
- Specific comments on the tariff proposals of the businesses are provided later in this submission

Stakeholder engagement

We recognise the distributors' efforts to engage with Energy Consumers Australia and other advocates before and after submitting their regulatory proposals.

The businesses have engaged with their customers in detailed and open discussions about priorities and choices that will impact the final determination by the AER.

It is apparent that all the businesses have sought to accommodate consumer input into aspects of their regulatory proposals.

AusNet is acknowledged for the first trial under the umbrella of the *New Reg: Towards Consumer-Centric Energy Network Regulation* project.¹ This trial enabled the Customer Forum to provide constructive feedback on the timing of some proposed augmentation projects that sought to balance consumer concerns for affordability and reliability.

The Customer Forum tested step changes proposed by AusNet and encouraged AusNet to absorb several of these as part of its pursuit of cost efficiency. Most importantly, the Customer Forum undertook extensive engagement itself which brought the 'voice of the customer' to the table and challenged AusNet's assumptions.²

The Customer Forum has shown how people from different walks of life, who are not energy experts, can effectively scrutinise elements of a regulatory proposal. It is unfortunate, in hindsight, that the scope established for AusNet's Customer Forum's scrutiny was limited to 7% of the total proposed CAPEX.

We see this process as a guide to how AusNet can obtain more value from its Customer Forum in the future. Further, it has demonstrated its value amongst the range of approaches that have been taken by distributors to better engagement, and that could be further developed in the future.

We are aware of concerns that consumer preferences can have the potential for significant costs that would be reflected in bills. It would assist further engagement, and the AER as the final decision-maker, if the businesses could show how they have balanced the desires of customers with considerations of affordability.

Affordability

Energy Consumers Australia is pleased that most of the proposals would reduce overall energy prices for Victorian households during the next period.

Tables 1 and 2 below summarise the typical bill impacts outlined in the Appendix A of the AER's Issues Paper.

This shows that consumers will likely see a larger reduction in the first year, followed by price rises linked to inflation in subsequent years. The AER's analysis presents "…indicative price impacts based on the demand forecasts of each of the distributors".³

In <u>our submission</u> to the AER on Energy Queensland's regulatory proposals for 2020-25, we did not support a price path that saw an initial reduction followed by increases.

https://www.aer.gov.au/networks-pipelines/new-reg.

¹ Information on the New Reg project is available on the Energy Consumers Australia website <u>https://energyconsumersaustralia.com.au/projects/newreg</u>, and on the Australian Energy Regulator's website

² Information on the work of the Customer Forum is available here - <u>https://www.ausnetservices.com.au/en/Misc-Pages/Links/About-</u>Us/Charges-and-revenues/Electricity-distribution-network/Customer-Forum

³ <u>AER Issues Paper</u>, page 58

In that case, the analysis indicated there may be other opportunities for further savings that could be used to offset these price increases. In this instance however, we note that the increases in subsequent years reflect changes in the Consumer Price Index (CPI), noting that the outcome will depend on consumption forecasts being realised.

Nevertheless, we suspect that further reductions in costs for key elements of the building blocks are possible. We also note that without the significant changes in the Weighted Average Cost of Capital (WACC) – a key parameter in the revenue calculations – prices would increase across the board in the next period.

Energy Consumers Australia have a preference for a smooth price path that minimises price volatility for customers.

Table 1: Residential – indicative impact of proposed 2021-26 revenue on the distribution network component of annual electricity bills (\$nominal)

NETWORK BUSINESS	2021-22	2022-23	2023-24	2024-25	2025-26	TOTAL 2021-26
AusNet Services	-12	25	25	26	27	90
CitiPower	-23	5	5	5	6	-1
Jemena	-34	3	7	7	7	-10
Powercor	-4	5	5	5	6	18
United Energy	-42	6	6	6	6	-17

Table 2: Small business – indicative impact of proposed 2021-26 revenue on the distribution network component of annual electricity bills (\$nominal)

NETWORK BUSINESS	2021-22	2022-23	2023-24	2024-25	2025-26	TOTAL 2021-26
AusNet Services	-17	44	45	46	47	165
CitiPower	-62	23	24	24	25	33
Jemena	-88	10	23	23	23	-9
Powercor	6	23	23	23	24	98
United Energy	-181	32	32	33	34	-50

The Victoria distributors point to measures of their efficient operational performance relative to distributors in other jurisdictions. Citipower, Powercor and United Energy argue that their OPEX efficiency means that they require greater increases to cover new costs.

Yet at the same time, the businesses have not fully delivered their capital investment programs for the current regulatory period.

There is a question which the AER should explore about whether these 'underspends' reflect real cost efficiencies or are a product of poor cost forecasts at the start of the period. It is not to the benefit of consumers if a distributor overestimates or front-end loads its expenditure programs.

This is particularly the case where networks follow a 'boom and bust' approach to investment, which can result in a bow wave of investment. The impact of this approach on small consumers could be price shocks. A steadier approach could help to mitigate this impact.

Changed economic circumstances due to COVID-19 make it even more important than ever that customers do not pay more than they need to. In recent discussions with the distributors, all parties have acknowledged the need to reconsider the assumptions in the distributor's regulatory proposals.

We therefore support the AER and the distributor's plans to review the key inputs including the forecast of economic growth, customer connections, consumer demand, growth in solar take-up, the delivery of capital works, labour costs, and the cost of debt.

Specific comments on expenditure

We note that the AER's recent decision on tax and the lower WACC have contributed significantly to lower revenues. Against this, other building blocks are proposed to be increased. The distributors are all seeking more OPEX than they spent last period. In addition, proposed CAPEX programs are larger (with one exception) and the proposals include large incentive payments.

OPEX

Proposed OPEX is a concern, with the five distributors proposing additional revenues of \$233 million in the next period based on step changes alone. A step change is a permanent change in costs that requires a significant change in the way the costs are accounted for.

We understand this will equate to, for example, an increase in costs of more than 9 per cent for United Energy and \$120 in extra charges for Jemena's customers over five years.

It is notable that no negative step changes (i.e. changes which would reflect permanent reductions in costs) have been proposed. We are concerned that the lack of symmetry in these proposals may reflect the fact that businesses will receive greater rewards via the Efficiency Benefit Sharing Scheme (EBSS) if costs are maintained at the start of the period are lowered once the period has begun.

Incentive schemes

We are similarly concerned about the approach proposed in relation to incentive schemes.

These mechanisms rightly are aimed at sharing the benefits of improved operational performance between consumers and the distributors.

For consumers to continue supporting these mechanisms there must be clarity as to whether these payments are rewarding efficient behaviour and positive outcomes or are the result of, in the case of the Capital Expenditure Sharing Scheme (CESS), gaps between forecast effort and actual delivery. In our view the proposals for CESS and Guaranteed Service Level (GSL) payments warrant closer scrutiny.

Energy Consumers Australia recommends a cautious approach to the new Customer Service Incentive Scheme (CSIS) at this time.

Broadly we share the concerns raised by Jemena's customers. A level of good service should be provided through the base charges for distribution services. The CSIS carries a risk of consumers being asked to pay twice for the same level of 'good' service. This is especially the case if the CSIS is to be set using historical performance.

Conversely it appears that some incentive schemes are not being used as they might to deliver benefits for the distributors and consumers. The demand management incentive schemes (DMIA and DMIS) are an example and we note the positive outcomes reported by United Energy.

We also note that AusNet is the only distributor that is seeking an allowance for innovation. Its proposed program has been reviewed by the Customer Forum. Given AusNet's record of innovation investment, and the support given by the Customer Forum for \$7.5 million of costs, we do not oppose this proposal.

Depreciation

Energy Consumers Australia agrees with the approach taken by the CCP on changes to depreciation proposed by the distributors. Our view is that significant changes to asset lives should be viewed with caution. We look forward to engaging with the AER on its scrutiny of this part of the distributors' proposals.

Information Technology

The level of spending on IT is proposed to grow further in the next regulatory period (except for Jemena). The question remains for consumers as to the benefits they can expect in customer service or lower prices. At the least it would be helpful to have information about whether spending in this area is resulting in offsetting improvements in greater productivity or reductions in OPEX.

Impact of bushfires

Victorian distributors and consumers continue to face costs resulting from the 2009 Black Saturday bushfires. The Rapid Earth Fault Current Limiter (REFCL) program alone is proposed to cost \$400m in this next period on top of \$600m already spent on this program.

Energy Consumers Australia asks for more information on the interaction between the REFCL program and proposed increases in spending on pole maintenance and replacement.

Given the impact of the REFCL program in reducing fire starts it is important that consumers can understand how the reduction of risk has been reflected in plans for poles and whether this has led to reduced costs for consumers. This would also enable a better understanding of the trade-offs inherent in the efforts by Powercor to address community concerns about bushfire risks.

Similarly, we understand that REFCLs are impacting negatively on reliability in some areas. Powercor is seeking \$13m to fund Automatic Circuit Reclosers (ACRs) to restore reliability to normal levels.

We would appreciate clarification that these poorer reliability outcomes are reflected in proposed Service Target Performance Incentive Scheme (STPIS) payments.

All the distributors are facing challenges in obtaining insurance of appropriate coverage. However, the increase in costs varies across the five distributors. In our view AER should consider applying a standard approach to the treatment of insurance across the businesses. We consider that the pass-through mechanism is the appropriate mechanism to address the issue of gaps in insurance coverage.

Investment for solar

It is pleasing that all the distributors have engaged with their customers about rooftop solar PV and opportunities to create more benefits for consumers and the businesses.

However, we note that the distributors have taken different approaches to modelling the impact of rooftop solar PV on their respective networks. It has been challenging to understand the likely costs per customer of proposed distributed energy resource (DER) programs since the distributors have chosen a variety of ways of allocating costs to programs.

Our understanding is that the actual costs of the programs are based on modelling which itself is based on forecasts of load growth and solar takeup. We have appreciated the explanation of the modelling approach, but the build-up of cost estimates is less clear.

We note that simple calculations of DER costs / customer do not take account of economies of scale, but we think that some comparative cost across networks is a reasonable approach. We expect to explore this further but at this stage we would prefer that the AER take a conservative approach to these CAPEX allowances in this period, particularly given the uncertain economic circumstances and the potential impact on take-up.

Response to the TSS

Stakeholder engagement is a necessary step in developing more costreflective pricing that could potentially result in retail pricing options that reward consumers for shifting their energy use.

The three forums on tariffs that were convened by the Victorian electricity distribution networks over the past two years were invaluable in supporting stakeholders to explore the potential pathways for realising the benefits of network tariff reform in the Victorian context. They were all well-facilitated, with outcomes shared in workshop reports which was very much appreciated by participants.

In this section of our submission:

- we review the experience so far with empowering consumers to manage their energy use and change behaviour, linked to the roll-out of digital meters;
- we comment on the tariff proposals put forward by the Victorian electricity distribution network businesses;
- we take the view that the proposed default tariffs and the tariff assignment can be accepted by the AER as they are currently framed, with the exception that all customers should be able to opt-out to a flat tariff;
- we would not support the alternative of a mandatory assignment of all Victorian energy consumers to the proposed time of use (ToU) or monthly maximum demand tariffs (MMD), and we explain why; and
- we propose that to achieve the benefits of tariff reform, the network businesses should be required to include in their TSS a voluntary tariff, that would be suitable for rewarding electric vehicle owners to charge offpeak. The proposed ToU tariff put forward by the Victorian electricity distribution network businesses is not a sufficiently attractive tariff for rewarding consumers to shift the use of any electrical appliance, including electric vehicles.

The context for changes to more cost-reflective network tariffs

This is the second round of Tariff Structure Statements submitted by the Victorian electricity distribution network businesses since the National Electricity Rules were changed in December 2014.

They are also the last of the proposed Tariff Structure Statements to be submitted in this round of regulatory determinations undertaken by the AER.

Changes to the National Electricity Rules (NER) in December 2014, introduced pricing principles to regulate the setting of electricity distribution network tariffs on a more cost-reflective basis.

The aim was that energy retailers would then develop retail offers for consumers with digital meters that gave them a choice to remain on flat tariffs or to take up offers that gave them an opportunity to shift energy use to off-peak times and lower their bills.

The roll-out of digital meters was first initiated on government mandated basis in Victoria in 2005 (and on an industry led basis in NSW and the ACT at around the same time). With changes in the National Electricity Rules since December 2017, all new and replacement meters in the National Electricity Market mut be digital meters.

In Victoria, consumers had the option to take up retail offers based on costreflective network tariffs, including first ToU rates and later MMD. In other jurisdictions, default cost-reflective network tariffs began to be introduced from 1 December 2017 onwards, usually with an opt-out to a flat network tariff. The exception was the ACT, where consumers could no longer opt out to a flat rate network tariff.

Figure 9 AER analysis of the uptake of cost-reflective network tariffs



Source: AER

Figure 9 shows the impact of the various TSS decisions since 2017. Note that both EvoEnergy and Ausgrid had significant numbers of customers with digital meters prior to the rule changes.

In designing their tariff structures the network businesses were required to balance the steepness of the peak rates, and the duration in which peak rates applied, against the impact on customers who used more energy at peak times, who would experience substantial bill increases unless they shifted their energy use.

The practicalities of shifting energy use, for example the use of airconditioners on hot days, were matters that were not considered in the making of changes to the National Electricity Rules.

Nor was it considered in the rules how consumers could make decisions about changing their energy use behaviour when the only source of information on the costs of their use of energy in their home at peak times was provided in their bill, which arrived months later.

Given that there were potentially significant impacts for a proportion of consumers who could shift their behaviour, the network tariffs that were introduced were designed to minimise bill changes for up to 80% of customers.

The result is that cost-reflective pricing has been achieved, with some reallocation of costs to those with the peakiest loads, without the intended benefits of the reduction in future investment in generation and network capacity, that comes from behaviour change.

This is not a desirable outcome. Without detailed, socio-economic and demographic impact analysis we do not know whether the impact of cost-reflective network tariffs is progressive or regressive. It is likely to be impacting more heavily on larger families, regions where the weather is more extreme including in the outer suburbs of our cities and on people in poor housing with cheap appliances, usually renters.

Our position on the proposed tariffs

As they did previously, the Victorian businesses have proposed network tariff structures that are aligned, so that there is a 'uniform' tariff structure across Victoria although the rates will vary across the network businesses because they have different revenues and regulatory asset bases to recover.

Retailers are to be charged a default ToU from 1 July 2021, applying to:

- · all new connections of residential and small business customers; and
- customers who install rooftop solar PV, home batteries, or who upgrade their connection from single phase to three phase power.

It is not clear whether customers whose digital meters are replaced under other circumstances will be treated as new connections or allowed to remain on their current tariff – whether a legacy ToU or a flat rate.

Under this assignment policy, customers (or their retailer on their behalf) will be able to opt-out to a flat tariff, except in the case of Ausnet Services where customers only alternative to the default ToU tariff is a monthly maximum demand tariff.

Any customer can also opt-in under these arrangements to a monthly maximum demand tariff.

We support the default tariff assignment proposed by the Victorian electricity distribution networks, with the exception that Ausnet Services should be required to offer an opt-out to a flat rate network tariff.

This is the position that Energy Consumers Australia argued in response to both the Ausgrid and SA Power Networks tariff proposals.

Our view was based on the risk that, without a flat network tariff, consumers could be denied the choice of a flat rate at the retail level.

This position is informed by our experience in the Australian Capital Territory with the major local retailer ActewAGL.

Our understanding is that consumers with this retailer who have had a digital meter installed after 1 December 2017, are no longer able to choose to have a flat rate retail tariff.

The lack of retail choice - an MMD default tariff with an opt out to a ToU - has caused considerable consumer dissatisfaction, for minimal gain in reducing future investment in network capacity. By eliminating retail choice, the case for genuine innovation and more cost-reflective pricing is even more difficult to make out.

We appreciate that the AER could have a different view on whether to allow an opt-out from the default tariff to a flat rate network tariff.

Energy Consumers Australia also took the view in the NSW determination on the TSS that there should be no retrospectivity, so that if consumers already had a digital meter before the date on which default tariffs were introduced, they should only voluntarily choose to move to the default tariff.

We accept that there is an argument that preserving an opt out to a flat rate at the network level, means customers can be restored to the current status quo. However, migrating more than 2 million Victorian customers with a digital meter across to a ToU tariff without their consent is not consistent with principles of openness and good consumer engagement.

With trust in the energy market low, the pathway to "reward" pricing needs to be achieved with transparency, be consumer led, with measures and support in place to enable consumers to manage their energy use.

Our research findings and analysis, and our views on a consumer led approach to developing pathways for reward pricing are presented in the Appendix to this report.

A voluntary tariff for electric vehicles

Without changes that put power into the hands of consumers, with information and technology to manage risk, the Victorian electricity distribution network businesses have put forward tariff proposals that maintain the status quo.

The research undertaken by the Victorian electricity distribution network businesses, and the work we commissioned by Energeia, has been critical in Energy Consumers Australia forming a view that what is needed is a voluntary tariff that rewards and incentivises consumers to manage their energy use and change their behaviour.

This is to be preferred to mandating ToU tariffs that are not fit-for purpose in achieving the outcome of reducing future investment in electricity generation and network capacity.

A voluntary tariff is something that can unite the industry – both retailers and networks – to provide a retail pricing offer that is attractive to consumers.

This is why Energy Consumers Australia has developed a 'prices to devices' cost-reflective tariff proposal to be adopted by the Victorian electricity distribution network businesses, in this regulatory period.

This would see electric vehicle owners charged a retail price for off-peak charging of 10 cents a kilowatt hour, with peak rates only charged 2% of the time.

In developing these rates Energeia used publicly information available on network costs and made assumptions about avoidable network costs and wholesale costs that will need to be tested with stakeholders.

The Energeia report is attached (Attachment 2). We will be engaging with stakeholders in the course of the Victorian electricity network businesses developing their revised revenue proposals.

Appendix: Our research and our consumer-led approach

Research findings and analysis

In the course of our engagement with the various TSS processes in the past few years Energy Consumers Australia developed both principles, and commissioned research to understand the outcomes of network tariff changes at the retail level.

This work is summarised in this section, and we also comment on the research commissioned by the Victorian electricity distribution businesses.

Together this body of research has been helpful in demonstrating the barriers to network tariff reform

Pricing principles

Our approach to retail pricing builds on the foundation of the principles that were established by Energy Consumers Australia with the AER's Consumer Challenge Panel for the NSW revenue determinations, in consultation with other consumer advocates.

The Pricing Directions paper will be available on Energy Consumers Australia's website, together with the commissioned reports from Energeia.

Electricity Distribution Network Tariffs, Principles and Analysis of Options, April 2018

In the course of their engagement, the Victorian electricity distribution network businesses commissioned The Brattle Group to undertake a study, that focussed on the role of retailers in achieving the intended outcomes of network tariff reform. In the discussion on this work and the subsequent work by the Australian Energy Council, the concept of charging retailers on an aggregate basis for the use of the network by their customers was raised.

We still see merit in exploring this approach further, so that retailers would be charged on a similar basis to the way they purchase electricity in the wholesale market for their customers, rather than a customer account basis. The current arrangements favour a simple mark-up or pass through of network costs.

If retailers could "hedge" their exposure to peak network costs, they would develop targeted offers for customers who could manage their use and provide them with information and tools.

An example of how an energy retailer works with customers to hedge their price exposure – in this case the wholesale price – is Octopus Energy in the UK. Some retailers are offering similar products in Australia, but their take up is still relatively small (Pooled Energy, Amber).

Alternatively, retailers are offering other consumers who don't wish to be exposed to a "risk" product, predictable pricing without volatility.

Retail Choice project – NSW and the ACT (2018)

Energy Consumers Australia commissioned Energeia to review how the major retailers in New South Wales and the ACT had responded in their retail pricing for residential and small business customers, following the introduction of changes to how they were charged by the electricity distribution network businesses in those jurisdictions.

- In the ACT, there had been a long-standing policy that all residential and small business customers that had a digital meter installed were moved from a flat network tariff to a time-of use network tariff. The AER approved Evoenergy changing these arrangements, so that from 1 December 2017, the energy retailer would be charged what Evoenergy called a peak demand tariff for these customers. No arrangements were made for customers to be opted out to a flat network tariff, but they could switch to an alterative ToU tariff.
- In New South Wales (NSW) the AER approved ToU tariffs for customers who had a digital meter installed after 1 July 2018, on an opt-out basis for the three electricity network distribution businesses. In a similar situation to the ACT, Ausgrid already had a significant number of customers with digital meters on a time-of-use tariff which were reflected in retail offers.



Figure 10 Retail component share of the bill, residential customers, Sydney





The Energeia analysis for residential customers found a similar pattern in NSW and the ACT, where the retailer share of customer bills is higher for ToU retail offers than for flat rate offers, suggesting that there is a greater 'mark-up' on ToU retail offers. The mark up across the three major retailers does vary according to the electricity distribution network area.

What this means for customers is that cost-reflective pricing is generally more expensive than flat rate retail pricing offers, and this was the earlier experience in Victoria with the introduction of flexible pricing.

Energeia also compared the bill outcomes for residential customers switching from a flat rate to a ToU rate, with the same retailer, in these jurisdictions.

This analysis revealed the high search costs facing consumers. Consumers are not able to choose their network area, but in NSW depending on which network area they are in and which retailer they choose, they could be better off, worse off, or much the same by switching to a ToU rate.



Figure 12 Switching impacts, residential customers, NSW (% better off)

Figure 13 Switching impacts, residential customers, NSW (average bill impact)



Energy Consumers Australia will be publishing the full report of this analysis as the Retail Choice Project report.

Victorian DNSP vulnerable customer analysis, 20 March 2019

The data from the Victorian survey that underpinned the ACIL Allen analysis, is publicly available on a limited and de-identified basis. Energy Consumers Australia is supporting the inclusion of this data set in the University of New South Wales Tariff Tool.⁴

The Victorian electricity distribution network businesses reported on aggregate the customer impacts.





⁴ Available from the on the Centre for Energy and Environmental Markets, <u>http://www.ceem.unsw.edu.au/cost-reflective-tariff-design</u>

Figure 14 shows that 44% of customers would be better off with mandating all customers to the proposed ToU (except legacy ToU customers), and 56% would be worse off. It is not clear if this is on a revenue neutral basis.

The bill impacts on average are small - \$22 annually for those who are better off and \$17 for those that are worse of. However, at the 'tails' of the distribution there are customers who are significantly better off – which will include those with relatively less peaky consumption – and those that will be significantly worse off, which will include those who use a larger proportion of their consumption during the peak hours set by the network of 3pm to 9 pm, every day.

What this customer impact analysis cannot do is identify what types of customers are impacted - it relies only on load profiles.

Using the data from the ACIL Allen survey, the Victorian electricity distribution network businesses have been able to report the bill impacts of their ToU tariffs, for vulnerable customers under different assumptions about assignment and a retail mark-up.

The reported results are shown in Table 3.

Table 3: Bill impacts of ToU pricing

	VULNERABLE	OTHER
Proportion of customers with bill decrease	32%	19%
Proportion of customers with no change (+/-10%)	41%	41%
Proportion of customers with bill increase	27%	40%
Sample	293	1658

Source: ACIL Allen presentation, 20 March 2019

While this analysis was useful, there is not sufficiently granular information on which to design measures to address negative impacts – such as housing improvements or appliance replacement programs, as well as targeted income support. Further analysis of the dataset – using the UNSW Tariff Tool – based on the current tariff structures and rates would be very useful. Energy Consumers Australia will be working with the Victorian advocates to undertake this analysis, prior to the proposals being revised.

Retail Choice project – Victoria (2020)

Energy Consumers Australia commissioned Energeia to do a bill impact analysis at the retail level, similar to that it undertook in NSW and the ACT, on a revenue neutral basis. The results of this analysis are shown in Figure 15. A positive impact is a bill increase, while a negative impact is a bill decrease.

Figure 15 shows at the network level, depending on the network most customers are better or worse off by a small amount (the difference with the horizontal axis. Just as reported by the networks there are a significant proportion whose bill increases to a greater extent.

At the retail level, most customers of Powercor and United are now better off, while at the retail level the outcome for Citipower customers is much the same as the distribution at the network level. For Ausnet Services and Jemena customers, most customer have an increase in their average retail bill. However, the average bill impacts (Figure 16) are relatively small across all of the network areas.





Figure 16 Average retail bill impacts of moving tariff



Energeia also analysed whether there were any systemic factors revealed in the survey that could predict whether a residential customer would be better or worse off. What this analysis showed is that it is social practice in the home, including whether people are home during peak times and not income etc. that determines bill impacts.

Pathways to reward pricing

Energy Consumers Australia considers that a fundamentally different approach needs to be taken to empowering consumers to manage their energy use and change behaviour, to lower the future costs of investing in generation and network capacity.

As Professor Cameron Tonkinwise, from the University of Technology, said at our Foresighting Forum 2020, we need to understand using electricity is a social practice in our homes and at work.⁵

Rewarding and enabling behaviour change

With the right reward, and the right tools to manage their risk by set and forget using technology, more consumers will be willing to take up peak and off-peak retail pricing.

Just as with other services that have peak pricing, for example cinemas, hotel accommodation, airline flights, some consumers will want to purchase off-peak and others will pay for certainty or predictability.

In our view, the opportunities for consumers to conveniently change their behaviour in how they use electricity in their homes are greatest for pool pumps, hot water systems and electric vehicles, as people care only that these appliances are ready when they need to use them.

While cooling and heating are the most significant drivers of peak use in our homes, they are also critical to people's perceptions of comfort and quality of life during weather extremes.

Changing the energy efficiency of our appliances and the efficiency of our homes, is likely to have a greater pay-off and more community support than asking people on a consistent basis live in homes they find too cold or too hot. This is where there is a role for asking the community to change behaviour only on a few critical days, and over 75% of consumers in our ECSS say they will voluntarily reduce their use for little or no reward.

A consumer led approach

Without a consumer led approach, the barriers to of network tariff reform are insurmountable.

Such an approach recognises that consumers should have choice, of whether they want to have the opportunity to manage their use and change their behaviour to take advantage of lower prices outside of peak times.

Consumers should have the choice of predictability if that is what they would prefer. Other consumers, who may be more easily able to shift their energy use, including through automation. will want volatility so long as it can be managed.

Retailers have to be front-and-centre of any design, communicating with their customers the potential on an individual basis, and equipping consumers with the information and tools so that their actual experience matches their expectations.

At the foundation of this approach is unlocking the value of consumer data, enabling challenger brands with innovative retail products to win market share. This vision is very different to what consumers experience today, with high search costs and bill shock, because the connection between energy use in our homes and at work is only signalled in the bill.

⁵ <u>https://energyconsumersaustralia.com.au/projects/foresighting-forum</u> 30

In their most recent review of pricing, and the opportunities for wider acceptance, Dr Faruqui of The Brattle Group identified five factors that are critical to retail ToU pricing at scale:

- design cost-reflective rates but make sure they are customer friendly, and offer choices
- learn how customers think and market the rates using the customer's language
- educate the customers on how to benefit from the rates
- use enabling technologies and behavioral messaging to enhance the price signal
- transition gradually and consider providing bill protection.⁶

There are both opportunities and challenges in making progress towards pricing that rewards consumers for managing their energy use, and where they are willing or able to shift behaviour. There is no silver bullet, and every home – and every business – is different, in how they rely on energy for the quality of their lives and livelihoods.

⁶ The Brattle Group, *Bridging the Chasm, Moving From Pilots to Full-Scale Deployments of Time-of-Use Rates,* 16 April 2020 31

