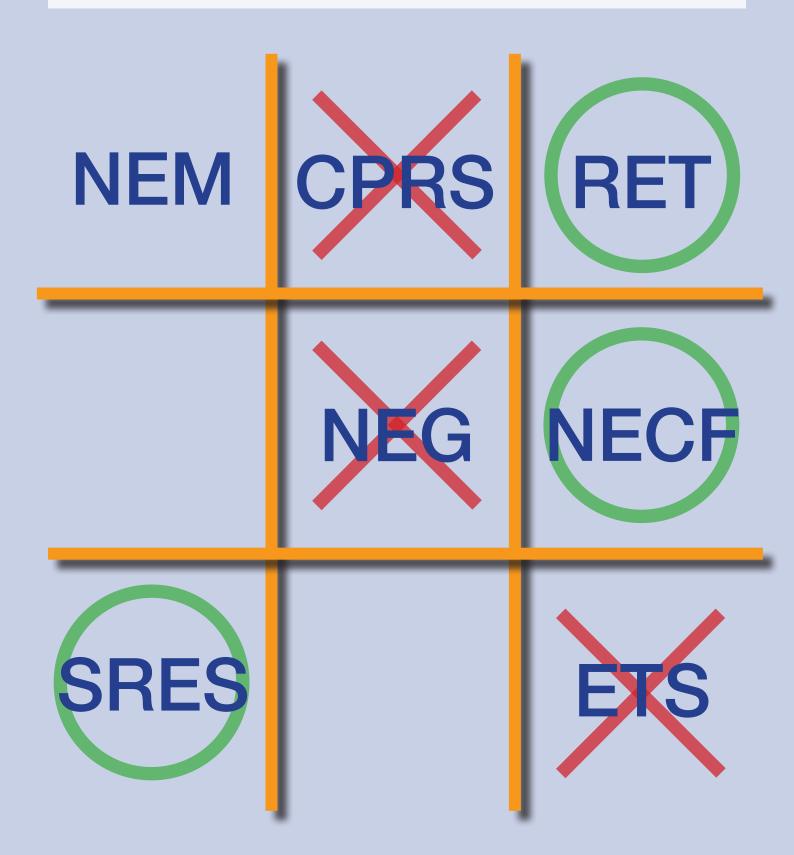




St Vincent de Paul Society good works

The NEM - No "guarantee" for consumers

Observations from the Vinnies' Tariff-Tracking Project



The NEM - No "guarantee" for consumers Observations from the Vinnies' Tariff-Tracking Project

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Melbourne, October 2018







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The views expressed in this document do not necessarily reflect the views of Energy Consumers Australia.

We also wish to thank and acknowledge the efforts of the various retailers and other stakeholders that review and provide feedback on these reports. While any errors that may occur are our own, we appreciate their views, suggestions and cooperation.

Interactive online map

Key findings from the Vinnies' Tariff-Tracking project are also presented as an interactive online map. The updated map is available at the St Vincent de Paul Society's website: https://www.vinnies.org.au/page/Our_Impact/Incomes_Support_Cost_of_Living/Energy/Map/.

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Background: The Tariff-Tracking Project

The St Vincent de Paul Society, in conjunction with Alviss Consulting, has been tracking changes to residential energy tariffs and reporting on household impacts since 2010. Initially the Tariff-Tracking project only covered Victoria but has since expanded to include New South Wales, Queensland, South Australia, Tasmania and the Australian Capital Territory.

The rationale for tracking changes to domestic energy prices has been to document price changes, analyse market developments and inform the broader community about bill impacts and potential savings to be made.

In our view, there is still a limited knowledge and understanding in the community of the various energy tariffs available, how they are changing, and how tariff changes impact on households' energy bills and energy affordability more broadly.

Only by improving this awareness and understanding can we ensure that the regulatory framework (for example, in relation to price information and disclosure) is adequate, to and promote a competitive retail market. Furthermore, this increased knowledge will allow for close monitoring of the impact price and tariff changes have on households' bills, and the affordability of this essential service.

In addition, a key aim of this project has been to document and analyse price and product developments arising from government policies and industry innovations, including the deregulation of retail prices, 'green policies', smart meter rollouts and transitions towards other smart grid developments.

To date we have developed five workbooks for each of the National Electricity Market (NEM) jurisdictions.¹ The workbooks allow the user to enter consumption levels and analyse household bills for standing or regulated gas and electricity offers, as well as published electricity and gas market offers.² The workbooks, as well as associated reports, can be accessed at the St Vincent de Paul Society's website: www.vinnies.org.au/energy.

This report is the result of a comparison of the state by state- based analyses undertaken as part of the Tariff-Tracking project, as well as reflections on the public debate on energy market developments and reasons for price increases over the last year.

¹ As Tasmania does not have regulated/standing offers for gas, only four workbooks have been produced for this jurisdiction.
² The Victorian workbooks contain regulated/standing offers from July 2008 to July 2018 and market offers from July 2010 to July

^{2018.} The NSW workbooks contain regulated/standing offers from July 2009 to July 2018 and market offers from 2011 and 2018. The Queensland and South Australian workbooks contain regulated/standing offers from July 2009 to July 2018 and market offers from July 2012 to July 2018. The ACT workbooks contain regulated/standing offers from July 2009 to July 2018 and market offers from July 2013 to July 2018. The Tasmanian workbooks contain regulated electricity offers from July 2009 to July 2018, market (pay as you go) electricity offers from July 2009 to July 2018 and gas market offers from July 2013 to July 2018. From 2018, we have also developed workbooks containing solar offers available to new customers in all of the jurisdictions.

Preamble

When we released last year's report³ the National Energy Guarantee (NEG) was the new initiative that was going to solve the 'trilemma' of energy prices, reliability and emissions, the ACCC inquiry into electricity supply and prices was underway and we focused our recommendations on the improvement of customer engagement and customer outcomes. Since then, the NEG is now apparently dead⁴, the ACCC has released the findings from its inquiry that highlighted significant concerns about the operation of the NEM and its impact on energy affordability⁵, and we have had calls for re-regulation, a Royal Commission into power companies and even the re-nationalisation of the electricity grid.⁶

This report highlights recent changes to energy bills, analyses changes to bill components (the "bill-stack') and raises issues and concerns about the energy retail markets that have been identified by this year's Tariff-Tracking exercise.

However, in a departure from previous NEM reports we have prepared, this report does not make specific recommendations or call upon specific agencies to act. Over the life of the Tariff-Tracking project, we have identified and raised numerous concerns about NEM policies and regulations more broadly and energy retail markets in particular. In the current climate, we do not believe it is productive to add to the numerous recommendations recent reviews have already put forward. Instead we highlight issues that can be considered in conjunction with existing recommendations.

Finally, we believe the energy retail markets need to be drastically changed but we are not on board for reregulation (or re-nationalisation). In our view, the idea of a competitive energy retail market was good. The execution was not.

Taking three steps back rather than five (or ten), and utilising the benefit of hindsight, may produce the best outcomes for consumers.

³ St Vincent de Paul Society and Alviss Consulting, The NEM – Time to shed some light on this market, Melbourne, November 2018

⁴ In September 2018, Prime Minister Morrison announced that the NEG, as legislative package, would not go ahead and this was reported in various media. See, for example, The Guardian Australia, Scott Morrison says national energy guarantee "is dead", 8 September 2018 at https://www.theguardian.com/australia-news/2018/sep/08/scott-morrison-says-national-energy-guarantee-is-dead

⁵ ACCC, Restoring electricity affordability and Australia's competitive advantage, Retail Electricity Pricing Inquiry – Final Report, June 2018 at https://www.accc.gov.au/system/files/Retail%20Electricity%20Pricing%20Inquiry%E2%80%94Final%20Report%20June%202018 0.pdf

⁶ For example, the Greens (https://www.adambandt.com/090817_pricecaps) and the NSW Labor Party (http://www.lukefoley.com.au/ budget reply foley to re regulate electricity market and backs western sydney metro) have announced that prices should be re-regulated, both Labor and Coalition MPs have expressed interest in a Royal Commission (https://www.theguardian.com/australia-news/2018/sep/03/shorten-says-labor-would-support-royal-commission-into-power-companies), and the Greens as well as Professor John Quiggin have called for re-nationalisation of the grid (https://www.smh.com.au/business/the-economy/power-to-the-people-let-s-nationalise-australia-s-grid-greens-say-20180201-p4yz79.html and http://theconversation.com/the-case-for-renationalising-australias-electricity-grid-73951).

Overview

This report is comprised of four sections.

Section 1 'How energy prices are tracking' analyses changes to electricity and gas prices across Australia from July 2009 to July 2018 in order to explore where and when prices have increased or decreased.

In relation to electricity, we find that regulated and standing offer prices (the base-rate) are up in most jurisdictions compared to July 2017. However, with the exception of the ACT and Tasmania, the increases are smaller compared to last year. The highest prices in the country continue to be in South Australia for Electricity and Queensland for gas.

Section 2 'Electricity bills: Who gets what?' focuses on the various cost components of electricity bills (the bill-stack) by exploring the cost of each component for each jurisdiction.

For electricity market offers (including pay on time discounts), we estimate that the retail component is as low as 8% in the ACT and as high as 23% in NSW's Endeavour network. In Victoria the retail component is between 16-22% (depending on network area), in South Australia it is 20%, in South East Queensland it is 17%, in NSW it is 12-23% (depending on network area), and in Tasmania it is 15%. The estimated network component is greatest in NSW's Ausgrid network (47%) while it is lowest in Victoria's Citipower network (30%). The wholesale component is between 30-40% in all jurisdictions. The Green scheme component is significantly greater in the ACT (16%) than in the other jurisdictions.

Section 3 'Solar offers' compares solar offers available to new customers across the NEM as well as examining the various bill components of solar bills.

Since last year, annual bills for solar customers in Victoria has increased the most (approximately by \$90 - \$120, depending on network area) while there were more modest increases in Tasmania. In Queensland (Energex), the ACT (EvoEnergy) and NSW's Endeavour network on the other hand, solar bills have decreased by \$130, \$80 and \$50 respectively. In South Australia (SAPN) and greater Sydney (Ausgrid), solar bills have remained stable. compared to non-solar, standing and market offer, customers. Average annual solar customer bills are \$1,340 less than average market offer bills (including discounts) in South Australia (SAPN). In Tasmania (TasNetworks) the difference is more modest at \$690.

Section 4 'Price dispersions' analyses the maximum price dispersion in competitive markets as well as monthly changes to the 'three big' retailers' (AGL, Energy Australia and Origin) electricity market offers from August 2015 to July 2018 in NSW, Queensland, South Australia and Victoria.

Compared to three years ago (August 2015), AGL, Energy Australia and Origin's offers produce higher annual bills in NSW, South Australia and Victoria and lower bills (on average) in Queensland. Energy Australia's bills in South Australia has increased by 53% over this period while Origin's bills have increased by 27%. In Queensland, AGL's bills have decreased by 10% while Energy Australia and Origin's bills are similar to what they were in August 2015.

Over the last three years, the maximum difference between the annual bills produced by the "big three" has been as high as \$145 in NSW, \$185 in South East Queensland, \$200 in Victoria and \$385 in South Australia.

The difference between the "big three" retailers' offers is remarkably low in some jurisdictions and/or months. As of March and April 2018, for example, the difference between AGL, Origin and Energy Australia's annual bills were only \$10 in NSW.

Furthermore, retailers change their discounts (including pay on time discounts) significantly and frequently, and changes to discounts can have much greater impact on energy bills than changes to the rates themselves. We argue that from a customer perspective, these changes to discounts appear arbitrary. It is not possible to explain when or why a retailer's discounts are likely to be high or low. There are no seasonal factors, clear underlying price changes or other explainable rationales behind retailers' changes

to discounts.

We also argue that pay on time discounts are de-facto exit fees. As the discount cannot be paid prior to the customer having demonstrated that they paid the relevant bill on time, pay on time discounts from one billing period is credited to the following bill. Most retailers offer a pay on time discount available for 12 months (the so-called "benefit period") and most customers are billed quarterly. If a customer wishes to switch retailer because the new pay on time discount offered is lower, or because another retailer offers a better deal, however, the customer will forego up to three months of any discount as their retailer will simply issue a final bill. When there is no bill to forward the discount to, the customer will pay the full price for their final bill whether they pay on time or not.

1. How energy prices are tracking

Key findings

- The base rates for electricity (standing offers) have increased in all jurisdictions but the most recent increases are smaller compared to last year, with the exception of the ACT and Tasmania (the latter having a bill reduction last year).
- While electricity prices are still increasing the average increase was 5.2% this year compared to 11.4% last year.⁷
- Compared to 2009, electricity prices have increased by 75% on average, with Victoria and South Australia experiencing the greatest increases (104% and 112% respectively).
- On average, gas prices increased by 3.4% this year compared to 8.7% last year.
- Compared to 2009, gas prices have increased by 65% on average, with Victoria experiencing the greatest increases (93%).9

This section analyses changes to electricity and gas prices across Australia from July 2009 to July 2018 in order to explore where and when prices have increased or decreased.

1.1 Electricity prices

Regulated and standing offer prices (the base-rate) are up in all jurisdictions compared to July 2017. However, the size of the increases varies between jurisdictions. Chart 1 shows estimated annual bills for households consuming 6,000kWh per annum (single rate) from July 2009 to July 2018. The dotted lines represent electricity bills in the Northern Territory and Western Australia, the two non-NEM jurisdictions.

Looking at longer-term changes, chart 1 also shows the increasing differences in electricity prices between jurisdictions.

WHILE SOUTH AUSTRALIA HAD THE HIGHEST PRICES IN JULY 2009 AND JULY 2018, AND ACT HAD THE LOWEST, THE DIFFERENCE BETWEEN THE ANNUAL BILL FOR SOUTH AUSTRALIAN AND ACT HOUSEHOLDS (WITH THIS CONSUMPTION LEVEL) WAS JUST \$350 IN 2009 COMPARED TO APPROXIMATELY \$1,210 NOW.

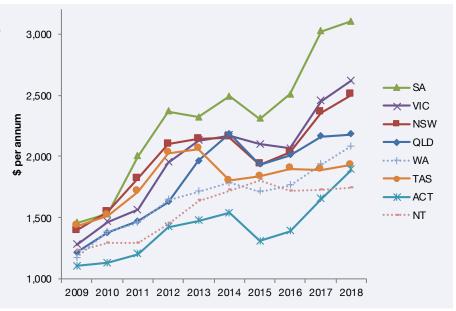
⁷ Based on increases in all 8 jurisdictions.

⁸ Based on increases in all 7 jurisdictions (Northern Territory is not included in the gas analysis due to low penetration).

⁹ For Tasmania, the comparison is based on 2018 and 2013 prices. All other jurisdictions are based on prices as of 2009 and 2018.

¹⁰ Note that Tasmania introduced carbon exclusive prices from 1 July 2014 (rather than backdating new prices after the repeal) and Tasmania's July 2014 price is therefore carbon exclusive.

Chart 1 Changes to electricity prices in Australia July 2009 to July 2018 as estimated annual bills (nominal, incl GST) for electricity regulated/ standing offers, 6,000kWh per annum, single rate¹¹



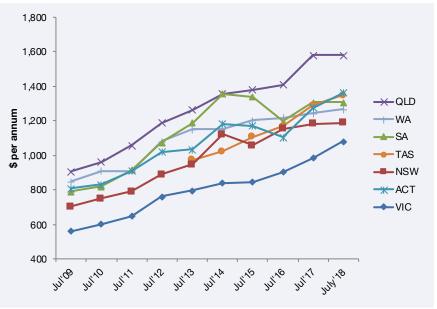
1.2 Gas prices

Typical household gas consumption varies significantly between jurisdictions. In Victoria, for example, typical household consumption is over 60,000Mj per annum. In Queensland, on the other hand, household consumption is typically less than 10,000Mj per annum. Chart 2 below compares annual gas bills across Australia (except the Northern Territory) from July 2009 to July 2018 for households consuming 30,000Mj per annum. It shows that gas prices are greatest in Queensland and lowest in Victoria. However, if we assume a more representative consumption level for each jurisdiction, Victorians will have greater gas bills than Queenslanders. Gas prices have increased in all jurisdictions since July 2017, except in South Australia and Queensland, where prices remain the same.

Chart 2 also shows that the price difference between the jurisdictions has not increased by much since 2009. Unlike in the case of electricity, the difference between the jurisdiction with the highest annual bill (Queensland) and the jurisdiction with the lowest (Victoria) was \$350 in 2009 and it is currently \$500 for this consumption level.

¹¹ In Victoria and NSW the standing offer price is based on the average retail standing offer in each network area. As the prices differ between network areas in NSW and Victoria, the estimated bills in these two states are based on the average across network areas. In South Australia, the price is based on the average retail standing offer from July 2015 to July 2018, and AGL's regulated/standing offer prior to that. In Queensland, the price is based on the average retail standing offer (Energex network) from July 2016 to 2018, and the regulated/standing offer prior to that. The regulated rate has been used for ACT, Tasmania, Western Australia and the Northern Territory. Note that the transitional tariffs previously available in SA and NSW are not included in this chart.

Chart 2 Changes to gas prices in Australia July 2009 to July 2018 as estimated annual bills (nominal, inc GST) for gas regulated/standing offers, 30,000Mj per annum¹²



¹² In Victoria the standing offer price is based on the incumbents' average retail standing offer across the eight main gas zones. In NSW the standing offer price is based on the regulated retail offer across the eleven gas zones until July 2016. In July 2018 it is based on the incumbent retailer's standing offer in each gas zone. In Queensland it is based on the average AGL and Origin standard retail gas offers in the North Brisbane and South Brisbane gas zones. In South Australia it is based on Origin's regulated/standing offers across five gas zones. In the ACT it is based on ActewAGL's standard gas offer. In Tasmania (data from 2013 to 2018 only) it is based on Aurora and Tas Gas' average standard offer. In Western Australia it is based on the government's price cap for customers in the southwest region.

2. Electricity bills: Who gets what?

Key findings

- The Network Use of System (NUOS) charges have significantly decreased in Queensland (Energex) and in Victoria's Jemena network. Decreases have also occurred in Tasmania and Victoria's Powercor and Ausnet networks. In South Australia (SAPN), however, NUOS charges have increased for the second year in a row.
- NUOS charges, and price changes, vary significantly between the networks. Households in South Australia (SAPN) and rural NSW (Essential) pay the highest NUOS charges in the NEM. The NUOS charges are lowest in Victoria's Citipower, United Energy, Jemena and Powercor networks and the ACT (EvoEnergy's network).
- In terms of bill components, the NUOS proportion of electricity bills is still highest in Tasmania (TasNetworks) but only South Australia (SAPN) and rural NSW (Essential) have had an increase in the NUOS proportion since last year (July 2017). In Tasmania the NUOS accounts for approximately 40% of electricity bills while in Melbourne (Citipower), the NUOS component of bills is as low as 20%.
- When deducting GST, NUOS costs, wholesale costs and the cost of environmental policies ("green schemes") and the cost of rolling out smart meters (Victoria only), the residual retail component of a residential *standing* offer bill is as low as \$271 (in Tasmania) and as high as \$953 (in Victoria's Powercor network).¹³
- For market offers, inclusive of guaranteed and pay on time discounts, the residual retail component is as low as \$122 in the ACT (EvoEnergy) and as high as \$467 in South Australia (SAPN).¹⁴
- While the retail component of bills is smaller for market offers (if customers pay on time and thus receive a discount) compared to standing/regulated offers in most jurisdictions, the size of the retail component of the total market offer bill is still high in many network areas.

Electricity bills are made up of several components, including generation (wholesale market) costs, network costs (distribution and transmission), "green schemes" and costs associated with other public policy initiatives, and retail costs. In Victoria, South Australia, NSW and Queensland, where retail prices are deregulated, effective competition is required to ensure that households do not pay more than necessary for both generation (wholesale) and retail services (including retail margins). This section therefore seeks to explore the cost of each component for each jurisdiction, as well as changes to these cost components over time.

As shown by chart 1 above, electricity bills increased significantly from July 2009 to July 2014 (prior to the repeal of the carbon tax) before declining, to various extents, post the repeal and with new network tariffs taking effect in July 2015. In July 2016, 2017 and 2018, however, electricity bills increased in most jurisdictions.

Chart 3 below shows that Network Use of System (NUOS) charges increased in all of the NEM electricity networks between July 2009 and July 2014, before decreasing in most jurisdictions (NSW, Queensland, South Australia and the ACT) in July 2015. In 2016 it also decreased in the Victorian networks and Tasmania, and again (slightly) in South Australia. In 2018, the decreases have been significant in Queensland (Energex) and in Victoria's Jemena network. Decreases have also occurred in Tasmania and Victoria's Powercor and Ausnet networks. In South Australia, however, NUOS charges have increased for the second year in a row.

Chart 3 also shows that the NUOS price changes, vary significantly between the networks.

¹³ Note that other charges such as market fees and ancillary service fees as well as losses have not been accounted for in this bill-stack.

¹⁴ Note that other charges such as market fees and ancillary service fees as well as losses have not been accounted for in this bill-stack.

HOUSEHOLDS IN SOUTH AUSTRALIA (SAPN) AND RURAL NSW (ESSENTIAL) PAY THE HIGHEST NUOS CHARGES IN THE NEM.

The NUOS charges are lowest in Victoria's Citipower, United Energy, Jemena and Powercor networks and the ACT (EvoEnergy's network). The difference between NUOS costs in the various networks has slightly increased since last year. Currently an annual "NUOS bill", for this consumption level, is \$467 more in SA Power Networks compared to Citipower. In 2012, on the other hand, the difference was \$987.



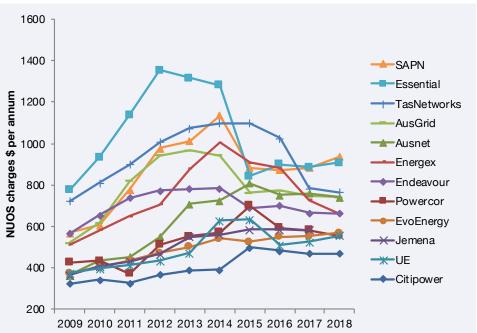
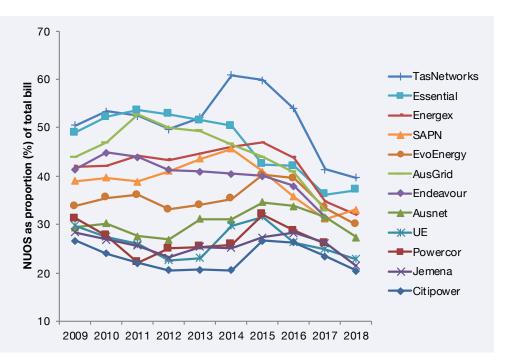


Chart 4 below looks at NUOS charges as a proportion of total bill. It shows that the NUOS proportion of electricity bills is still highest in Tasmania (TasNetworks) but only South Australia (SAPN) and rural NSW (Essential) have had an increase in the NUOS proportion since last year (July 2017).

IN TASMANIA THE NUOS ACCOUNTS FOR APPROXIMATELY 40% OF ELECTRICITY BILLS WHILE IN MELBOURNE (CITIPOWER), THE NUOS COMPONENT OF BILLS IS AS LOW AS 20%.

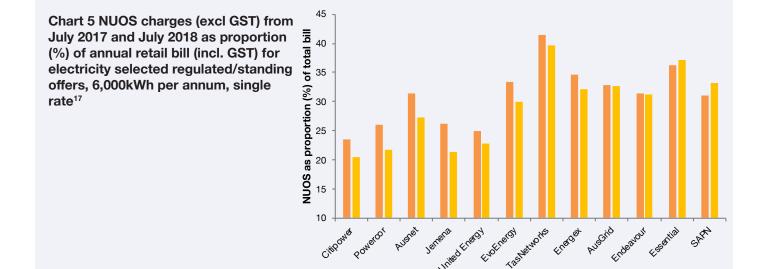
¹⁵ The annual NUOS charges have been calculated by allocating 1,500kWh per quarter (again based on annual consumption of 6,000kWh) to the step charges stipulated in the NUOS. The annual NUOS cost also includes fixed charges. Note that as United Energy's NUOS charge has been a seasonal tariff over the last four years, the United Energy consumption used in these calculations is thus based on a proportional allocation of a 5 month summer tariff and a 7 month non-summer (off-peak) rate.

Chart 4 NUOS charges (excl GST) from July 2009 to July 2018 as proportion (%) of annual retail bill (incl. GST) for electricity selected regulated/standing offers, 6,000kWh per annum, single rate¹⁶



2017 2018

Chart 5 compares the NUOS proportion of bills in July 2017 to July 2018. It shows that the biggest decreases occurred in Victoria's Ausnet and Jemena networks (-5%).



In order to examine what households actually pay for the various goods, services and policies that are costed by the supply chain and passed on to consumers in a retail bill, we deduct estimated cost components from the average annual retail bill for households using 6,000kWh per annum as of July 2018.¹⁸

While we do not know exactly what retailers pay for wholesale energy we have relied on the AEMC's latest

¹⁶ In Victoria the standing offer bill is based on the average incumbent (AGL, Origin and Energy Australia) standing offer as of July every year. In NSW the retail bill is based on the regulated rate from 2009 to 2013 and the incumbent retailer's standing offer in each of the network areas (Origin or Energy Australia) as of July 2014 and July 2015. In South Australia the retail bills are based on the regulated rates as well as AGL's standing offer post retail deregulation. In Queensland the retail bills are based on the regulated rates as well as AGL and Origin's average standing offer post retail deregulation (July 2016). In all other jurisdictions the retail bills are based on the regulated rates. Note that as United Energy's NUOS charge has been a seasonal tariff over the last three years, the United Energy consumption used in these calculations is thus based on a proportional allocation of a 5 month summer tariff and a 7 month non-summer (off-peak) rate.

¹⁸ Note that consumption levels applied to the analysis in this report may differ from analyses presented in various jurisdictional Tariff-Tracking up-date reports in 2018. These differences can have significant impact on the size of the various bill components.

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Table 1 AEMC estimated electricity wholesale costs 2018/19

	Cost per MWh
ACT	\$91
NSW	\$90
Queensland	\$94
South Australia	\$127
Tasmania	\$105
Victoria	\$105

The AEMC's Residential Electricity Price Trends report have also been used as a source to estimate "green scheme" costs.²⁰ Table 2 below shows the cost of "green schemes" used for this analysis.

Table 2 AEMC estimated "Green scheme" costs (c/kWh) 2018/19

	Cents/kWh
ACT	3.96
NSW	1.85
Queensland	1.19
South Australia	2.58
Tasmania	1.49
Victoria	1.87

In order to examine what households actually pay for the various services (and policies) that are costed by the supply chain and passed on to consumers in the form of a retail bill, tables 3 and 4 below estimate the retail component of bills for standing offer customers and market offer customers. Both tables are based on households consuming 6,000 kWh per annum at a single rate tariff.

By deducting GST, NUOS costs, wholesale costs and the cost of environmental policies ("green schemes") and the cost of rolling out smart meters (Victoria only),

THE RESIDUAL RETAIL COMPONENT OF A RESIDENTIAL STANDING OFFER BILL (FINAL COLUMN), IS AS LOW AS \$271 (IN TASMANIA) AND AS HIGH AS \$953 (IN VICTORIA'S POWERCOR NETWORK).²¹

¹⁹ Estimated energy purchase cost for 2018/19 (financial year). Based on Figure 21 to 24 in Frontier Economics, *2017 Residential Electricity Price Trends Report, A report prepared for the AEMC* December 2018. Note that the AEMC has supplied the numbers that the base case scenarios in Figure 21 to 24 is based on (except for Tasmania and ACT which have been estimated from the figures).

²⁰ See AEMC, Residential Electricity Price Trends Reports, 2017.

²¹ Note that other charges such as market fees and ancillary service fees as well as losses have not been accounted for in this bill-stack.

Table 3 Deduction of bill components for regulated/standing offers, average annual bill based on offers taking effect post July 2018 (6,000kWh per annum, single rate)²²

	Retail bill incl. GST^	Retail bill excl. GST	Retail bill excl. GST and NUOS*	Retail bill excl. GST, NUOS and wholesale^^	Retail bill, excl. GST, NUOS, wholesale and "green scheme" costs**	Retail bill excl. GST, NUOS, wholesale, "green scheme" costs and smart meter costs***
Citipower	2,294	2,085	1,616	986	874	795
Powercor	2,555	2,323	1,767	1,137	1,025	953
Ausnet	2,718	2,471	1,730	1,100	988	905
Jemena	2,511	2,283	1,745	1,115	1,003	920
UE	2,433	2,212	1,656	1,026	914	857
EvoEnergy	1,893	1,721	1,153	607	369	
Tasnetworks	1,930	1,755	990	360	271	
Energex	2,064	1,876	1,215	651	579	
Ausgrid	2,274	2,067	1,326	786	675	
Endeavour	2,120	1,927	1,264	724	613	
Essential	2,444	2,222	1,315	775	664	
SAPN	2,827	2,570	1,633	871	717	

[^] As per chart 4 above

Chart 6 below is based on the same calculations presented in table 3 above but shows the various bill components as a percentage of the total bill. While we stress that some of the cost components are based on estimates rather than actual known costs, we believe chart 6 clearly illustrates that the cost of retail is significant in some network areas.²⁴

Our estimates show that between 15-41% of the bills paid by households goes to the retailer and this is a broader range compared to last year (21-39%).

THE RETAIL COST IS STILL PROPORTIONALLY HIGHER THAN THE NETWORK CHARGES (NUOS) IN ALL OF THE VICTORIAN NETWORK AREAS. IN QUEENSLAND (ENERGEX) AND NSW'S AUSGRID AND ENDEAVOUR NETWORKS, THE RETAIL AND NUOS COMPONENTS ARE OF SIMILAR SIZE.

In Tasmania, South Australia and NSW's Essential network, the NUOS is the largest bill component. The ACT (EvoEnergy) has the highest "green scheme" costs, accounting for 14% of the total bill.

^{*} As per chart 3 above

^{^^} As per Table 1 above

^{**} As per Table 2 above

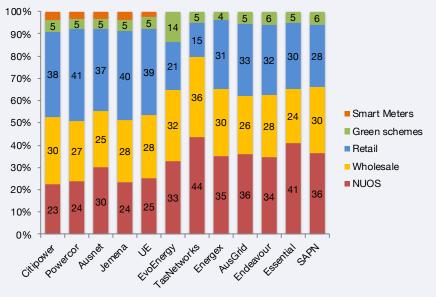
^{***} Based on AER estimated AMI charges for 2018²³

²² This table is based on the same offers used for July 2018 in chart 4 above. Note that the cost of the smart meter rollout is not accounted for in the NUOS charges due to the AMI Cost Recovery Order-In-Council that ensures that the distributors are able to recover expenditure associated with the AMI program from consumers on a cost pass-through basis.

²³ To estimate the impact of the Victorian smart meter rollout on the bill-stack, we used AER's indicative average annual metering bill for 2018. See table 1-2 in *AER*, *Advanced Metering Infrastructure, Transition charges applications*, Final Decision (December 2016)

²⁴ Cost of retail includes both retail costs and margins (profits).

Chart 6 Estimated bill-stack for selected regulated/standing offers, average annual bill based on the offers taking effect post July 2018 (6,000kWh per annum, single rate, excluding GST)²⁵



A longstanding feature of market offers in the NEM retail markets has been to offer a discount on the published rates. The vast majority of retail offers now include a conditional discount that the customer will receive if the bill is paid by the due date.

As the calculations for the charts above are based on standing and/or regulated prices, a bill-stack analysis for market offers is included below. Table 4 below deducts estimated cost components from the annual retail market offer bill (including pay on time discounts) for households using 6,000kWh per annum post July 2018.²⁶ After deducting GST, NUOS costs, wholesale costs, the cost of environmental policies ("green schemes") and the cost of rolling out smart meters (Victoria only), amounts in the final column are as low as approximately \$122 in the ACT (EvoEnergy) and as high as \$467 in South Australia (SAPN).²⁷ By comparing these figures to the regulated/standing offers examined in table 3 above, we can see that the retail component of bills varies significantly between regulated/standing offers and market offers (including pay on time discounts) in most network areas. We do note, however, that not all customers will receive these conditional discounts and that the retail component will in reality be greater than this.

²⁵ This chart is based on the calculation used for table 3 above

²⁶ These market offers were collected between mid-July and mid-September 2018.

²⁷ Note that other charges such as market fees and ancillary service fees as well as losses have not been accounted for in this bill-stack.

Table 4 Deduction of bill components for selected market offers (including pay on time discounts), average annual bill based on offers taking effect post July 2018 (6,000kWh per annum, single rate)²⁸

	Retail bill incl. GST^	Retail bill excl. GST	Retail bill excl. GST and NUOS^^	Retail bill excl. GST, NUOS and wholesale^^^	Retail bill, excl. GST, NUOS, wholesale and "green scheme" costs*	Retail bill excl. GST, NUOS, wholesale, "green scheme" costs and smart meter costs**
Citipower	1,732	1,575	1,105	475	363	284
Powercor	1,930	1,755	1,199	569	457	385
Ausnet	2,044	1,858	1,117	487	375	292
Jemena	1,876	1,705	1,168	538	426	343
UE	1,879	1,708	1,153	523	411	354
EvoEnergy	1,621	1,474	906	360	122	
Tasnetworks	1,930	1,755	990	360	271	
Energex	1,722	1,565	904	340	269	
Ausgrid	1,731	1,574	832	292	181	
Endeavour	1,887	1,715	1,052	512	401	
Essential	2,199	1,999	1,093	553	442	
SAPN	1,553	2,321	1,384	622	467	

[^] Based on market offers available post July 2018 (including guaranteed and pay on time discounts) offered by the same retailers included in the analysis of standing/regulated offers (table 3), except for the ACT where the standing offer is regulated. In the ACT, the market offer bill is based on the average retail market offer.

Chart 7 below is based on the same calculations presented in table 4 above but shows the various bill components as a percentage of the total bill. Again, we stress that some of the cost components are based on estimates rather than actual, known costs.³⁰

^{^^} As per Table 1 above

^{**} As per Table 2 above

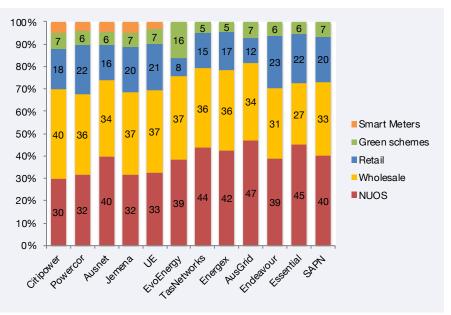
^{***} Based on AER estimated AMI charges for 2018²⁹

²⁸ Note that the cost of the smart meter rollout is not accounted for in the NUOS charges due to the AMI Cost Recovery Order-In-Council that ensures that the distributors are able to recover expenditure associated with the AMI program from consumers on a cost pass-through basis.

²⁹ To estimate the impact of the Victorian smart meter rollout on the bill-stack, we used AER's indicative average annual metering bill for 2018. See table 1-2 in *AER*, *Advanced Metering Infrastructure, Transition charges applications*, Final Decision (December 2016)

³⁰ Cost of retail includes both retail costs and margins (profits).

Chart 7 Estimated bill-stack for market offers, average annual bill based on the offers taking effect post July 2018 (6,000kWh per annum, single rate, excluding GST)³¹



³¹ This chart is based on the calculation used for table 4 above

3. Solar offers

Key findings

- Since last year, annual bills for solar customers in Victoria have increased the most (approximately by \$90 \$120, depending on network area) while there were more modest increases in Tasmania. In Queensland (Energex), the ACT (EvoEnergy) and NSW's Endeavour network on the other hand, solar bills have decreased by \$130, \$80 and \$50 respectively. In South Australia (SAPN) and greater Sydney (Ausgrid), solar bills have remained stable.
- The average annual electricity bills are significantly lower for solar customers compared to non-solar, standing and market offer, customers. Average annual solar customer bills are \$1,340 less than average market offer bills (including discounts) in South Australia (SAPN). In Tasmania (TasNetworks) the difference is more modest at \$690.
- For solar households with a 3kW system installed, the average annual Feed-in-tariff (FiT) credit is highest in South Australia (\$375) and lowest in Tasmania (\$145).
- When deducting GST, NUOS costs, wholesale costs, the cost of environmental policies ("green schemes") and the cost of rolling out smart meters (Victoria only), the residual retail component for solar bills is highest in Tasmania (TasNetworks) at \$84 while it is negative in the ACT (EvoEnergy).³²

This year was the third year the Tariff-Tracking project covered offers available to solar customers and compared offers based on both electricity bought and feed in tariff (FIT) rates for electricity sold. The online workbooks allow users to compare offers for 3 kW and 1.5 kW capacity systems, based on nominated consumption levels and location (network and urban or non-urban setting). The analysis presented below is based on 3 kW systems in urban locations and the assumptions applied are shown in table 5.

Table 5 Assumptions: Generation capacity and export (%) in capital cities, 3 kW systems³³

Capital cities	Annual generation per kW installed	Export rates (%)
Adelaide	\$91	51.8%
Brisbane	\$90	53.4%
Melbourne	\$94	47.4%
Hobart	\$127	47.4%
Canberra	\$105	55.1%
Sydney	\$105	49.9%

Chart 8 shows average annual bills for solar customers (3 kW systems installed) in metropolitan areas using 6,000 kWh (imported as well as generated) per annum.³⁴ It shows that the average annual bills (calculations based on all retailers' solar market offers) are significantly lower than those for non-solar standing and market offer customers analysed in section 1 and 2 above.

³² Note that this is based on components of customers' bills and does not take into account retailers' revenue from each customer type. The energy exported by solar customers does, for example, have a value to the retailers.

³³ The export rates and generation capacities (Except for Hobart and Canberra) are based on Melbourne and were used for the analysis presented in a report for the Alternative Technology Association (ATA) by Alviss Consulting (Alviss Consulting, Retail Offers and Market Transparency for New Solar Customers, June 2013). The Tasmanian 1.185 MWh generation capacity is based on small-scale technology certificates (STC) for zone 4. The Export rate is based on Melbourne assumptions and may therefore be slightly higher than the Tasmanian average. The Canberra assumptions are based on non-metropolitan NSW rates and will therefore be somewhat high for ACT housing experiencing overshadowing.

³⁴ Based on average market offer (all retailers) including guaranteed discounts, pay on time discounts, FIT credits and GST. NSW's Essential network is not included as it covers rural NSW only.

Chart 8 Annual retail bills for solar customers post July 2018, inclusive of pay on time discounts and FIT credits (6,000kWh per annum, single rate, GST incl)

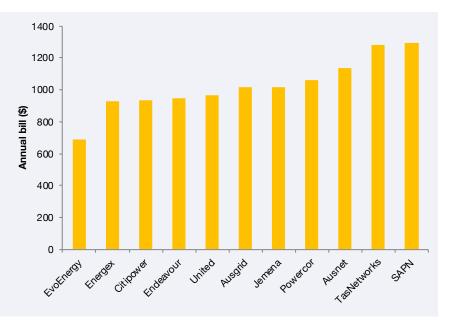
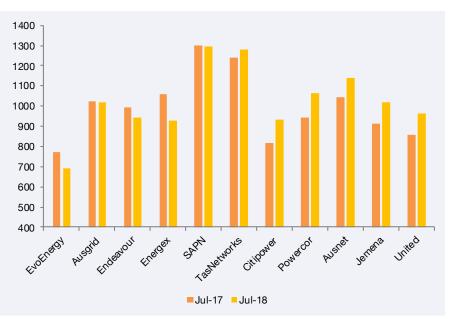


Chart 9 below compares solar bills as of July 2017 to bills as of July 2018. It shows that the

ANNUAL BILLS FOR SOLAR CUSTOMERS IN VICTORIA HAS INCREASED THE MOST (APPROXIMATELY BY \$90 - \$120, DEPENDING ON NETWORK AREA) WHILE THERE WERE MORE MODEST INCREASES IN TASMANIA. IN QUEENSLAND (ENERGEX), THE ACT (EVOENERGY) AND NSW'S ENDEAVOUR NETWORK ON THE OTHER HAND, SOLAR BILLS HAVE DECREASED BY \$130, \$80 AND \$50 RESPECTIVELY.

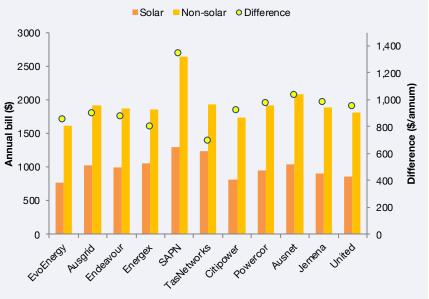
In South Australia (SAPN) and greater Sydney (Ausgrid), solar bills have remained stable.

Chart 9 Annual retail bills for solar customers post July 2017 and 2018, inclusive of pay on time discounts and FIT credits (6,000kWh per annum, single rate, GST inc³⁵



³⁵ Based on average market offer (all retailers) including guaranteed discounts, pay on time discounts, FIT credits and GST for metropolitan customers with 3 kW systems. NSW's Essential network is not included as it covers rural NSW only.

Chart 10 Annual retail bills for nonsolar customers and solar customers post July 2018, inclusive of pay on time discounts and FIT credits (6,000kWh per annum, single rate, GST incl)³⁶



The difference in South Australia is partly explained by retailers, on average, offering higher FIT rates compared to other jurisdictions (see table 6 below) but also because solar customers avoid kWh (because of their own generation) that non-solar customers do not. This generation/avoided purchase becomes even more valuable when the tariff applied is an inclining block tariff where the price per kWh increases significantly with increase in overall consumption.

Table 6 Annual average FIT credit, market offers July 2018, 6,000kWh per annum, 3 kW system, single rate

Jurisdiction	Average annual FIT credit (\$)
SA	\$375
ACT	\$370
QLD	\$355
NSW	\$290
VIC	\$275
TAS	\$145

Table 7 below deducts the various bill components of solar bills (from left to right) and after deducting GST, NUOS costs, wholesale costs, the cost of environmental policies ("green schemes") and the cost of rolling out smart meters (Victoria only), amounts in the final column, effectively the retail component, is highest in Tasmania (Tasnetworks) at \$84 while it is negative in the ACT (EvoEnergy).³⁷

³⁶ The average market and solar offer bills in this chart are based on all retailers with an offer in each network area. In section 2 above, on the other hand, market offers were based on selected retailers in order to compare against relevant regulated/standing offers.

³⁷ Note that this is based on components of customers' bills and does not take into account retailers' revenue from each customer type. The energy exported by solar customers does, for example, have a value to the retailers.

Table 7 Deduction of bill components for solar market offers (including pay on time discounts), average annual bill based on offers taking effect post July 2018 (6,000kWh per annum, single rate). Metropolitan households with 3kW system installed³⁸

	Retail bill incl. GST^	Retail bill excl. GST	Retail bill excl. GST and NUOS^^	Retail bill excl. GST, NUOS and wholesale^^^	Retail bill, excl. GST, NUOS, wholesale and "green scheme" costs*	Retail bill excl. GST, NUOS, wholesale, "green scheme" costs and smart meter costs**
Citipower	932	847	534	159	92	13
Powercor	1062	965	585	210	143	71
Ausnet	1137	1,034	582	207	140	57
Jemena	1018	925	588	213	146	63
UE	963	875	535	160	94	37
EvoEnergy	690	627	238	-87	-228	
Tasnetworks	1,278	1,162	579	145	84	
Energex	928	844	387	51	9	
Ausgrid	1,017	925	429	107	41	
Endeavour	944	858	411	89	23	
SAPN	1,296	1,178	577	123	31	

[^] Based on solar market offers available post July 2017 (including guaranteed and pay on time discounts) offered by the same retailers included in chart 10 above.

^{^^} NUOS charges applied to quarterly import rates of: 892 kWh in Vic, 893 kWh in ACT, SA and Queensland, 894 kWh in NSW, and 1033 kWh in Tasmania.

^{^^\}Wholesale cost of \$105/MWh in Vic and Tasmania, \$90/MWh in NSW, \$91/MWh in the ACT, \$94/MWh in Qld and \$127/MWh in SA applied to the above import rates.

^{** 1.19} c/kWh in Qld, 3.96 c/kWh in ACT, 2.58 c/kWh in SA, 1.85 c/kWh in NSW, 1.87 c/kWh in Vic, and 1.49 c/kWh in Tasmania applied to the above import rates³⁹

^{***} Based on AER estimated AMI charges for 201840

³⁸ Note that the cost of the smart meter rollout is not accounted for in the NUOS charges due to the AMI Cost Recovery Order-In-Council that ensures that the distributors are able to recover expenditure associated with the AMI program from consumers on a cost pass-through basis.

³⁹ The "green scheme" costs include Renewable Energy Targets, Feed in Tariffs and other jurisdictional schemes. The AEMC report, 2017 Residential Electricity Price Trends (December 2018) estimated the cost of environmental policies for each jurisdiction and costs used for this report are based on the cost of environmental policies (c/kWh) in 2018/19.

⁴⁰ To estimate the impact of the Victorian smart meter rollout on the bill-stack, we used AER's indicative average annual metering bill for 2018. See table 1-2 in AER, *Advanced Metering Infrastructure, Transition charges applications, Final Decision* (December 2016)

4. Price dispersion

Key findings

- Compared to three years ago (August 2015), AGL, Energy Australia and Origin's offers produce higher annual bills in NSW, South Australia and Victoria and lower bills (on average) in Queensland. Energy Australia's bills in South Australia has increased by 53% over this period while Origin's bills have increased by 27%. In Queensland, AGL's bills have decreased by 10% while Energy Australia and Origin's bills are similar to what they were in August 2015.
- Over the last three years, the maximum difference between the annual bills produced by the "big three" has been as high as \$145 in NSW, \$185 in South East Queensland, \$200 in Victoria and \$385 in South Australia.
- The difference between the "big three" retailers' offers is remarkably low in some jurisdictions and/ or months. As of March and April 2018, for example, the difference between AGL, Origin and Energy Australia's annual bills were only \$10 in NSW.
- Retailers change their discounts (including pay on time discounts) significantly and frequently, and changes to discounts can have much greater impact on energy bills than changes to the rates themselves.
- From a customer perspective, changes to discounts are random. It is not possible to explain when or why a retailer's discounts are likely to be high or low. There are no seasonal factors, clear underlying price changes or other explainable rationales behind retailers' changes to discounts.
- Pay on time discounts are de-facto exit fees. As the discount cannot be paid prior to the customer having demonstrated that they paid the relevant bill on time, pay on time discounts from one billing period is credited to the following bill. Most retailers offer a pay on time discount available for 12 months (the so-called "benefit period") and most customers are billed quarterly. If a customer wishes to switch retailer because the new pay on time discount offered is lower, or because another retailer offers a better deal, however, the customer will forego up to three months of any discount as their retailer will simply issue a final bill. When there is no bill to forward the discount to, the customer will pay the full price for their final bill whether they pay on time or not.

This section analyses maximum price dispersion in competitive markets as well as monthly changes to the "big three" retailers' (AGL, Energy Australia and Origin) electricity market offers from August 2015 to July 2018 in NSW, Queensland, South Australia and Victoria.⁴¹ It shows that the difference between the big three retailers' offers is remarkably low in some jurisdictions and/or months.

Compared to three years ago (August 2015), AGL, Energy Australia and Origin's offers produce higher annual bills in NSW, South Australia and Victoria and lower bills (on average) in Queensland. The changes do, however, vary between the jurisdictions as well as retailers. Table 8 shows the percentage changes to these retail offers (including pay on time discounts) from August 2015 to July 2018. It shows that Energy Australia's bills in South Australia have increased by 53% over this period while Origin's bills have increased by 27%. In Queensland, AGL's bills have decreased by 10% while Energy Australia and Origin's bills are similar to what they were in August 2015.

⁴¹ In NSW the comparison is based on offers in the Ausgrid network and in Victoria it is based on offers available in Citipower's network. The offers compared are Energy Australia's 'Flexi Saver', AGL's 'Savers' and Origin's 'Daily Saver Plus' until it was discontinued in October 2015 and Origin's 'Saver' product was introduced.

Table 8 Changes (%) to annual bills for the "big three" from August 2015 to July 2018 – Based on single rate, 6,000kWh/annum, inclusive of pay on time discounts⁴²

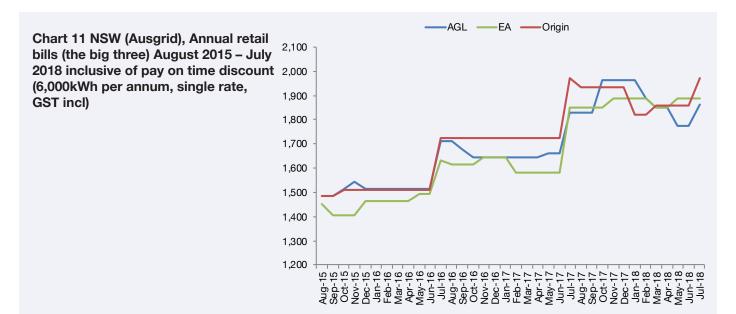
	NSW (Ausgrid)	QLD (Energex)	SA (SAPN)	VIC (Citipower)
AGL	25%	-10%	44%	16%
Energy Australia	20%	1%	53%	37%
Origin	33%	2%	27%	25%

Over the last three years, the maximum difference between the annual bills produced by the "big three" has been as high as \$145 in NSW (Ausgrid), \$185 in Queensland (Energex), \$200 in Victoria (Citipower) and \$385 in South Australia. In both Queensland and South Australia the maximum price-spread occurred in July 2018. In Victoria the maximum price-spread of \$200 occurred in December 2017 while the NSW maximum was back in June 2017.

AS OF MARCH AND APRIL 2018, THE DIFFERENCE BETWEEN AGL, ORIGIN AND ENERGY AUSTRALIA'S ANNUAL BILLS WERE ONLY \$10 IN NSW.

NSW

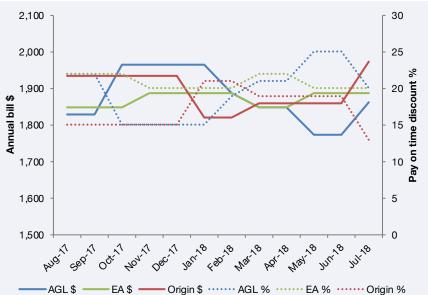
In NSW's Ausgrid network area, the average maximum price-spread over the last year was approximately \$90. The difference was lowest in March – April 2018 (\$10) and highest in January 2018 (approximately \$140). As of July 2018 the difference was around \$110.



Only AGL changed its rates on 1 July 2018 (usage charges down from 29 c/kWh to 28.9 c/kwh, excluding GST) but all three have changed their pay on time discount, applied to the usage rates, several times during the last year. In the last 12 months, AGL's pay on time discount has been as high as 25% and as low as 15%. Energy Australia's discount has varied between 20% and 22%. Origin's discount has varied from a maximum of 21% in January – February 2018 to 13% in July 2018. Chart 12 shows variations in the three retailers' pay on time discounts (dotted line) over the last 12 months as well as the annual bill each month's offer produces (inclusive of the applicable discount). It shows that a customer accepting AGL's Savers product between October 2017 and January 2018 would have an annual bill of approximately \$1,965 after receiving a pay on time discount of 15%. A customer with the same consumption level, that accepted AGL's Savers product in May-June 2018, however, would have an annual bill of \$1,775 (\$190 less).

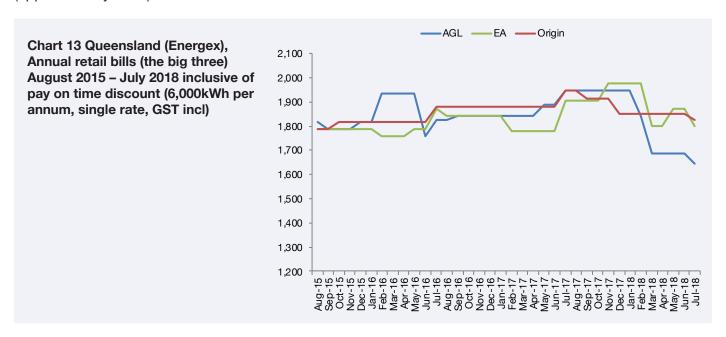
⁴² Ibid.

Chart 12 NSW (Ausgrid), Annual retail bills inclusive of pay on time discount (6,000kWh per annum, single rate, GST incl) and Pay on time discounts offered (% off usage charges) August 2017 – July 2018



Queensland

In Queensland's Energex network area, the average maximum price-spread over the last year was \$120. The difference was lowest in August – November 2017 (approximately \$40) and highest in May - July 2018 (approximately \$185).



All three retailers reduced their rates on 1 July 2018 and all three have changed the pay on time discount, applied to the usage rates, several times during the last year. In the last 12 months, AGL's pay on time discount has been as high as 26% and as low as 10%. Energy Australia's discount has varied between 14% and 24%. Origin's discount has varied from a maximum of 14% to a minimum of 8%. Chart 14 shows variations in the three retailers' pay on time discounts (dotted line) over the last 12 months as well as the annual bill each month's offer produces (inclusive of the applicable discount). It shows that a customer accepting AGL's Savers product in January 2017 would have an annual bill of approximately \$1,945 after receiving a pay on time discount of 10%. A customer, with the same consumption level, that accepted AGL's Savers product in March 2018, however, would have an annual bill of \$1,690 (\$255 less). By comparison a customer signing on to AGL's offer in July 2018, after rates actually came down, would have an annual bill of \$1,645, which is only \$45 less than the bill was prior to the price change.

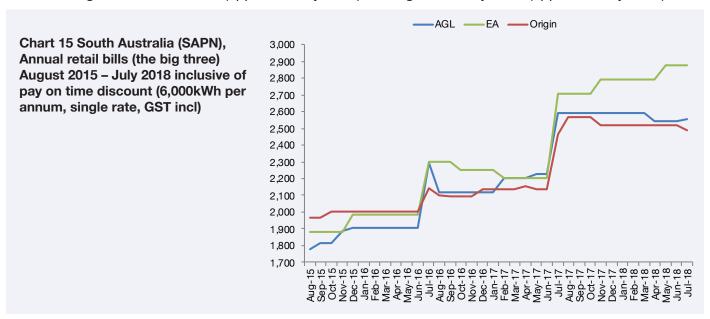
THIS SHOWS THAT RANDOM CHANGES TO PAY ON TIME DISCOUNTS ACTUALLY CAN HAVE GREATER IMPACT ON WHAT HOUSEHOLDS PAY FOR ENERGY THAN THE PRICE RE-SETS THEMSELVES.

2.100 30 Chart 14 Queensland (Energex), Annual retail bills inclusive of pay on 2,000 25 time discount (6,000kWh per annum, single rate, GST incl) and Pay on time 20 discount discounts offered (% off usage charges) 1,900 Annual bill \$ August 2017 – July 2018 1,800 Pay on time 1,700 10 5 1,600 1,500 0

South Australia

In South Australia, the average maximum price-spread over the last year was \$265. The difference was lowest in August – October 2017 (approximately \$140) and highest in July 2018 (approximately \$385).

Origin \$ ······ AGL % ····· EA % ····· Origin %



AGL and Origin reduced their rates on 1 July 2018 while Energy Australia's rates remained unchanged. All three changed the pay on time discount, applied to the usage rates, during the last year but this was done less frequently and with smaller percentage changes compared to NSW and Queensland. In the last 12 months, AGL's pay on time discount has been as high as 12% and as low as 10%. Energy Australia's discount has varied between 12% and 18%. Origin's discount has varied from a maximum of 12% to a minimum of 10%. Chart 16 shows variations in the three retailers' pay on time discounts (dotted line) over the last 12 months as well as the annual bill each month's offer produces (inclusive of the applicable discount). It shows that a customer accepting Energy Australia's Flexi Saver product in August to October 2017 would have an annual bill of approximately \$2,705 after receiving a pay on time discount of 18%. A customer, with the same consumption level, that accepted Energy Australia's Flexi Saver product in May 2018, however, would have an annual bill of \$2,875 (\$170 more) after receiving a 12% pay on time discount.

ELECTRICITY USAGE CHARGES ARE HIGHER IN SOUTH AUSTRALIA COMPARED TO OTHER JURISDICTIONS AND EVEN A RELATIVELY SMALL CHANGE TO THE PAY ON TIME DISCOUNT (COMPARED TO THOSE DISCUSSED FOR NSW AND QUEENSLAND ABOVE) WILL HAVE A SIGNIFICANT IMPACT ON THE ANNUAL BILL.

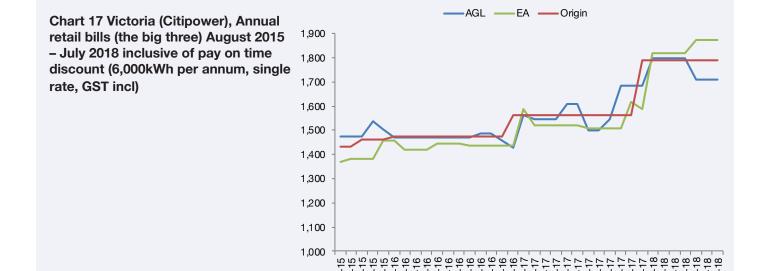
Chart 16 South Australia, Annual retail bills inclusive of pay on time discount (6,000kWh per annum, single rate, GST incl) and Pay on time discounts offered (% off usage charges) August 2017 – July 2018



AAUG SAAUG SAA

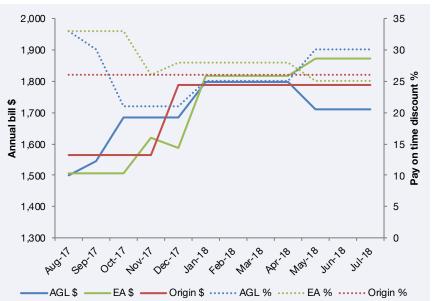
Victoria

In Victoria's Citipower network, the average maximum price-spread over the last year was approximately \$100. The difference was lowest in January – April 2018 (\$30) and highest in December 2017 (approximately \$200). As of July 2018 the difference was around \$165.



All three retailers increased their rates on 1 January 2018 and AGL and Energy Australia have changed the pay on time discount, applied to the usage rates, several times during the last year. In the last 12 months, AGL's pay on time discount has been as high as 33% and as low as 21%. Energy Australia's discount has varied between 25% and 33%. Origin's pay on time discount, on the other hand, remained stable at 26% for the whole period. Chart 18 shows variations in the three retailers' pay on time discounts (dotted line) over the last 12 months as well as the annual bill each month's offer produces (inclusive of the applicable discount). It shows that a customer accepting AGL's Savers product in August 2017 would have an annual bill of approximately \$1,500 after receiving a pay on time discount of 33%. A customer with the same consumption level, that accepted AGL's Savers product in December 2018, however, would have an annual bill of \$1,685 (\$185 more). Comparing AGL's discounts post rate increases on 1 January 2018 shows that a customer signing on to AGL's offer in January 2018 would have an annual bill of \$1,800 while a customer waiting until May 2018 would have an annual bill of \$90 less (\$1,710).

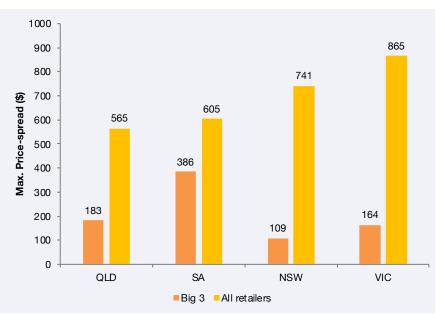
Chart 18 Victoria (Citipower), Annual retail bills inclusive of pay on time discount (6,000kWh per annum, single rate, GST incl) and Pay on time discounts offered (% off usage charges) August 2017 – July 2018



The above charts have analysed price-spread for the "big three" retailers only. Chart 19 below compares the maximum price-spread for all retailers to that of the "big three" for each jurisdiction as of July 2018, and it shows that the price-spread between the big three is much lower than the market overall. Moreover, it shows that

THE PRICE-SPREAD, BASED ON ALL RETAILERS, IS GREATEST IN VICTORIA WHILE THE PRICE DIFFERENCE BETWEEN THE "BIG THREE" IS GREATEST IN SOUTH AUSTRALIA.

Chart 19 Maximum difference between the big three's annual retail bills and all retailers' annual bills as of July 2018, inclusive of pay on time discount (6,000kWh per annum, single rate, GST incl)⁴³



The above analysis raises three issues to be discussed; 1) frequent and significant changes to discounts, 2) pay on time discounts being de-facto exit fees, and 3) implications for the retailer-customer power balance.

4.1 Frequent and significant changes to discounts

The frequent and significant changes to pay on time discounts mean that a customer that was on a comparatively good deal one month can be on a comparatively bad deal the next.

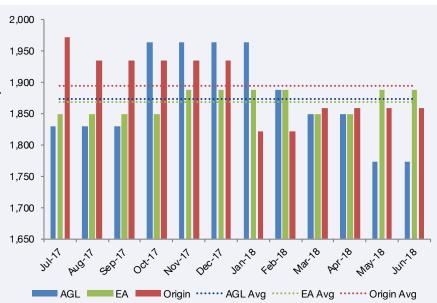
⁴³ Based on offers in the Energex network in Queensland, SAPN in South Australia, Ausgrid in NSW and Citipower in Victoria.

WHILE REGULATION HAS FOCUSED ON FREQUENCY AND NOTIFICATION OF PRICE VARIATIONS, DISCOUNTS OFF THESE PRICES HAVE BEEN LEFT TO THE RETAILERS THEMSELVES. THE ABOVE, HOWEVER, SHOWS THAT CHANGES TO DISCOUNTS CAN HAVE MUCH GREATER IMPACT ON ENERGY BILLS THAN CHANGES TO THE RATES THEMSELVES.

Charts 20 -23 below show customers annual bills with AGL, Energy Australia and Origin in NSW, Queensland, South Australia and Victoria according to when during the year they accepted the offer. There were no changes to the rates during these periods, only changes to the pay on time discounts.

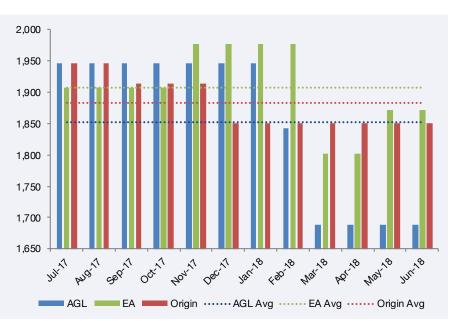
In NSW (Ausgrid), customers signing up to the AGL Savers product in late autumn would have an annual bill that is around \$190 more than those who signed up to the same product in spring/early summer. Energy Australia customers signing up to the Flexi Saver product as soon as it took effect after the price re-set in July 2017 would have an annual bill of \$40 less compared to those signing up later in the year. Origin customers signing up to the Origin Saver product just after the price re-set in July 2017, however, would have an annual bill of \$150 more than those waiting six months.

Chart 20 SW (Ausgrid), Annual bills according to month customer sign up (the big three) July 2017 – June 2018 inclusive of pay on time discount (6,000kWh per annum, single rate, GST incl)



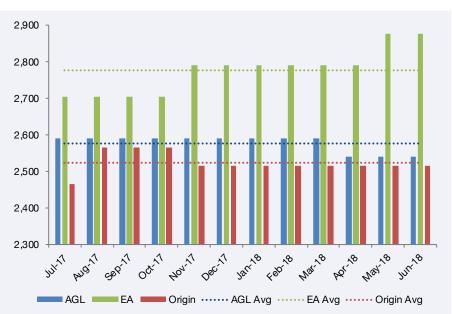
In Queensland (Energex), customers signing up to the AGL Savers product in early autumn would have an annual bill that is around \$255 less than those who signed up to the same product two months earlier. Energy Australia customers signing up to the Flexi Saver product in early autumn would have an annual bill of \$170 less compared to those signing up over summer. Origin customers signing up to the Origin Saver product just after the price re-set in July 2017, however, would have an annual bill of \$100 more than those waiting five months.

Chart 21 Queensland (Energex), Annual bills according to month customer sign up (the big three) July 2017 – June 2018 inclusive of pay on time discount (6,000kWh per annum, single rate, GST incl)



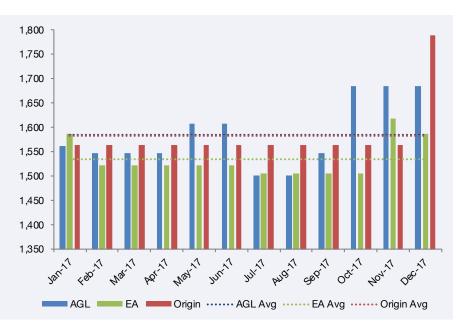
In South Australia, customers signing up to the AGL Savers product in autumn would have an annual bill that is around \$50 less than those who signed up to the same product just after the price re-set in July 2017. Energy Australia customers signing up to the Flexi Saver product in late autumn would have an annual bill of \$170 more compared to those signed up to the same product just after the price re-set in July 2017. Origin customers signing up to the Origin Saver product just after the price re-set in July 2017 would have an annual bill of \$100 less than those waiting one month.

Chart 22 South Australia (SAPN), Annual bills according to month customer sign up (the big three) July 2017 – June 2018 inclusive of pay on time discount (6,000kWh per annum, single rate, GST incl)



In Victoria, the annual price re-set occurs in January every year and we have therefore compared bills for customers signing up between January and December 2017. Customers signing up to the AGL Savers product in winter would have an annual bill that is around \$185 less than those who signed up to the same product in spring. Energy Australia customers signing up to the Flexi Saver product in winter would have an annual bill of \$110 less compared to those who signed up to the same product in the spring. Origin's offer remained unchanged for most of the year, but customers signing up to the Origin Saver in December 2017 would have an annual bill of \$225 more than those signing up earlier in the year.

Chart 23 Victoria (Citipower), Annual bills according to month customer sign up (the big three) January 2017 – December 2017 inclusive of pay on time discount (6,000kWh per annum, single rate, GST incl)



THESE CHARTS DEMONSTRATE HOW DIFFICULT IT WOULD BE FOR AN ENERGY CUSTOMER TO BELIEVE THEY ARE NOT PAYING MORE THAN NECESSARY FOR AN ALREADY EXPENSIVE ESSENTIAL SERVICE.

When consumers purchase the latest fashion, they do so realising that the same items will be on sale a few months later. Consumers know that the latest technology is likely to come down in price when it is no

longer the latest. Motorists are always told that fuel will be more expensive leading up to public holidays.

FOR ENERGY CONSUMERS, ENERGY IS JUST ENERGY AND IT MAKES NO SENSE WHY YOU MAY PAY THE SAME RETAILER \$200 MORE PER ANNUM FOR THE SAME ENERGY CONSUMED BECAUSE YOU SIGNED UP IN APRIL INSTEAD OF MARCH.

Furthermore, unlike in the case of petrol, there is no logic behind these changes. The underlying network price has not changed, the regulatory framework has not changed, the energy itself has not changed. To the consumer, it is completely random.

On top of this randomness in terms of what you may end up paying compared to someone else, it is actually quite a slow process to switch retailers.

If/when a customer that receives a 21% pay on time discount notices that the same retailer now offers 30% off the same product they are on, they naturally would want to receive the same higher discount. The retailer, however, may stress that this better offer is only available to new customers. As long as search costs are high and switching processes are cumbersome and slow, retailers have the ability to restrict existing customers from accessing their best deal without running the risk of losing a great number of customers. The Essential Services Commission in Victoria recently proposed a rule change to ensure customers receive advance notice of changes to prices, discounts or benefits so customers get 'no more surprises'. However, it is not necessarily the current customer's discount that will change it is the discount for new customers of exactly the same product that will change.

There is a clear mis-match between how often retailers can change their offers and how long it takes to a customer to switch retailer. It currently can take up to three months to get a final read (depending where the customer is in the billing cycle) that must occur prior to any switching taking place. While energy consumers are provided with tools such as Energy Made Easy to help them choose the best offer, by the time they complete the switch this may, in fact, now be a very poor offer compared to other retailers, or even compared to what the same retailer is now offering.

THIS MAKES THE PROCESS OF SEARCHING, COMPARING AND SWITCHING QUITE A USELESS EXERCISE.

4.2 Pay on time discounts being de-facto exit fees

The above analysis shows pay on time discounts as high as 33% and we have previously argued that the size of these discounts does not reflect the benefit of retailers receiving prompt payments and limit debt. We have also argued that high pay on time discounts are effective marketing tools and mask the real price paid by the many unable to pay their bills on time.

We also believe that pay on time discounts can be a barrier to switching and a customer retention strategy used by retailers. As the discount cannot be paid prior to the customer having demonstrated that they paid the relevant bill on time, pay on time discounts from one billing period are commonly credited to the following bill. Most retailers offer a pay on time discount available for 12 months (the so-called "benefit period") and most customers are billed quarterly. If a customer wishes to switch retailer because the new pay on time discount offered is lower, or because another retailer offers a better deal, the customer will forego up to three months of any discount as their retailer will simply issue a final bill.

WHEN THERE IS NO BILL TO FORWARD THE DISCOUNT TO, THE CUSTOMER WILL PAY THE FULL PRICE FOR THEIR FINAL BILL WHETHER THEY PAY ON TIME OR NOT. AS SUCH, PAY ON TIME DISCOUNTS ARE DE-FACTO EXIT FEES.

Chart 24 below shows maximum impact of foregone pay on time discounts for the "big three" in NSW (Ausgrid), Queensland (Energex), South Australia (SAPN) and Victoria (Citipower) as of offers available in

⁴⁴ ESC, Energy retailers must rebuild community trust, 7 September 2018 at https://www.esc.vic.gov.au/media-centre/energy-retailers-must-rebuild-community-trust

July 2018. It shows that this de-facto exit fee could be as high as \$122 in Victoria (AGL).

Chart 24 Value of quarterly pay on time discount - AGL, Energy Australia and Origin, as of July 2018, (6,000kWh per annum, single rate, excl GST)⁴⁵

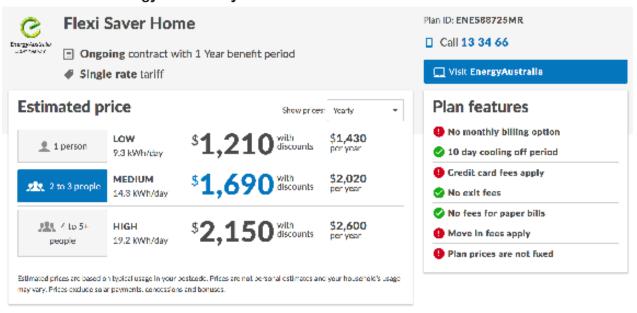


We note that the above analysis does not include the highest pay on time discounts available. All of the "big three" offer discounts off usage rates only and the maximum discount included in the above chart is 30%. Other retailers such as Globird in Victoria and Click in NSW offer pay on time discounts of 34% and 35% off the bill (usage rates and supply charges).

IN OUR VIEW, THIS PRACTISE CAN BE A SIGNIFICANT BARRIER TO CUSTOMER SWITCHING AND WE DO NOT BELIEVE CUSTOMERS TYPICALLY CONSIDER THE IMPACT ON THEIR FINAL BILL WHEN CHOOSING A PRODUCT WITH A HIGH PAY ON TIME DISCOUNT.

The recently revamped Energy Made Easy (EME) website, run by the Australian Energy Regulator (AER), also assumes that customers will receive the pay on time discount for a whole year when calculating bills inclusive of discounts. Screenshot 1 below shows EME's presentation of Energy Australia's Flexi Saver product in NSW's Ausgrid area. The annual bill calculation is based on 12 months' worth of pay on time discounts and it explicitly states that the offer has no exit fee.

Screenshot 1 - Energy Made Easy



⁴⁵ We stress that we cannot confirm which retailers exclude pay on time discounts from final bill and whether some retailers do not. Energy Australia has contacted us to explain that they do not exclude pay on time discounts from final bill. Based on offers in the Energex network in Queensland, SAPN in South Australia, Ausgrid in NSW and Citipower in Victoria. The pay on time discounts (on usage charges only) included in this chart range from 11 to 30%.

While some retailers stipulate that the pay on time discount does not apply to the final bill others are less clear. Screenshot 2 below shows Click Energy's statement that pay on time discounts are not applied to the final bill while Screenshots 3 and 4 show AGL and Energy Australia's more ambiguous explanations.

Screenshot 2 - Click Energy

lectricity	Offer	Details
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Conditional Discount	Conditional Discount Details
27% discount on your usage and supply charges	You must agree to receive bills by email and pay by the due date using an approved payment method. Discount is off your usage and supply charges after concessions, credits, solar exports, rebates or fees when you pay your bill on time and is applied to your next bill, excludes final bill. You will not earn a discount when your account is in credit. The usage charges for Click Agate are the same as the Click Energy Standing offer and the daily supply charge is the same as the Click Energy Standing offer for this distribution area.

Screenshot 3 - AGL

Discounts	
27% Pay on time discount	The pay on time discount only applies to our energy usage charges and will appear as a separate credit (GST exclusive) on bills, for each bill paid in full on or before the due date.

Screenshot 4 - Energy Australia

Conditional Discounts	
	25% off your market usage charges set out above on each bill that you pay by the due date. The discount excludes overdue amounts,
Pay by Due Date	reconnection or disconnection fees, or any charges passed on by your distributor. Our rates will generally be adjusted annually, and
	we'll notify you when this happens. Your discount percentage won't change during your benefit period.

In our view, retailers should not be allowed to offer conditional discounts that may not be applied to the entire contract and/or benefit period when the customer meets the conditions required. Conditional discounts based on receiving bills by e-mail, signing-up electronically and paying by direct debit are conditions that can be met in advance and discounts should thus be applied in advance.

ANY CONDITIONS DEPENDING ON CUSTOMERS' BEHAVIOUR POST BILLS BEING ISSUED SHOULD BE BANNED.

4.3 The retailer-customer power imbalance

For years energy consumers have been told to exercise their market powers to deal with rising energy prices. The mantra has been to "search and switch", "exercise choice" or "if you snooze you lose".

When this has not sparked extensive market participation it has often been assumed that energy is too complex or too boring for the average consumer to understand or deal with. As such, new and different ways of informing customers have been attempted.

Perhaps it is not that energy is too complex or boring, but that we have made it opaque and frustrating in the name of market innovation. There has been an assumption that a high number of offers (even if there is no clear difference between them), constant changes to discounts, and offers with multiple components all signal competition. Instead, it may be that they have simply added uncessary complexity.

To counter the impact of this complexity on customers, however, we have required numerous protections to address the power imbalance between retailers and customers. This has resulted in every retailer, big or small, now allocating substantial resources to regulatory issues. This is another element that adds to the cost of energy retailing.

WE WOULD LIKE TO TAKE A BIG STEP BACK AND COMMENCE THE PROCESS OF DESIGNING AN ENERGY RETAIL MARKET ON THE SINGLE PRINCIPLE OF IT BENEFITING CONSUMERS. WHAT DO WE THINK CONSUMERS GENERALLY WANT? LOWER PRICES AND LESS COMPLEXITY.

In our view, it was not necessarily the idea of a competitive energy retail market that was bad. It was the execution.⁴⁶

⁴⁶ As stated in the preamble of this report, we have decided to not make specific recommendations this year. Recent major reviews have already produced a raft of recommendations that are under consideration and the energy policy debate is ever changing. Rather, this report highlights recent market developments and raises some concerns that policy makers and/or regulators may or may not like to consider on their way forward.