

THE NEM - *TOWARDS A*

N E W
N O R M A L ?

Observations from the Vinnies' Tariff-Tracking Project



St Vincent de Paul Society
good works



ALVISS
CONSULTING

Disclaimer

The energy offers, tariffs and bill calculations presented in this paper and associated workbooks should be used as a general guide only and should not be relied upon. The workbooks are not an appropriate substitute for obtaining an offer from an energy retailer. The information presented in this paper and the workbooks is not provided as financial advice. While we have taken great care to ensure accuracy of the information provided in this paper and the workbooks, they are suitable for use only as a research and advocacy tool. We do not accept any legal responsibility for errors or inaccuracies. The St Vincent de Paul Society and Alvis Consulting Pty Ltd do not accept liability for any action taken based on the information provided in this paper or the associated workbooks or for any loss, economic or otherwise, suffered as a result of reliance on the information presented. If you would like to obtain information about energy offers available to you as a customer, go to the relevant regulator's website or contact the energy retailers directly.

The NEM – Moving towards a new normal?

Observations from the Vinnies' Tariff-Tracking Project

Gavin Dufty, St Vincent de Paul Society, Victoria
May Mauseth Johnston, Alvis Consulting

Melbourne, November 2020

St Vincent de Paul Society

www.vinnies.org.au



St Vincent de Paul Society
good works

Alvis Consulting Pty Ltd

www.alvisconsulting.com



© **St Vincent de Paul Society and Alvis Consulting Pty Ltd**

This work is copyright. Apart from any use permitted under the Copyright Act 1968 (Ctw), no parts may be adapted, reproduced, copied, stored, distributed, published or put to commercial use without prior written permission from the St Vincent de Paul Society.

Report reference: St Vincent de Paul Society and Alvis Consulting, *The NEM – Moving towards a new normal?*, Melbourne, November 2020

Acknowledgements

This project was funded by Energy Consumers Australia (www.energyconsumersaustralia.com.au) as part of its grants process for consumer advocacy projects and research projects for the benefit of consumers of electricity and natural gas.

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/

Contents

Background: Tariff-Tracking Project	1
Overview	3
1. How energy prices are tracking	5
1.1 Electricity prices	5
1.2 Gas prices	6
2. The electricity bill-stack	8
3. Solar offers	16
4. Impact of DMO and VDO	20
4.1 Price changes and dispersion – regulated vs. market offers	20
4.2 Price dispersion – the “big three”	29
4.3 Changes to market offer base rates and discounts	32
5. COVID-19 assistance, increased usage and debt	36

Background: Tariff-Tracking Project

The St Vincent de Paul Society, in conjunction with Alvis 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.

With the introduction of the Default Market Offer (DMO) in NSW, South East Queensland and South Australia and the Victorian Default Offer (VDO) in Victoria from 1 July 2019 all the previously deregulated electricity retail markets are again regulated. The DMO and the VDO are significant developments that the Tariff-Tracking project will monitor and analyse the impact of.

The Australian Energy Regulator's (AER) DMO is expressed as an annual bill for a set consumption level and retailers are still able to "translate the annual amount into different tariff structures".¹ The Regulations stipulate that retailers must structure their prices to not exceed the annual DMO price for that consumption level.² The initial DMO took effect on 1 July 2019 and was amended on 1 July 2020.

The VDO is set by the Essential Services Commission (ESC) and the initial VDO took effect on 1 July 2019 and was amended on 1 January 2020. The VDO determines the rates for basic metering types (single rate and controlled load tariffs) in each network area and the retailers are obliged to reflect these rates when creating standing offers for other metering types (e.g. time of use tariffs).

All retailers are required to offer a DMO/VDO but they can, and still do, offer other market contracts.

¹ AER, Default Market Offer Prices 2019-20, Final Determination, April 2019, 9

² Ibid., 9

As the Tariff-Tracking project aims to monitor and assess changes to energy prices over time, the analysis presented in this report will be based on the same consumption levels (6,000 kWh and 30,000 Mj per annum) as in previous national comparison reports produced by the Tariff-Tracking project. The DMO, on the other hand, is set for households using between 3,900 and 4,900 kWh/annum in NSW (depending on network area), 4,600 kWh/annum in South East Queensland and 4,000 kWh/annum in South Australia.³ This means that the bills produced by the DMOs offered by retailers will vary for households using 6,000 kWh/annum as the retail offers have different supply charges and/or usage charges.

To date we have developed five workbooks for each of the National Electricity Market (NEM) jurisdictions.⁴ 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.⁵ 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. This year's report continues to focus on the impact of the retail price regulations that took effect on 1 July 2019.

³ For households with single rate metering.

⁴ Tasmania does not have regulated/standing offers for gas and there is only one market offer available, there are currently three workbooks for this jurisdiction.

⁵ The Victorian workbooks contain regulated/standing offers from July 2008 to July 2020 and market offers from July 2010 to July 2020. The NSW workbooks contain regulated/standing offers from July 2009 to July 2018 and market offers from 2011 and 2020. The Queensland and South Australian workbooks contain regulated/standing offers from July 2009 to July 2020 and market offers from July 2012 to July 2020. The ACT workbooks contain regulated/standing offers from July 2009 to July 2020 and market offers from July 2013 to July 2020. The Tasmanian workbooks contain regulated and market electricity offers from July 2009 to July 2020 and gas market offers from July 2013 to July 2020. From 2016, we have also developed workbooks containing solar offers available to new customers in all of the jurisdictions.

Overview

This report is comprised of five sections.

Section 1 **'How energy prices are tracking'** analyses changes to electricity and gas prices across Australia from July 2009 to July 2020 in order to explore where and when prices have increased or decreased.

The base rates for electricity (standing offers) have decreased in Queensland, New South Wales, South Australia, the ACT and Tasmania compared to last year, whereas the regulated rates have remained unchanged in Western Australia and the Northern Territory. In Victoria, on the other hand, the VDO increased by 8% (on average between July 2019 and July 2020). For gas, prices increased slightly in Victoria and Tasmania since July 2019 while they have decreased in NSW. In all other jurisdictions, gas prices have remained unchanged.⁶

Section 2 **'The electricity bill-stack'** 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 negative in the South Australia⁷ and as high as 27% in Tasmania. In Victoria the retail component is between 13-18% (depending on network area), in South East Queensland it is 13%, in NSW it is 11-14% (depending on network area) while it is zero in the ACT. The retail component is significantly lower in some jurisdictions, most notably South Australia and Queensland, compared to one year ago (July 2019). The estimated network component is greatest in NSW's Essential network (50%) while it is lowest in Victoria's Citipower network (32%). The Green scheme component is significantly greater in the ACT (13%) 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 has decreased the most in the ACT (\$80) and in NSW's Ausgrid network (\$65). Tasmania, NSW's Endeavour network, Queensland (Energex) and South Australia (SAPN) have had smaller decreases. In Victoria, on the other hand, solar bills have increased by \$60 - \$100, depending on network area. Compared to non-solar customers, average annual solar customer bills are \$1,060 less than average market offer bills (including discounts) in South Australia (SAPN). In Tasmania (TasNetworks) the difference is more modest at \$660.

Section 4 **'The impact of retail price regulation'** analyses price changes and price dispersion in relation to the regulated offers and market offers, price dispersion between the "big 3" retailers⁸ and changes to all retailers' discounts, as well as, base rates.

⁶ Northern Territory is not included in the gas analysis due to low penetration.

⁷ We stress that the wholesale prices in South Australia have recently reduced significantly (which is not yet reflected in the AEMC figures used for this analysis) and that the wholesale costs are likely to be overestimated in this analysis. Furthermore, the negative residual component in South Australia does not mean that the retailers do not have costs or a margin in this jurisdiction. It can indicate, however, that the retail costs/margins are lower in South Australia compared to other jurisdictions.

⁸ The "big three" retailers are AGL, Energy Australia and Origin Energy

While standing offers, on average, have decreased by 18% in South Australia, 16% in South East Queensland, 15% in NSW and 21% in Victoria after the DMO/VDO took effect in July 2019,⁹ the reduction to average market offer bills has been lower - especially for bills inclusive of conditional pay on time discounts. In Victoria, the average market offer bill inclusive of conditional pay on time discounts has only decreased by 1% while it reduced by 7% in NSW, 11% in South East Queensland and 12% in South Australia. This means that customers previously on highly discounted market offers may not experience the price reduction that standing offer customers have post July 2019.

Importantly, the best value offers, as of July 2020, in each network area are market offers (both with guaranteed and conditional discounts) and not DMO/VDO offers.

The difference between the “big three” retailers’ offers have increased slightly since last year but it is still low. As of July 2020, the maximum price-spread (difference to annual bill) is approximately \$95 in Victoria, \$185 in South Australia, \$200 in NSW and \$210 in South East Queensland. The lack of price dispersion between the “big three” retailers also highlights the importance of having 2nd tier retailers that can put downward pressure on prices.

Many retailers have moved away from offering conditional discounts after the DMO/VDO took effect. In South Australia, for example, only one retailer offers conditional pay on time discounts as of July 2020 compared to 10 in July 2018 (prior to the DMO taking effect).

Section 5 ‘**COVID-19 assistance, increased usage and debt**’ highlights regulatory responses to the COVID-19 pandemic as well as jurisdictional government’s assistance measures. It also discusses the pandemic’s impact on residential energy usage and accumulated energy debt. It welcomes the Victorian energy assistance package announced in November 2020, noting that Victoria is the only state with electricity and gas price increases in 2020, and urge all jurisdictions to monitor energy debt and the need for assistance measures as we move into 2021.

⁹ The chart compares average bills (across all retailers/network areas) for household using 6,000 kWh/annum as of July 2020 to bills prior to the DMO and VDO taking effect (billing data collected in January 2019 for Victoria and July 2018 for other jurisdictions)

1. How energy prices are tracking

Key findings

- The base rates for electricity (standing offers) have decreased in Queensland, New South Wales, South Australia, the ACT and Tasmania compared to last year, whereas the regulated rates have remained unchanged in Western Australia and the Northern Territory. In Victoria, on the other hand, the VDO increased by 8% (on average between July 2019 and July 2020).
- In South Australia electricity prices have decreased by 6.4%, in Queensland by 4.9% %, in the ACT by 3.5% and in New South Wales and Tasmania prices have decreased by around 1%.
- Compared to 2009, electricity prices have increased by 58% on average, with South Australia and Western Australia experiencing the greatest increases (73% and 79%, respectively).¹⁰
- Gas prices have increased slightly in Victoria and Tasmania since July 2019 while they have decreased in NSW. In all other jurisdictions, gas prices have remained unchanged.¹¹
- Compared to 2009, gas prices have increased by 69% on average, with Victoria experiencing the greatest increases (98%).¹²

This section analyses changes to electricity and gas prices across Australia from July 2009 to July 2020 in order to explore where and when prices have increased or decreased.

1.1 Electricity prices

In comparison to July 2019, regulated standing offer prices (the base-rate) have decreased in Queensland, New South Wales, South Australia, the ACT and Tasmania. The size of the decrease, however, decrease does vary between the jurisdictions. Prices in Western Australia and the Northern Territory have remained unchanged since July 2019. In Victoria, on the other hand, the VDO increased by 8% (on average between July 2019 and July 2020. Chart 1 shows estimated annual bills for households consuming 6,000kWh per annum (single rate) from July 2009 to July 2020.¹³ The dotted lines represent electricity bills in the Northern Territory and Western Australia, the two non-NEM jurisdictions.

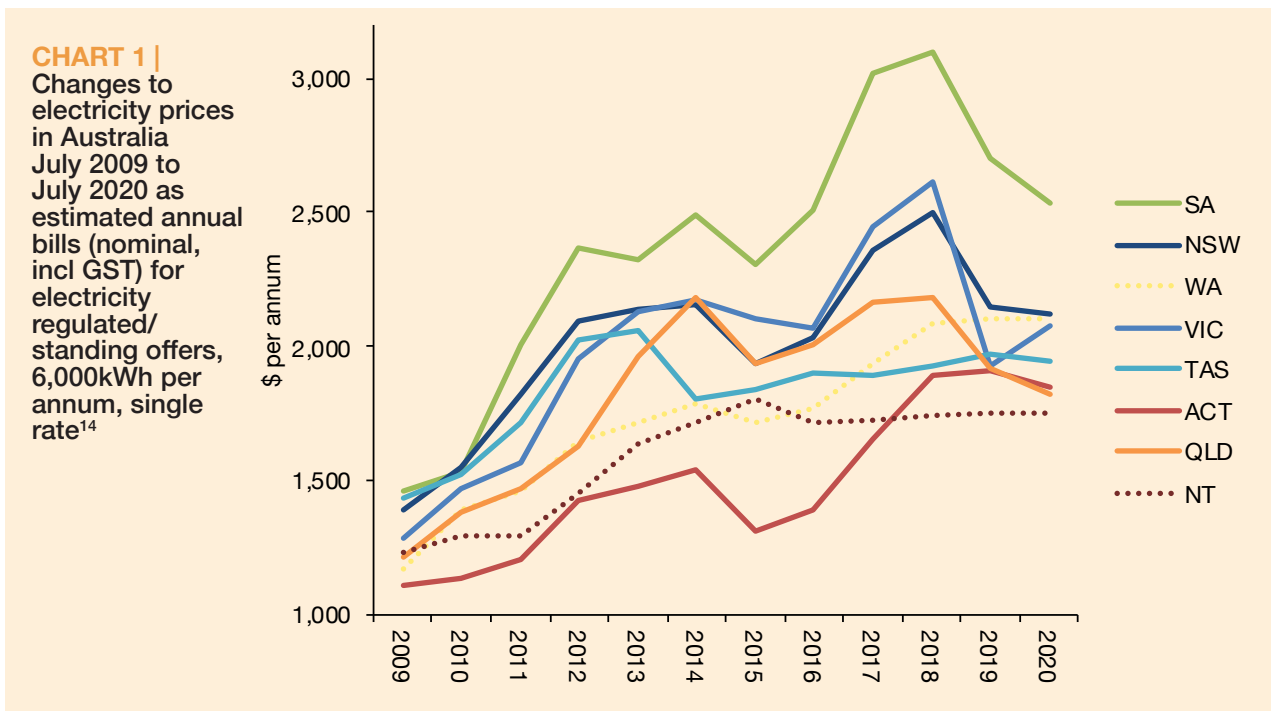
Looking at longer-term changes, chart 1 also shows the increasing differences in electricity prices between NEM jurisdictions between 2009 and 2020. While South Australia had the highest prices in both July 2009 and July 2020, the ACT had the lowest (in the NEM) in 2009 and Queensland has the lowest prices (in the NEM) as of July 2020. **The difference between the annual bill for South Australian and ACT households (with this consumption level) was just \$350 in 2009 compared to approximately \$710 difference between South Australia and Queensland in 2020. That said, the price decreases in South Australia since the introduction of the DMO in July 2019 have significantly narrowed the gap. In July 2018 (prior to the introduction of the DMO) the maximum difference between annual bills in the NEM (South Australia compared to the ACT) was as high as \$1,200.**

¹⁰ These are nominal price increases.

¹¹ Northern Territory is not included in the gas analysis due to low penetration.

¹² For Tasmania, the comparison is based on 2018 and 2013 prices. All other jurisdictions are based on prices as of 2009 and 2018. These are nominal price increases.

¹³ 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.



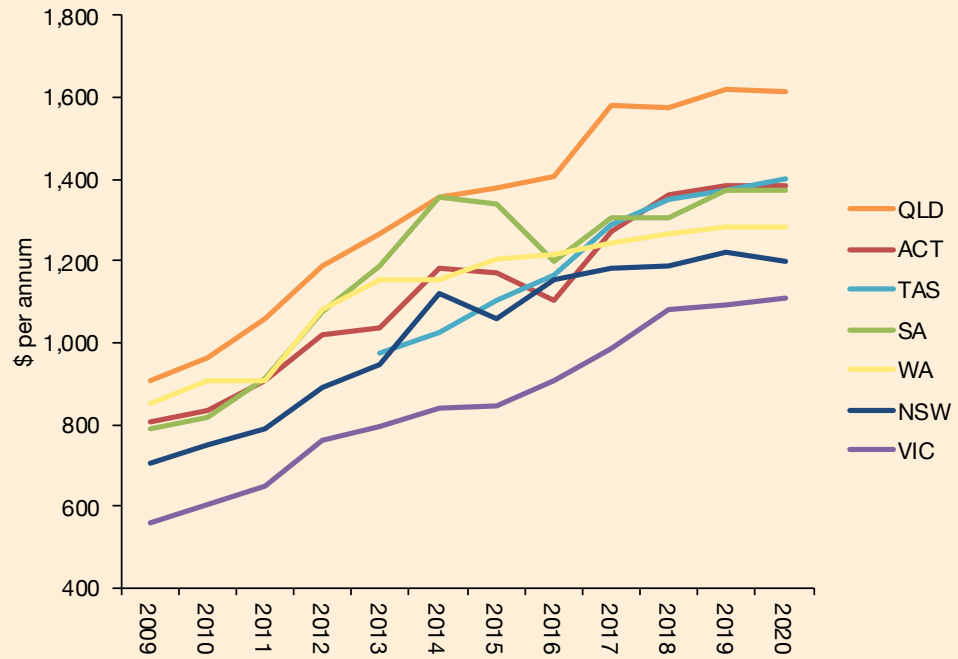
1.2 Gas prices

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 2020 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 slightly in Victoria and Tasmania since July 2019 while they have decreased in NSW. In all other jurisdictions, gas prices have remained unchanged.

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 around \$505 for this consumption level.

¹⁴ In Victoria and NSW, the standing offer price is based on the average retail standing offer in each network area. For July 2019 and 2020 it is based on the VDO in Victoria. 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 2020, 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 2020, 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 2020 as estimated annual bills (nominal, incl GST) for gas regulated/standing offers, 30,000Mj per annum.¹⁵



¹⁵ 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 2019 and 2020, 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 2020 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. The electricity bill-stack

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. As retail prices were deregulated in Victoria, South Australia, NSW and Queensland until July 2019, effective competition was required to ensure that households did not pay more than necessary for both generation (wholesale) and retail services (including retail margins). With the re-regulation of retail markets in July 2019, however, the regulatory decisions impact on the bill-stack for standing offer (DMO and VDO) while the market offers still reflect the competitive pressures. This section therefore seeks to explore the cost of each component for each jurisdiction, as well as differences between the types of offers.

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. **With the introduction of the DMO/VDO in NSW, South East Queensland, South Australia and Victoria in July 2019, however, prices decreased significantly in these jurisdictions. In Victoria, prices have since increased while they have decreased further in NSW, South East Queensland and South Australia.**

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 2019, the decreases were significant in NSW’s Ausgrid network. Decreases also occurred in Victoria’s United Energy and Jemena networks, as well as in Tasmania and in NSW’s Endeavour network. In South Australia, however, NUOS charges increased for the third year in a row. In 2020, the NUOS charges increased the most in the Victorian networks while the increases were more modest in NSW, Queensland and the ACT. In South Australia and Tasmania, on the other hand, the NUOS charges decreased.

Chart 3 also shows that the NUOS 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). The difference between NUOS costs in the various networks has slightly decreased since last year. Currently an annual “NUOS bill”, for this consumption level, is \$478 more in SA Power Networks compared to Citipower. By contrast, the difference was as high as \$987 in 2012.

CHART 3 | NUOS charges from July 2009 to July 2020 as estimated annual cost (GST exclusive) for households using 6,000kWh per annum, single rate.¹⁶

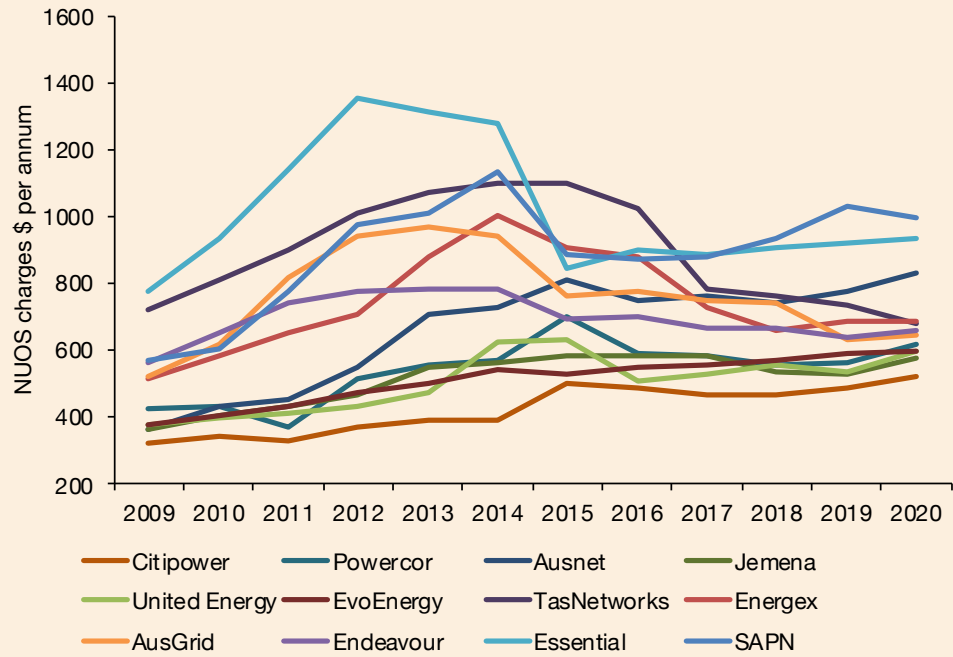


Chart 4 below looks at NUOS charges as a proportion of total bill. It shows that the NUOS proportion of electricity bills is now highest in South Australia (SAPN) and in NSW’s Essential network. Since last year, the NUOS proportion has increased in Powercor, United Energy, EvoEnergy, Energex, Ausgrid, Endeavour, Essential and SAPN while it has remained stable in Citipower, Ausnet and Jemena. In Tasmania, the NUOS proportion of bills has decreased. **In South Australia (SAPN) and in NSW’s Essential network, the NUOS accounts for 39% of electricity bills, whereas in Melbourne (Citipower), the NUOS component of bills is as low as 27%.**

¹⁶ 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.

CHART 4 | NUOS charges (excl GST) from July 2009 to July 2020 as proportion (%) of annual retail bill (incl. GST) for electricity selected regulated/standing offers, 6,000kWh per annum, single rate¹⁷

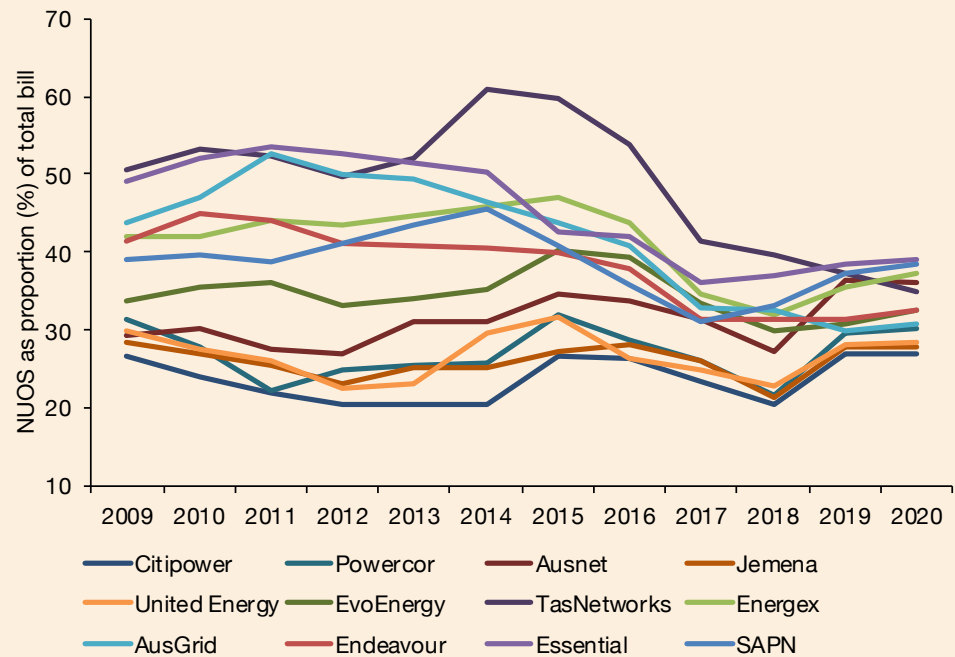
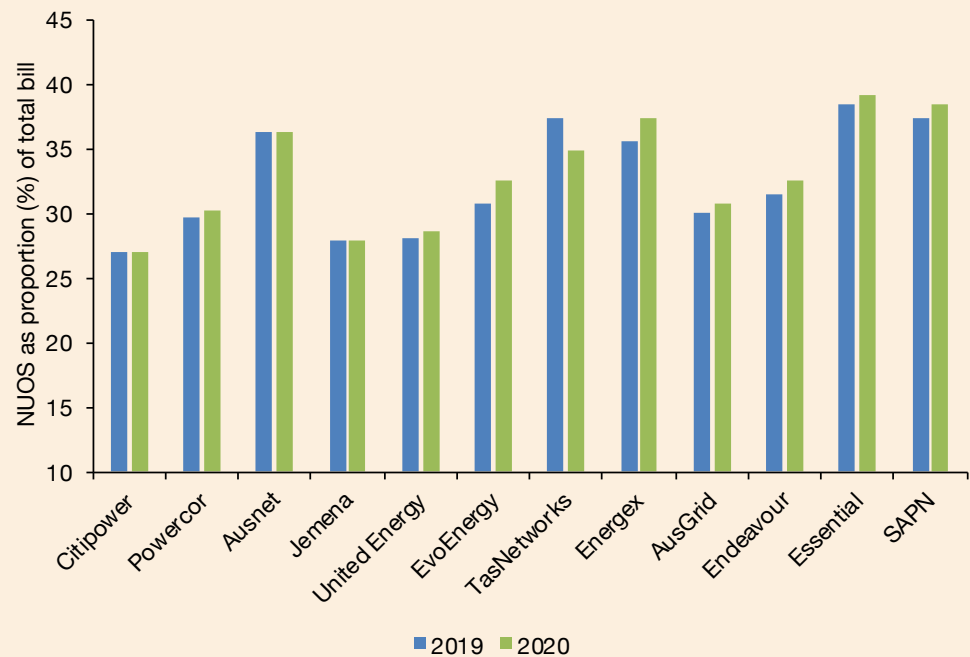


Chart 5 compares the NUOS proportion of bills in July 2019 to July 2020. It shows that the biggest decreases occurred in Tasmania (around 2%). The largest increases, also around 2%, occurred in the ACT (EvoEnergy) and Queensland (Energex).

CHART 5 | NUOS charges (excl GST) from July 2019 and July 2020 as proportion (%) of annual retail bill (incl. GST) for electricity selected regulated/standing offers, 6,000kWh per annum, single rate.¹⁸



¹⁷ In Victoria the standing offer bill is based on the average incumbent (AGL, Origin and Energy Australia) standing offer as of July every year and the VDO since July 2019. 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) since July 2014. 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.

¹⁸ Ibid.

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 2020.

While we do not know exactly what retailers pay for wholesale energy we have relied on the AEMC’s latest annual price trend report and based the wholesale cost component on the 2020/21 estimate.¹⁹ We do stress, however, that wholesale prices have significantly decreased in recent months. The Australian Energy Market Operator’s (AEMO) most recent quarterly report states that NEM spot prices declined by 45-48% compared to the same quarter (September quarter) last year and are at their lowest level since 2014.²⁰ For the purpose of consistency, we continue to use the AEMC’s price trend data for estimated wholesale costs but note that the wholesale component of bills may be lower than what this analysis presents. While many retailers would have entered into contracts prior to the decline in wholesale prices and that consumers are more likely to benefit from lower prices in the medium term, we note that AEMO has reported a quarterly average price of \$40/MWh in South Australia, \$32/MWh in Queensland and \$46/MWh in NSW (which means there is a similar quarterly average for the ACT).²¹ These prices are significantly lower than the estimates shown in Table 1 below.

TABLE 1 | Estimated electricity wholesale costs (\$/MWh)

	2020/21 \$/MWh
ACT	103.3
NSW	105
Queensland	90.4
South Australia	152.3
Tasmania	86.9
Victoria*	110.4

* As the Victorian price trends are reported by calendar year instead of financial year, this is the average of the 2020 and 2021 forecasts.

The AEMC’s Residential Electricity Price Trends report have also been used as a source to estimate “green scheme” costs.²² Table 2 below shows the cost of “green schemes” used for this analysis.

TABLE 2 | Estimated “Green scheme” costs (c/kWh)

	c/kWh
ACT	3.06
NSW	1.64
Queensland	1.11
South Australia	2.83
Tasmania	1.56
Victoria*	1.87

* As the Victorian price trends are reported by calendar year instead of financial year, this is the average of the 2020 and 2021 forecasts.

¹⁹ Based on AEMC, 2019 Residential Electricity Price Trends data (EPR0064), Data available at <https://www.aemc.gov.au/news-centre/data-portal/price-trends-2019>

²⁰ AEMO, Quarterly Energy Dynamics Q3 2020, 21 October 2020, 3. Note that this issue was also raised in ECA, Analysis of small business retail energy bills in Australia, Final report, December 2020 (forthcoming)

²¹ Ibid, 10

²² See AEMC, 2018 Residential Electricity Price Trends, Databook 2018, EPR 0064.

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, 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 \$270 (in the ACT’s EvoEnergy network and South Australia’s SAPN network) and as high as \$520 (in NSW’s Ausgrid network).²³

TABLE 3 | Deduction of bill components for regulated/standing offers, average annual bill based on offers taking effect post July 2020 (6,000kWh per annum, single rate)²⁴

	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”	Retail bill excl. GST, NUOS, wholesale, “green scheme” costs and smart meter costs ^{***}
Citipower	1,922	1,747	1,229	566	454	377
Powercor	2,043	1,858	1,239	577	465	389
Ausnet	2,297	2,088	1,255	593	481	432
Jemena	2,052	1,865	1,292	629	517	431
UE	2,092	1,902	1,304	642	530	472
EvoEnergy	1,844	1,676	1,076	456	273	
Tasnetworks	1,942	1,765	1,087	566	472	
Energex	1,843	1,675	986	444	377	
Ausgrid	2,082	1,893	1,251	621	522	
Endeavour	2,023	1,839	1,181	551	453	
Essential	2,387	2,170	1,235	605	507	
SAPN	2,586	2,351	1,354	440	271	

[^] As per chart 4 above

^{*} As per chart 3 above

^{^^}As per table 1 above

^{**} As per table 2 above

^{***}Based on AER estimated AMI charges for 2020²⁵

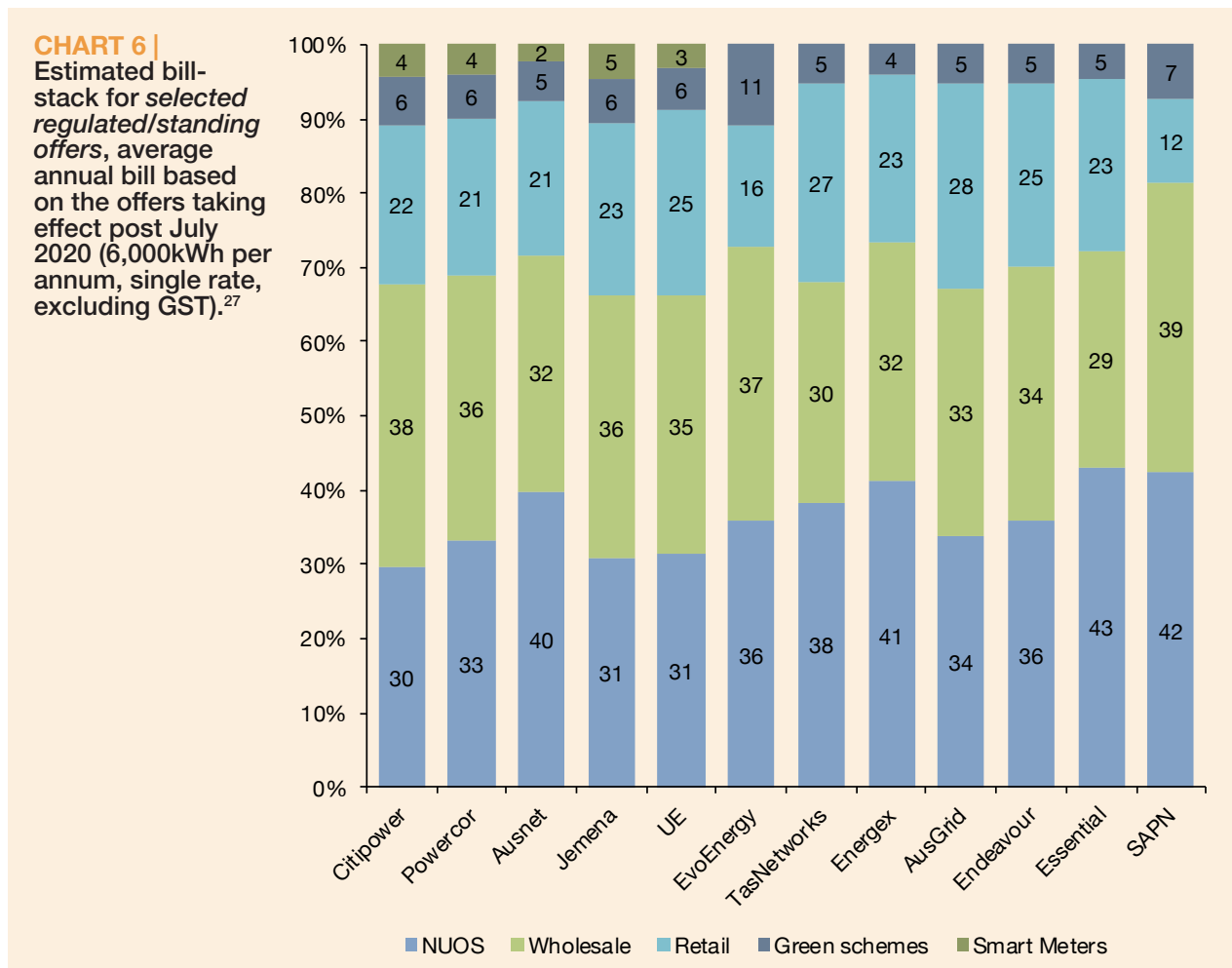
Chart 6 below is based on the same calculations presented in table 3 above but shows the various bill components as a percentage of the total bill. Our estimates show that between 12-28% of the

²³ Note that other charges such as separate metering costs, market fees and ancillary service fees as well as losses have not been accounted for in this bill-stack.

²⁴ This table is based on the same offers used for July 2020 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

²⁵ To estimate the impact of the Victorian smart meter rollout on the bill-stack, we used AER’s indicative average annual metering bill for 2019. See table 1-2 in AER, *Advanced Metering Infrastructure*, Transition charges applications, Final Decision (December 2016)

bills paid by households goes to the retailer, which is a similar to last year.²⁶ The retail component continues to be proportionally lower than the network charges (NUOS) in all network areas. In Victoria’s Ausnet network, Tasmania, Queensland’s Energex network, NSW and South Australia, the NUOS is the largest bill component. **The ACT (EvoEnergy) has the highest “green scheme” costs, accounting for 11% of the total bill.**



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. A longstanding feature of market offers in the NEM retail markets have been to offer a discount on the published rates. After the introduction of the DMO/VDO, however, the number of offers with additional discounts, and especially conditional pay on time discounts, have reduced significantly. Instead, many retailers now apply different base rates to their market offers.

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 2020.²⁸ 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

²⁶ Cost of retail includes both retail costs and margins (profits) and we stress that some of the cost components are based on estimates rather than actual known costs.

²⁷ This chart is based on the calculation used for table 3 above

²⁸ These market offers were collected in mid-July 2020.

are as low as -\$35 in South Australia (SAPN) and as high as \$470 in Tasmania (Tasnetworks).²⁹ As mentioned above, however, the wholesale costs are likely to be overestimated in this analysis and the negative residual component in South Australia does not mean that the retailers do not have costs or a margin in this jurisdiction. Although it can indicate that the retail costs/margins are lower in South Australia compared to other jurisdictions. By comparing these figures to the regulated/standing offers examined in table 3 above, we can see that the retail component of bills still varies between regulated/standing offers and market offers (including pay on time discounts) in most network areas.

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 2020 (6,000kWh per annum, single rate)³⁰

	Retail bill incl. GST [^]	Retail bill excl. GST	Retail bill excl. GST and NUOS [*]	Retail bill excl. GST, NUOS and whole-sale ^{^^}	Retail bill excl. GST, NUOS, wholesale and “green scheme”	Retail bill excl. GST, NUOS, wholesale, “green scheme” costs and smart meter costs ^{***}
Citipower	1,768	1,607	1,089	427	314	237
Powercor	1,880	1,709	1,091	428	316	240
Ausnet	2,105	1,914	1,082	419	307	258
Jemena	1,880	1,709	1,135	473	361	275
UE	1,918	1,744	1,146	483	371	314
EvoEnergy	1,547	1,406	806	187	3	
Tasnetworks	1,942	1,765	1,087	566	472	
Energex	1,640	1,491	802	259	193	
Ausgrid	1,749	1,590	948	318	220	
Endeavour	1,740	1,582	924	294	195	
Essential	2,053	1,866	931	301	203	
SAPN	2,249	2,045	1,048	135	-35	

[^] Based on market offers available post July 2020 (including guaranteed and pay on time discounts) offered by the same retailers included in the analysis of standing/regulated offers (table 3)

^{^^}As per table 1 above.

^{**}As per table 2 above

^{***}Based on AER estimated AMI charges for 2020³¹

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.³²

²⁹ 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.

³⁰ 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.

³¹ To estimate the impact of the Victorian smart meter rollout on the bill-stack, we used AER’s indicative average annual metering bill for 2020. See table 1-2 in AER, *Advanced Metering Infrastructure, Transition charges applications*, Final Decision (December 2016)

³² 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 2020 (6,000kWh per annum, single rate, excluding GST).³³

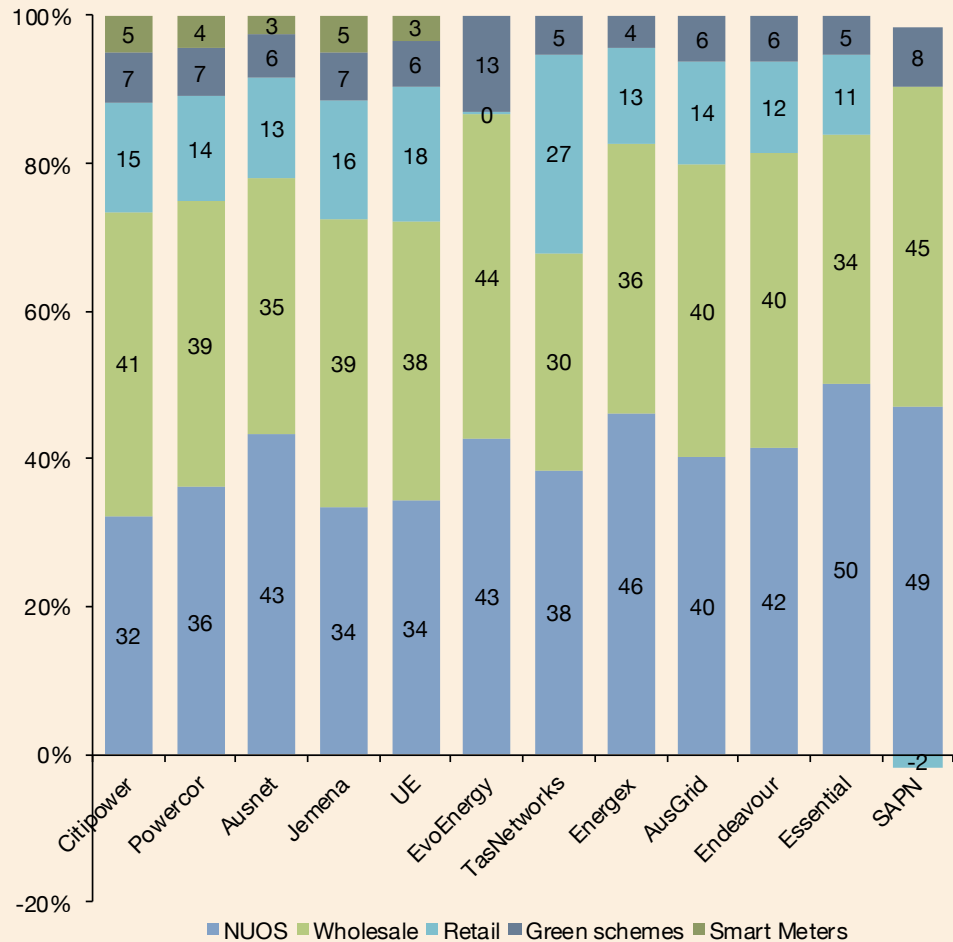


Chart 7 above shows that the retail component of bills is smaller for market offers (if customers pay on time and thus receive a discount) compared to standing/regulated offers in most jurisdictions (see chart 6). Furthermore, the retail component lower in some South Australia, NSW and Queensland, compared to one year ago (July 2019). As the retail component in South Australia and the ACT is estimated to be negative or zero, we note that the wholesale prices in South Australian have recently reduced significantly (which is not yet reflected in the AEMC figures) and that the ACT calculation is based on ActewAGL’s market offer which includes a 25% pay on time discount. If customers are unsuccessful in obtaining this discount, however, the retail component of the bill would be similar to that of the standing offer (16%).

³³ This chart is based on the calculation used for table 4 above

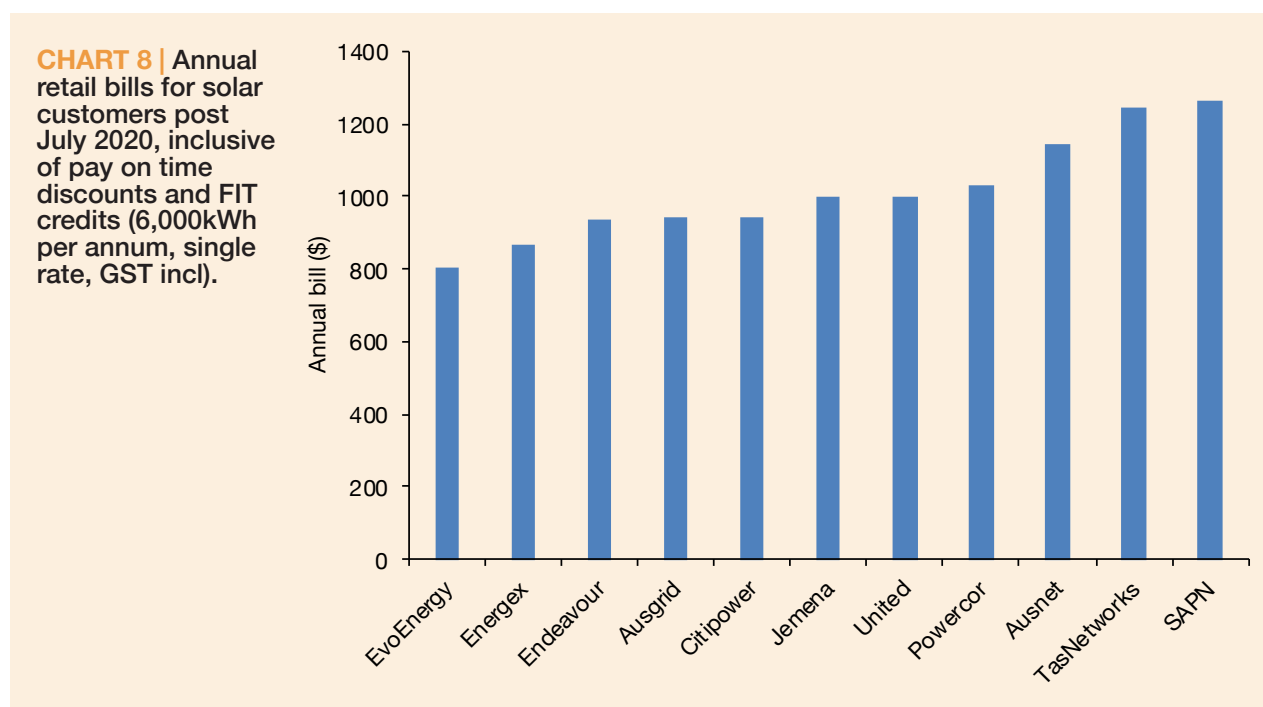
3. Solar offers

This year was the fifth 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 systems³⁴

Capital cities	Annual generation per kW installed	Export rates (%)
Adelaide	1.680 MWh	51.8%
Brisbane	1.736 MWh	53.4%
Melbourne	1.539 MWh	47.4%
Hobart	1.185 MWh	47.4%
Canberra	1.801 MWh	55.1%
Sydney	1.614 MWh	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.³⁵ 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.



³⁴ 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 Alvis Consulting (Alvis 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.

³⁵ 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 9 compares annual bills for non-solar customers and solar customers. It shows that the greatest bill difference is in South Australia (\$1,060) while the smallest difference is in Tasmania (\$660). Compared to last year (July 2019), however, the difference between solar and non-solar bills have become smaller in many networks. In South Australia, for example, the difference was \$1,255 in July 2019, almost \$200 more than this year.

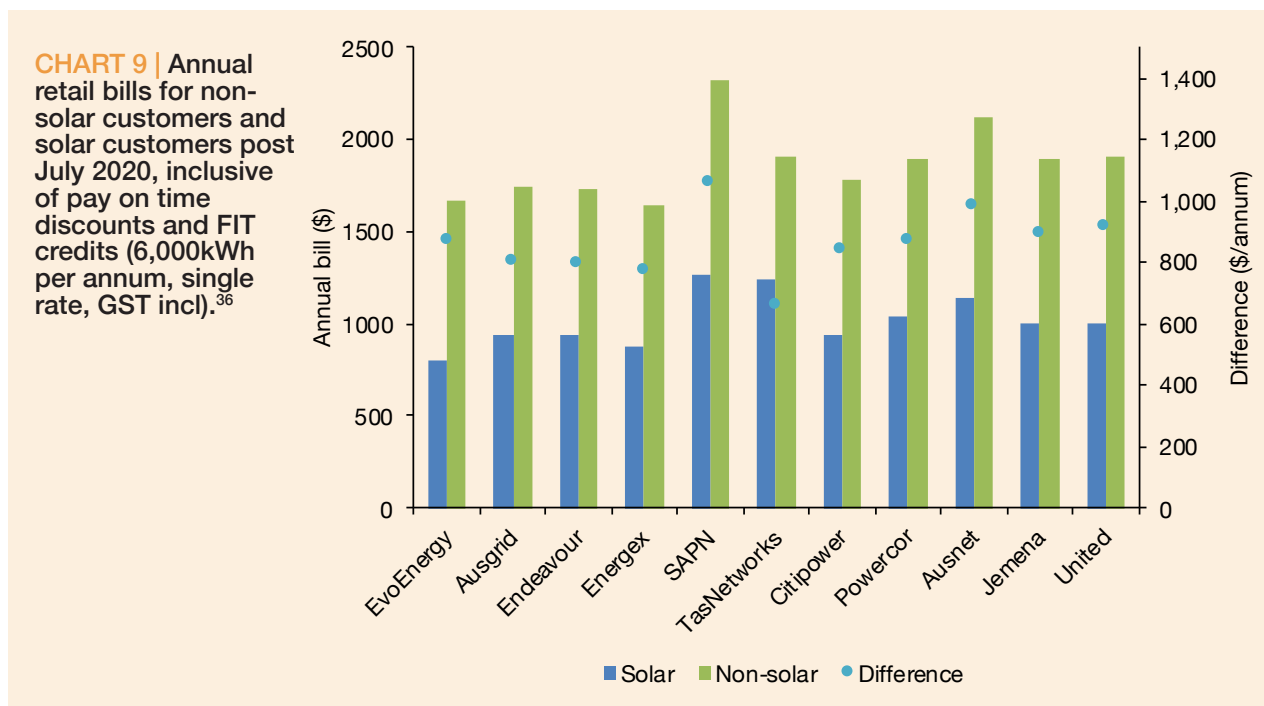
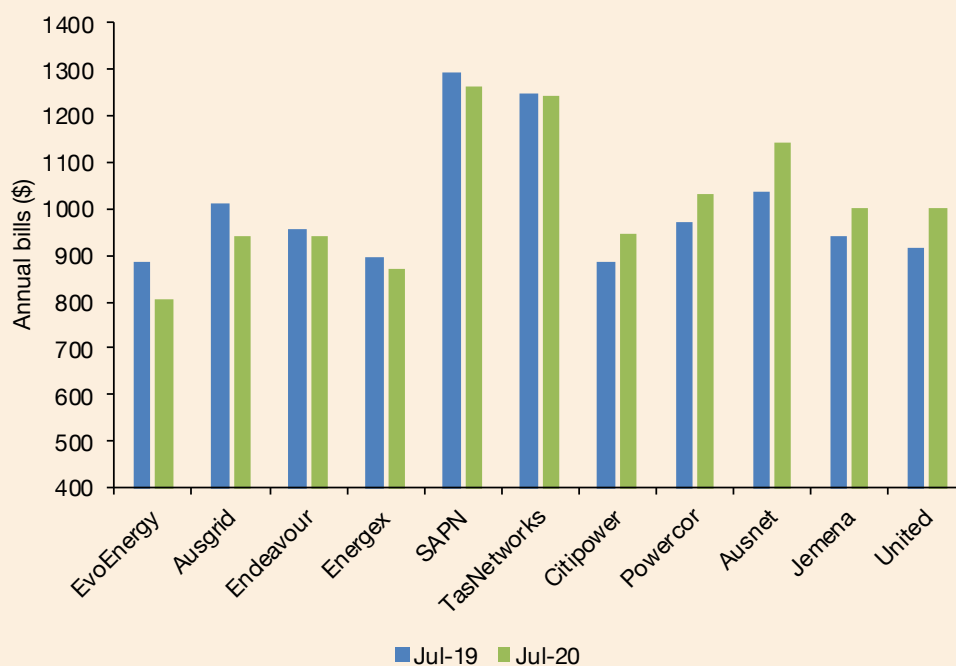


Chart 10 below compares solar bills as of July 2019 to bills as of July 2020. It shows that the annual bills for solar customers in Victoria have increased by approximately by \$60 - \$100 per annum (depending on network area). In the ACT (EvoEnergy) and NSW’s Ausgrid network, on the other hand, solar bills have decreased by \$80 and \$65 respectively. Tasmania, NSW’s Endeavour network, Queensland (Energex) and South Australia (SAPN) have had smaller decreases.

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.

CHART 10 | Annual retail bills for solar customers post July 2019 and 2020, inclusive of pay on time discounts and FIT credits (6,000kWh per annum, single rate, GST incl).³⁷



The difference in South Australia is partly explained by retailers, on average, offering one of the highest FIT rates (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 | Assumptions: Generation capacity and export (%) in capital cities, 3 kW systems

Jurisdiction	Average annual FIT credit (\$)
ACT	\$307
South Australia	\$279
Queensland	\$266
Victoria	\$252
New South Wales	\$242
Tasmania	\$185

Table 7 below deducts estimated cost components from the annual retail market offer bill (including pay on time discounts) for households with 3kW systems installed and using 6,000kWh per annum post July 2020.³⁸ 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 negative in all network areas except Tasmania (Tasnetworks) and Victoria’s United Energy network.³⁹ As discussed in section 2 above, the recent decreases to wholesale prices means that the wholesale costs are likely to be overestimated for solar customers as well as non-solar customers. **Still a comparison of the residual amount for non-solar households to solar**

³⁷ 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.

³⁸ These market offers were collected in mid-July 2020.

³⁹ Note that other charges such as separate metering fees, market fees and ancillary service fees as well as losses have not been accounted for in this bill-stack.

households, indicates that there is a significant cross subsidy in the retail component from non-solar households to solar households.

TABLE 7 | Deduction of bill components for selected market offers (including pay on time discounts), average annual bill based on offers taking effect post July 2020 (6,000kWh per annum, single rate)⁴⁰

	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"	Retail bill excl. GST, NUOS, wholesale, "green scheme" costs and smart meter costs ^{***}
Citipower	936	851	505	111	44	-33
Powercor	1,022	929	505	111	44	-31
Ausnet	1,120	1,019	495	102	35	-14
Jemena	992	901	536	142	76	-10
UE	1,029	935	568	174	108	50
EvoEnergy	805	731	327	-42	-151	
Tasnetworks	1,288	1,171	646	287	222	
Energex	886	805	320	-3	-43	
Ausgrid	868	789	351	-25	-84	
Endeavour	1,015	922	242	-133	-192	
SAPN	1,249	1,136	474	-70	-171	

[^] Based on market offers available post July 2020 (including guaranteed and pay on time discounts) offered by the same retailers included in the analysis of standing/regulated offers (table 3)

^{^^}As per table 1 above.

^{**}As per table 2 above

^{***}Based on AER estimated AMI charges for 2020⁴¹

⁴⁰ 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..

⁴¹ To estimate the impact of the Victorian smart meter rollout on the bill-stack, we used AER's indicative average annual metering bill for 2019. See table 1-2 in AER, *Advanced Metering Infrastructure, Transition charges applications*, Final Decision (December 2016)

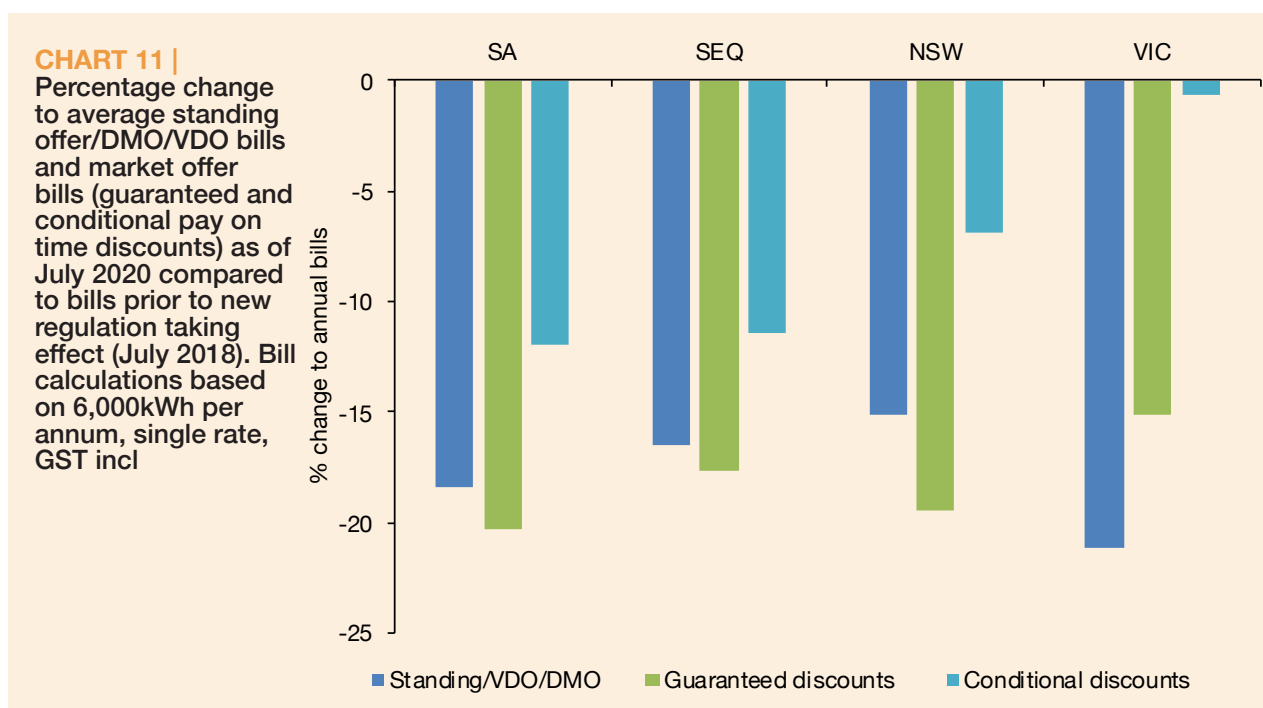
4. Impact of DMO and VDO

The re-regulation of the retail markets in NSW, South East Queensland, South Australia and Victoria in July 2019 had an immediate impact on prices, price dispersion and market offer features such as discounting. This section looks at price changes and price dispersion in relation to the regulated offers and market offers, price dispersion between the “big 3” retailers⁴² and changes to all retailers’ discounts, as well as, base rates.

4.1 Price changes and dispersion – regulated vs. market offers

This section compares the regulated DMO/VDO bills to market offer bills including guaranteed discounts as well as conditional discounts. It also shows changes to standing and market offers as the new regulations took effect. Chart 11 below shows that **standing offers, on average, have decreased by 18% in South Australia, 16% in South East Queensland, 15% in NSW and 21% in Victoria after the DMO/VDO took effect in July 2019.**⁴³ The reduction to average market offer bills, however, has been lower, especially for bills inclusive of conditional pay on time discounts. In Victoria, the average market offer bill inclusive of conditional pay on time discounts has only decreased by 1% while it reduced by 7% in NSW, 11% in South East Queensland and 12% in South Australia.

This means that customers previously on highly discounted market offers may not experience the price reduction that standing offer customers have post July 2019.



In NSW, the average DMO bill for households using 6,000 kWh per annum is currently 13-16% less (depending on network area) than the average standing offer bill in July 2018. **For market offers inclusive of conditional pay on time discounts, however, the average bill has decreased by 9% in Ausgrid, 7% in Endeavour and 5% in Essential.** See charts 12 - 14.

⁴² The “big three” retailers are AGL, Energy Australia and Origin Energy

⁴³ The chart compares average bills (across all retailers/network areas) for household using 6,000 kWh/annum as of July 2020 to bills prior to the DMO and VDO taking effect (billing data collected in January 2019 for Victoria and July 2018 for other jurisdictions)

CHART 12 | NSW (Ausgrid), change (\$) to average standing offer/DMO/VDO bills and market offer bills (guaranteed and conditional pay on time discounts) as of July 2020 compared to bills prior to new regulation taking effect (July 2018). Bill calculations based on 6,000kWh per annum, single rate, GST incl

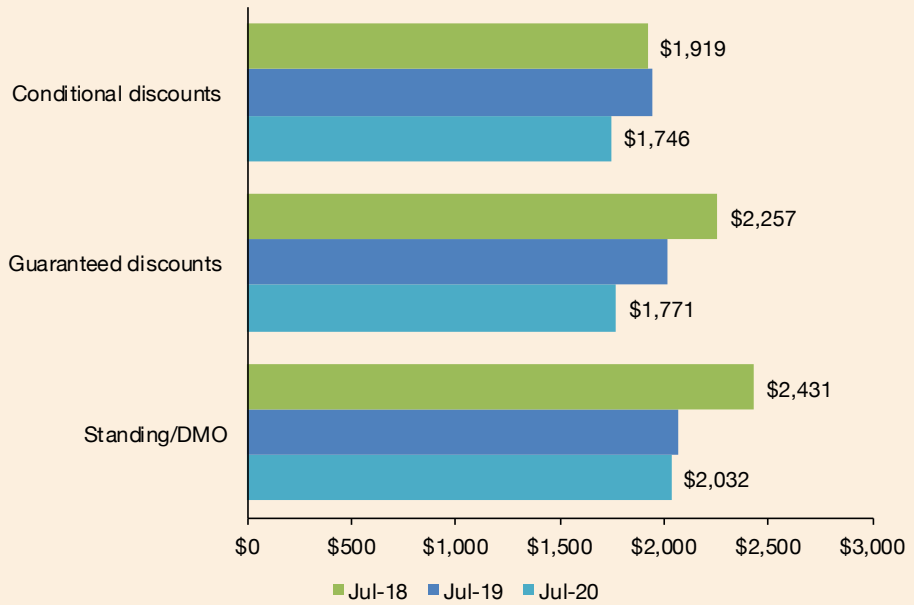


CHART 13 | NSW (Endeavour), change (\$) to average standing offer/DMO/VDO bills and market offer bills (guaranteed and conditional pay on time discounts) as of July 2020 compared to bills prior to new regulation taking effect (July 2018). Bill calculations based on 6,000kWh per annum, single rate, GST incl

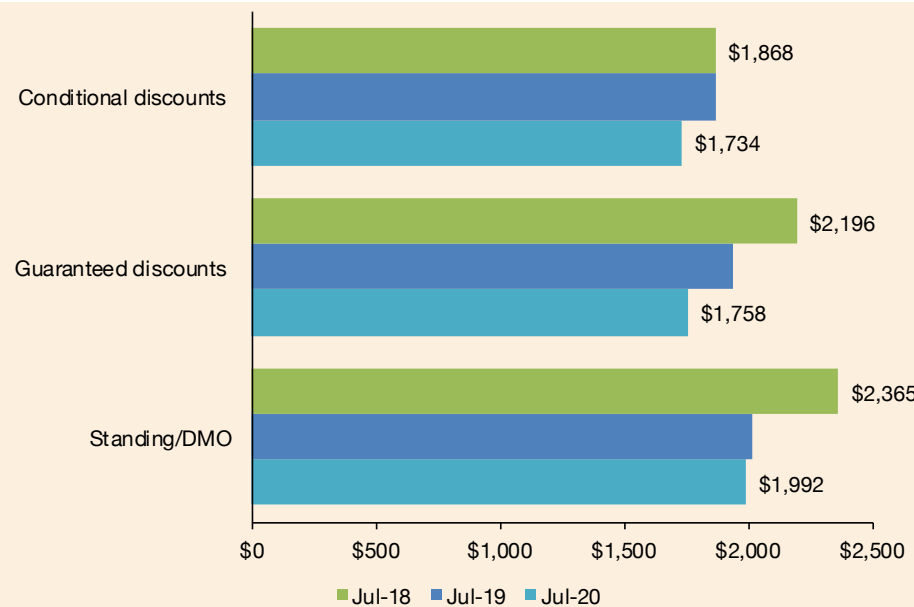
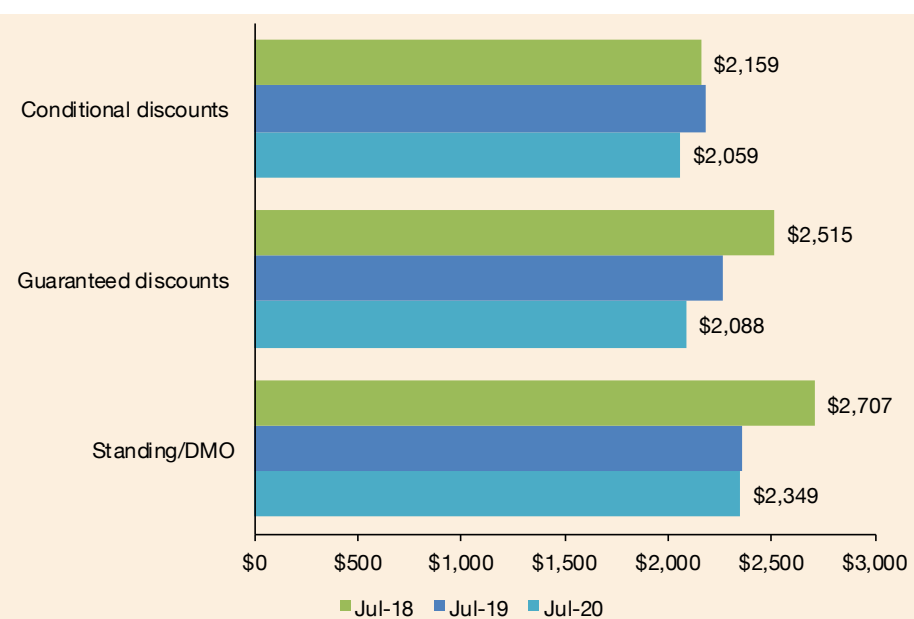


CHART 14 | NSW (Essential), change (\$) to average standing offer/DMO/VDO bills and market offer bills (guaranteed and conditional pay on time discounts) as of July 2020 compared to bills prior to new regulation taking effect (July 2018). Bill calculations based on 6,000kWh per annum, single rate, GST incl



Charts 15 - 17 below show standing offers as of July 2018, DMO offers as of July 2020, market offers inclusive of guaranteed discounts as of July 2020 and market offers inclusive of conditional pay on time discounts as of July 2020 for each network area. They show that the vast majority of the current DMO offers produce annual bills that are lower than the best standing offers as of July 2018. Furthermore, they show that **as of July 2020, the best value offers in each network area are market offers (both with guaranteed and conditional discounts) and not DMO offers.** That said, some market offers produce higher bills than the best DMO in each of the network areas. In Ausgrid, households on the worst market offer would be \$385 per annum better off on the best DMO, in Endeavour they would be \$460 better off and in the Essential network, the difference between the worst market offer and the best DMO is around \$440.

CHART 15 | NSW (Ausgrid), Annual standing offer bills as of July 2018, annual DMO bills as of July 2020, annual market offer bills (guaranteed and conditional pay on time discounts) as of July 2020. Offers shown from lowest to highest for each category. Bill calculations based on 6,000kWh per annum, single rate, GST incl

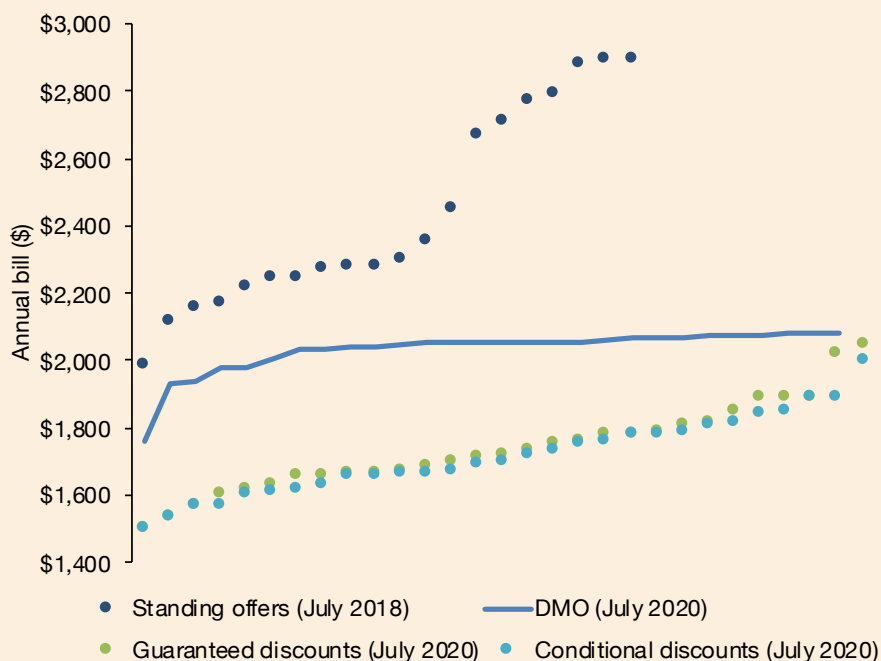


CHART 16 | NSW (Endeavour), Annual standing offer bills as of July 2018, annual DMO bills as of July 2020, annual market offer bills (guaranteed and conditional pay on time discounts) as of July 2020. Offers shown from lowest to highest for each category. Bill calculations based on 6,000kWh per annum, single rate, GST incl

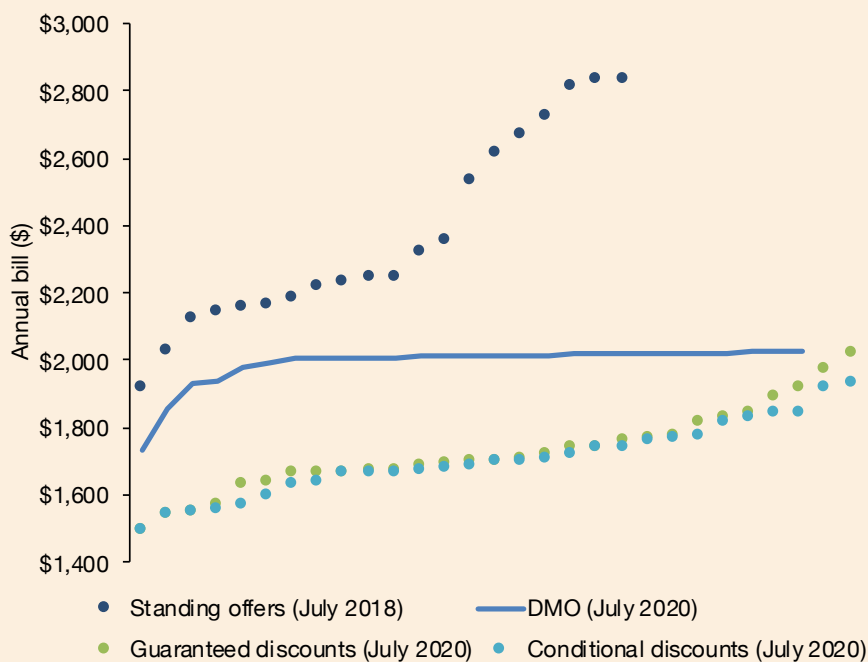
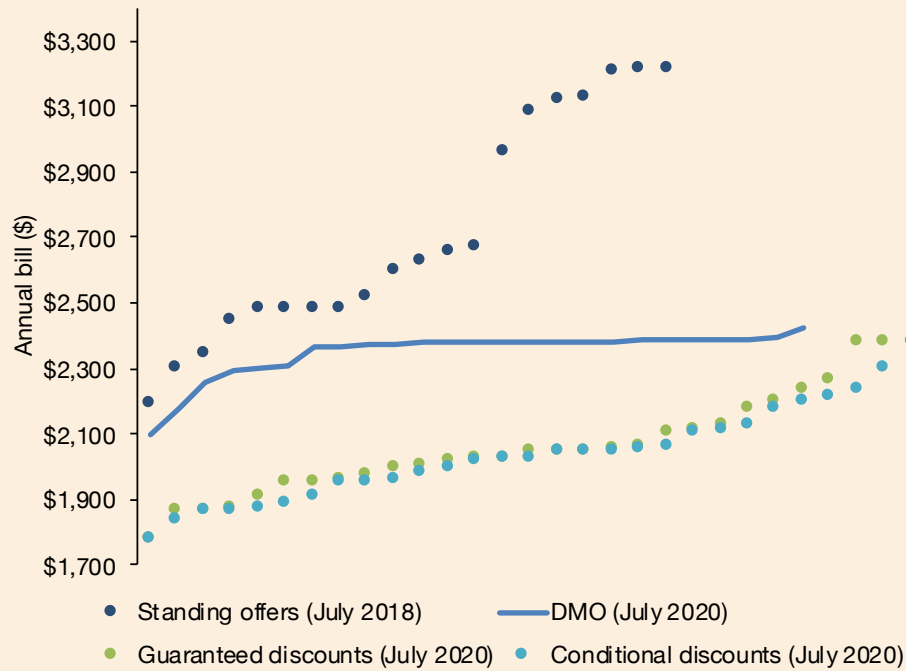


CHART 17 | NSW (Essential), Annual standing offer bills as of July 2018, annual DMO bills as of July 2020, annual market offer bills (guaranteed and conditional pay on time discounts) as of July 2020. Offers shown from lowest to highest for each category. Bill calculations based on 6,000kWh per annum, single rate, GST incl



In Queensland’s Energex network, the average DMO bill for households using 6,000 kWh per annum is 16% less than the average standing offer bill in July 2018. For market offers inclusive of conditional pay on time discounts, however, the average bill has decreased by 11%. See chart 18.

CHART 18 | Queensland (Energex), change (\$) to average standing offer/ DMO/VDO bills and market offer bills (guaranteed and conditional pay on time discounts) as of July 2020 compared to bills prior to new regulation taking effect (July 2018). Bill calculations based on 6,000kWh per annum, single rate, GST incl

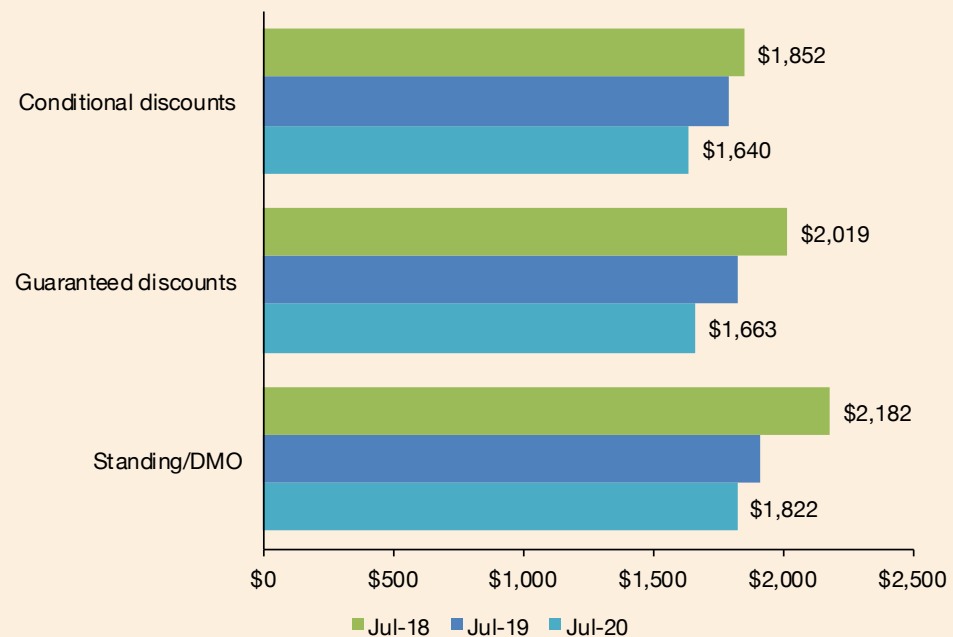
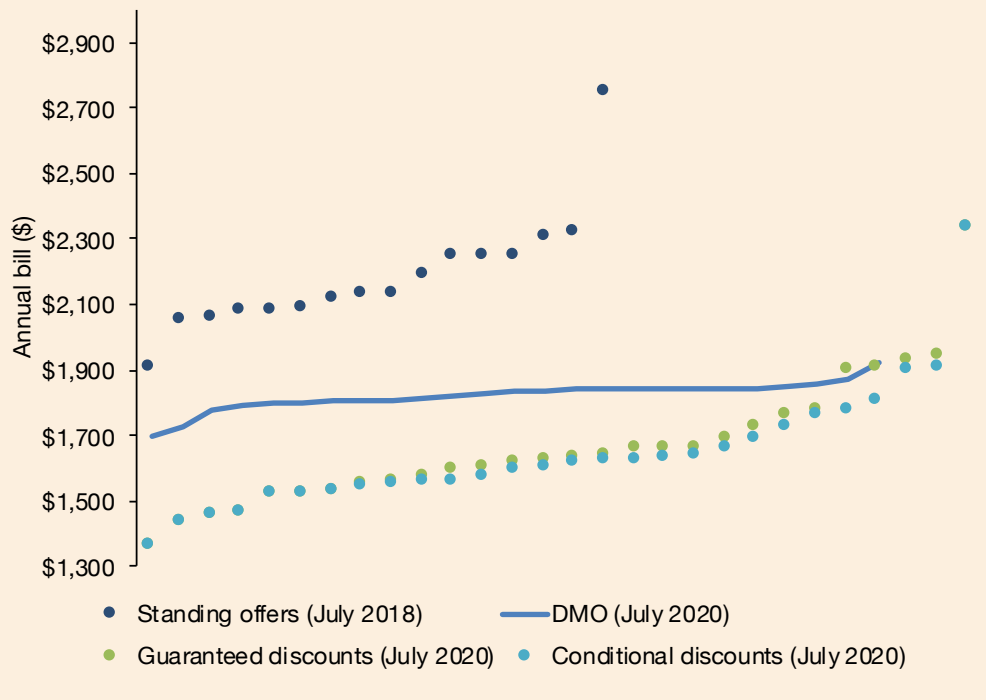


Chart 19 below shows that all but one of the current DMO offers produce annual bills that are lower than the best standing offers as of July 2018. Furthermore, it shows that as of July 2020, the best value offers are market offers (both with guaranteed and conditional discounts) and not DMO offers. However, as in NSW, some market offers produce significantly higher bills than the best DMO. Households on the worst market offer would be \$630 per annum better off on the best DMO. Finally, **we note that the price dispersion is significantly lower for the current DMO compared to standing offers as of July 2018 (prior to the DMO taking effect).**

CHART 19 | Queensland (Energex), Annual standing offer bills as of July 2018, annual DMO bills as of July 2020, annual market offer bills (guaranteed and conditional pay on time discounts) as of July 2020. Offers shown from lowest to highest for each category. Bill calculations based on 6,000kWh per annum, single rate, GST incl



In South Australia, the average DMO bill for households using 6,000 kWh per annum is 18% less than the average standing offer bill in July 2018. For market offers inclusive of conditional pay on time discounts, however, the average bill has decreased by 12%. See chart 20.

CHART 20 | South Australia (SAPN), change (\$) to average standing offer/DMO/VDO bills and market offer bills (guaranteed and conditional pay on time discounts) as of July 2020 compared to bills prior to new regulation taking effect (July 2018). Bill calculations based on 6,000kWh per annum, single rate, GST incl

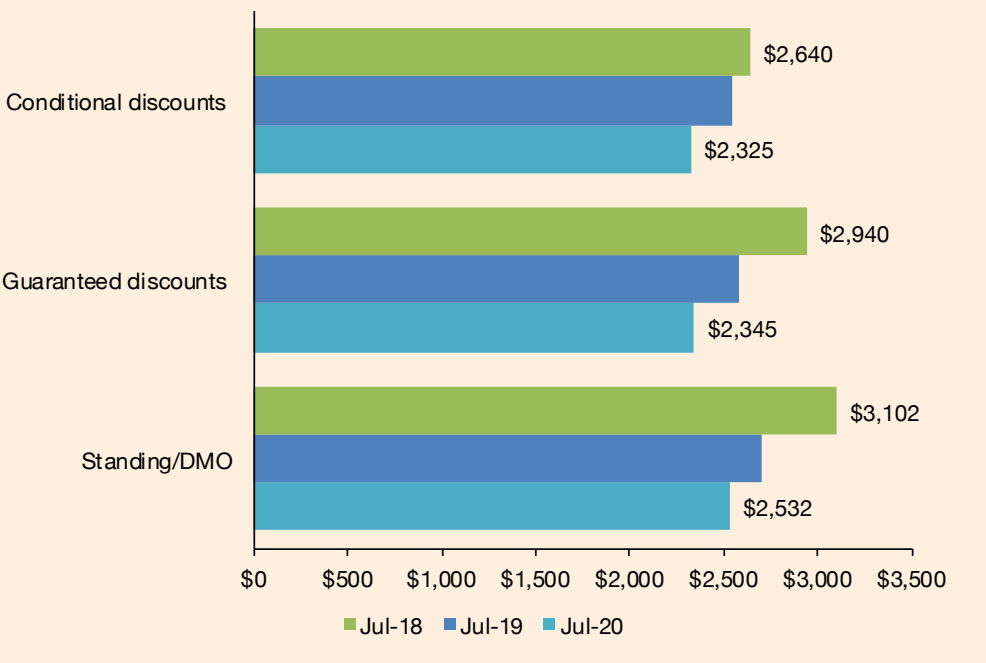
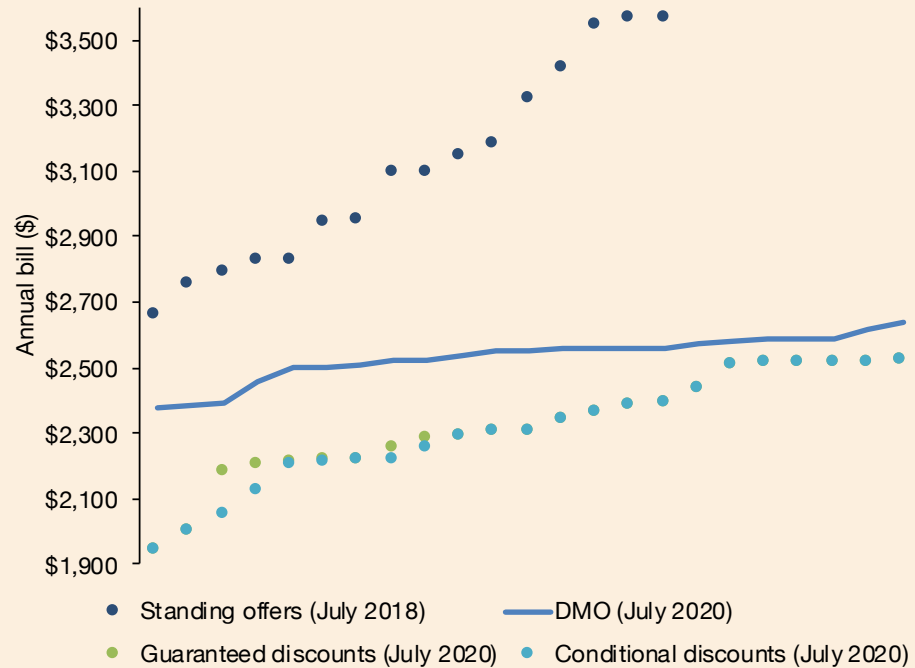


Chart 21 below shows that all of the current DMO offers produce annual bills that are lower than the best standing offers as of July 2018. Furthermore, it shows that as of July 2020, the best value offers are market offers (both with guaranteed and conditional discounts) and not DMO offers. However, as in NSW and Queensland, some market offers produce higher bills than the best DMO. **Households on the worst market offer would be \$370 per annum better off on the best DMO.** We note that the price dispersion is significantly lower for the current DMO compared to standing offers as of July 2018 (prior to the DMO taking effect) in South Australia as well.

CHART 21 | South Australia (SAPN), Annual standing offer bills as of July 2018, annual DMO bills as of July 2020, annual market offer bills (guaranteed and conditional pay on time discounts) as of July 2020. Offers shown from lowest to highest for each category. Bill calculations based on 6,000kWh per annum, single rate, GST incl



In Victoria, the current VDO bill for households using 6,000 kWh per annum is 18-24% less (depending on network area) than the average standing offer bill in January 2019. For market offers inclusive of conditional pay on time discounts, however, the average bill has increased in United Energy (3%) and Citipower (1%), while it has decreased slightly in the other networks (3% in Powercor, 2% in Ausnet and 1% in Jemena). See charts 22 - 26.

CHART 22 | Victoria (Citipower), change (\$) to average standing offer/ DMO/VDO bills and market offer bills (guaranteed and conditional pay on time discounts) as of July 2020 compared to bills prior to new regulation taking effect (July 2018). Bill calculations based on 6,000kWh per annum, single rate, GST incl

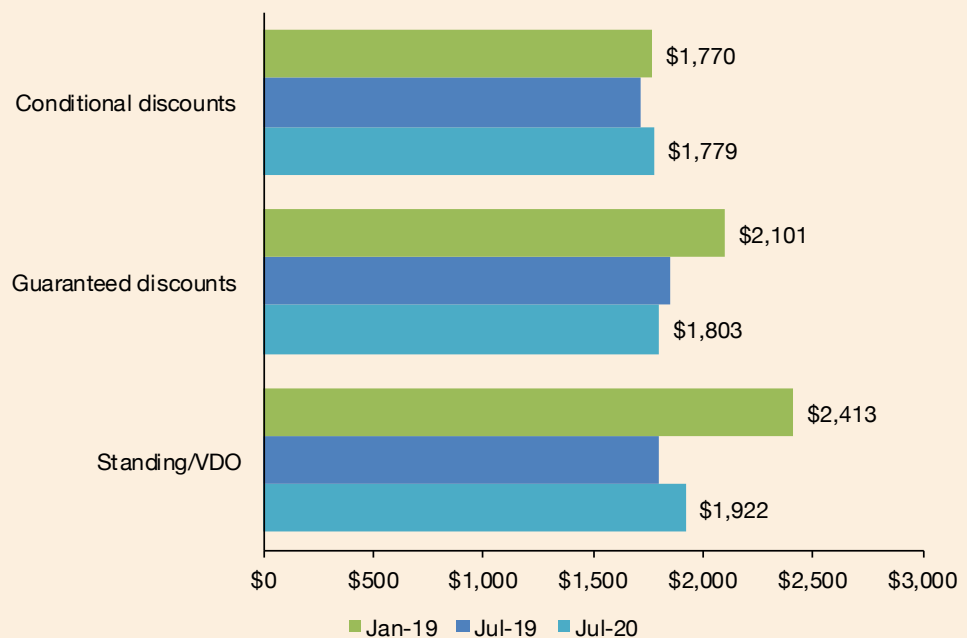


CHART 23 | Victoria (Powercor), change (\$) to average standing offer/DMO/VDO bills and market offer bills (guaranteed and conditional pay on time discounts) as of July 2020 compared to bills prior to new regulation taking effect (July 2018). Bill calculations based on 6,000kWh per annum, single rate, GST incl

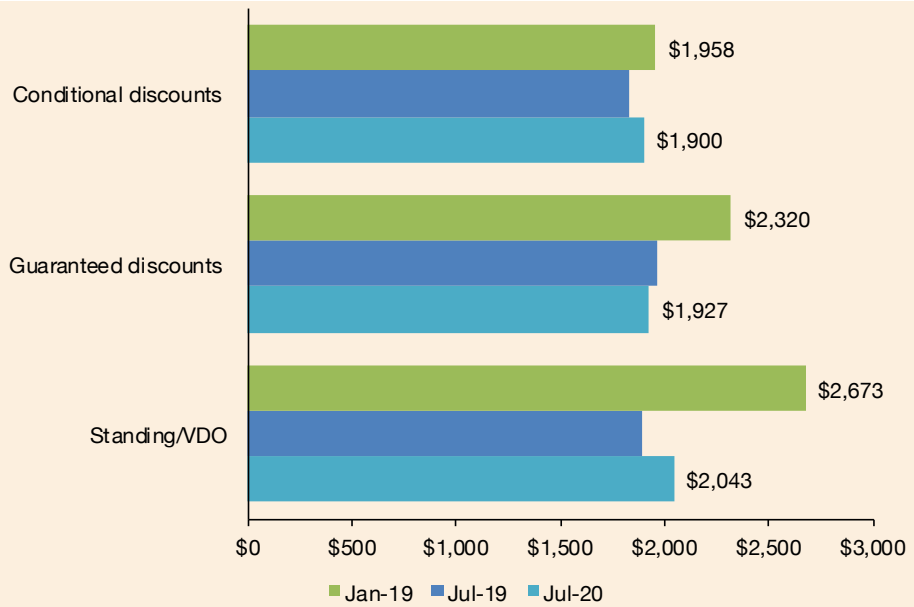


CHART 24 | Victoria (Ausnet), change (\$) to average standing offer/DMO/VDO bills and market offer bills (guaranteed and conditional pay on time discounts) as of July 2020 compared to bills prior to new regulation taking effect (July 2018). Bill calculations based on 6,000kWh per annum, single rate, GST incl

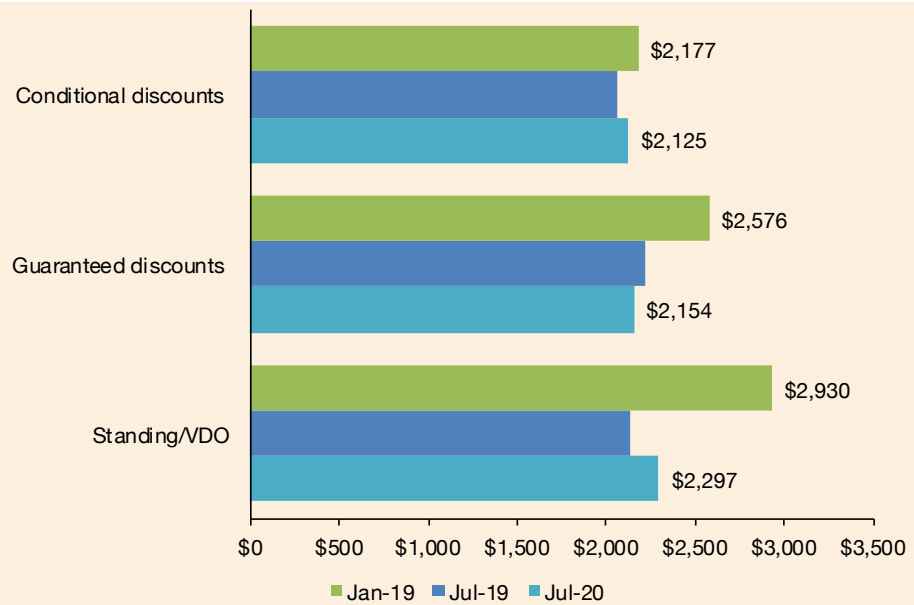


CHART 25 | Victoria (Jemena), change (\$) to average standing offer/DMO/VDO bills and market offer bills (guaranteed and conditional pay on time discounts) as of July 2020 compared to bills prior to new regulation taking effect (July 2018). Bill calculations based on 6,000kWh per annum, single rate, GST incl

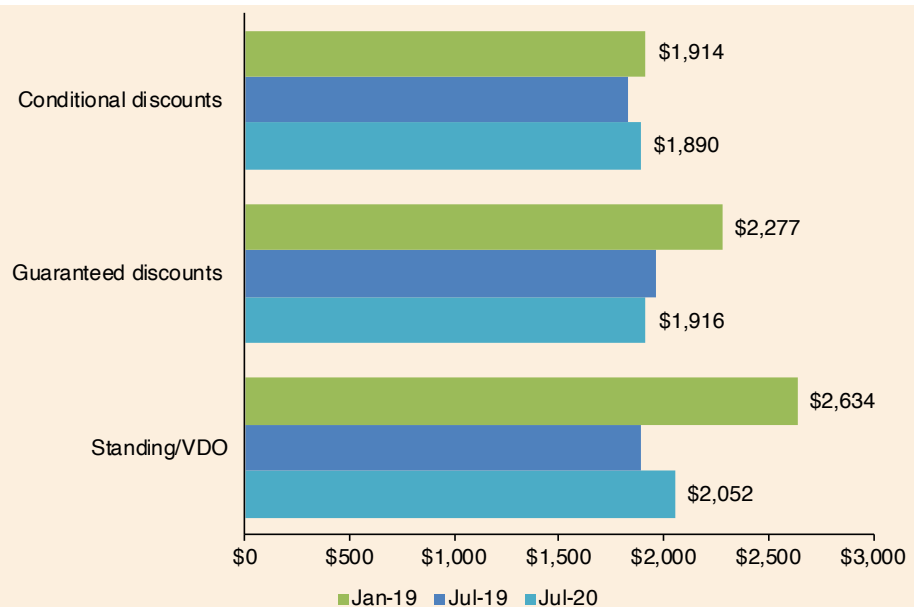
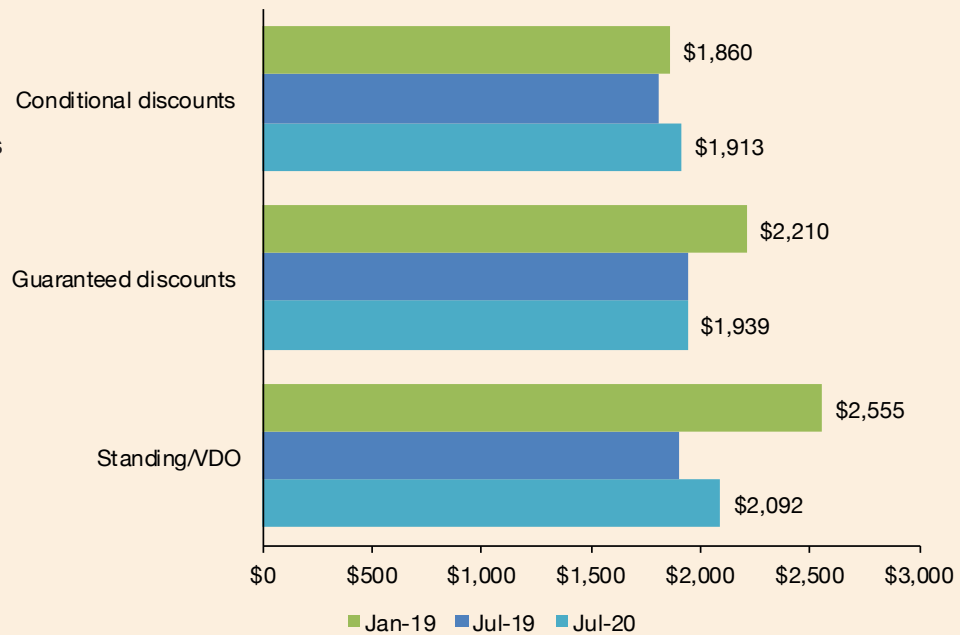


CHART 27 | Victoria (United Energy), change (\$) to average standing offer/DMO/VDO bills and market offer bills (guaranteed and conditional pay on time discounts) as of July 2020 compared to bills prior to new regulation taking effect (July 2018). Bill calculations based on 6,000kWh per annum, single rate, GST incl



There are a few market offers that produce higher bills than the VDO in each of the network areas. In Citipower, households on the worst market offer would be \$150 per annum better off on the VDO, in Powercor they would be \$245 better off, \$210 in Ausnet, \$265 in Jemena and in the United Energy network the difference is \$195. That said, **the best value offers in each network area are market offers (both with guaranteed and conditional discounts) and not the VDO.**

Last year (July 2019) around half of the market offers inclusive of guaranteed discounts produced annual bills that were lower than the VDO. As of July 2020, however, there are only 2-3 market offers in each network area that produce annual bills that are greater than the VDO. See charts 27 - 31.

CHART 27 | Victoria (Citipower), Annual standing offer bills as of January 2019, annual VDO bill as of July 2020, annual market offer bills (guaranteed and conditional pay on time discounts) as of July 2020. Offers shown from lowest to highest for each category. Bill calculations based on 6,000kWh per annum, single rate, GST incl

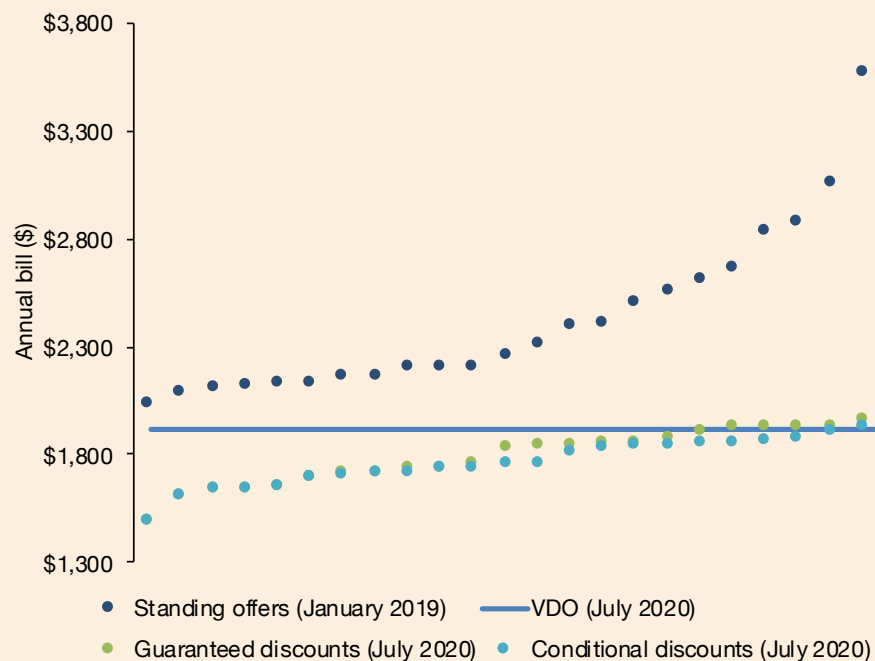


CHART 28 | Victoria (Powercor), Annual standing offer bills as of January 2019, annual VDO bill as of July 2020, annual market offer bills (guaranteed and conditional pay on time discounts) as of July 2020. Offers shown from lowest to highest for each category. Bill calculations based on 6,000kWh per annum, single rate, GST incl

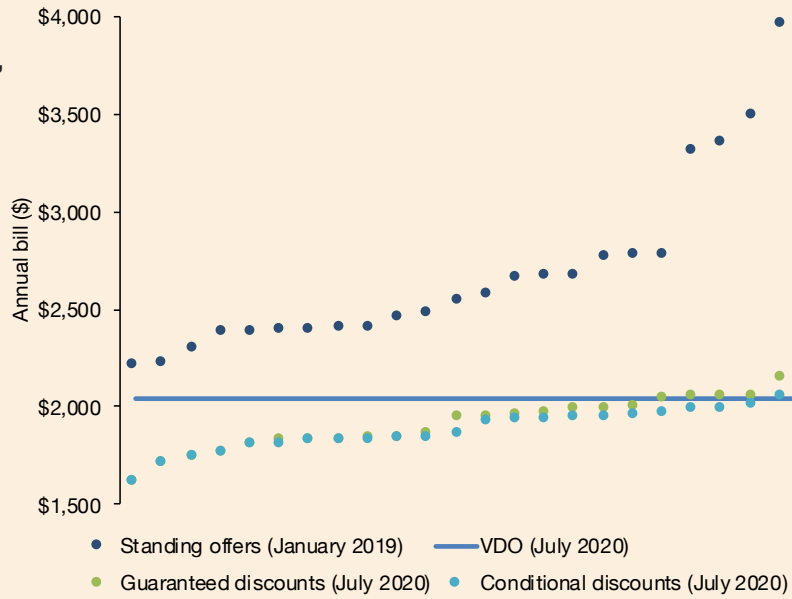


CHART 29 | Victoria (Ausnet), Annual standing offer bills as of January 2019, annual VDO bill as of July 2020, annual market offer bills (guaranteed and conditional pay on time discounts) as of July 2020. Offers shown from lowest to highest for each category. Bill calculations based on 6,000kWh per annum, single rate, GST incl

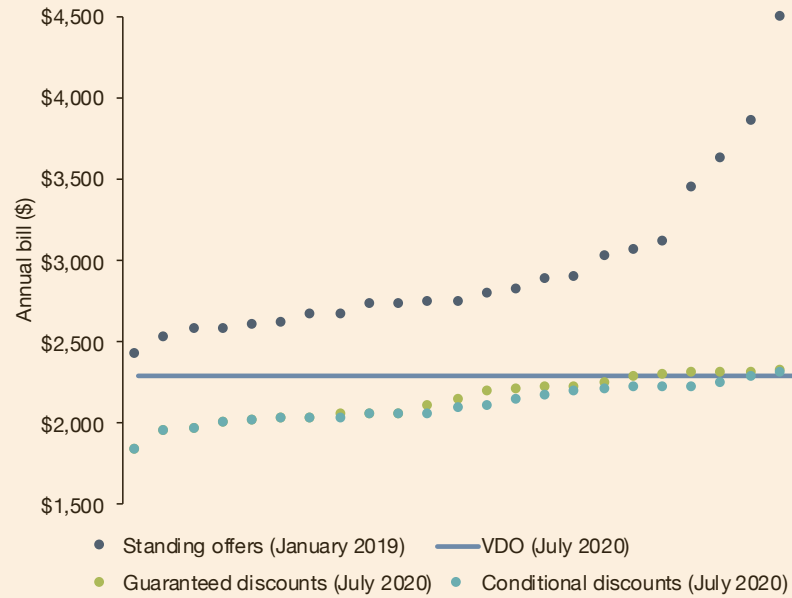


CHART 30 | Victoria (Jemena), Annual standing offer bills as of January 2019, annual VDO bill as of July 2020, annual market offer bills (guaranteed and conditional pay on time discounts) as of July 2020. Offers shown from lowest to highest for each category. Bill calculations based on 6,000kWh per annum, single rate, GST incl

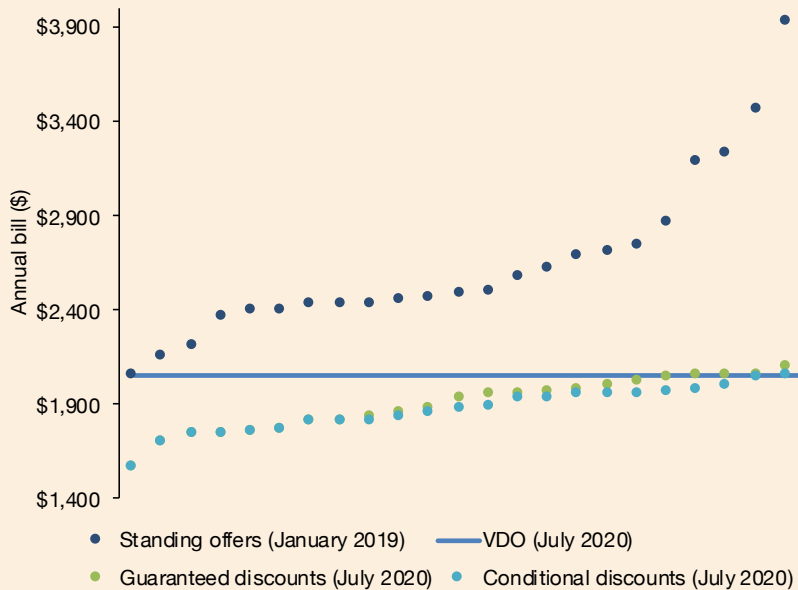
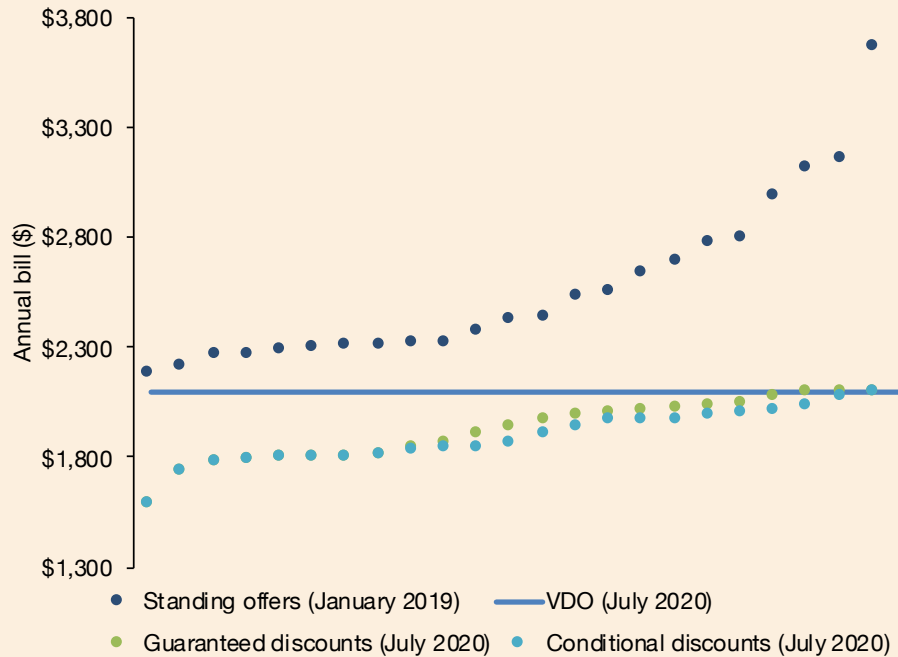


CHART 31 | Victoria (United Energy), Annual standing offer bills as of January 2019, annual VDO bill as of July 2020, annual market offer bills (guaranteed and conditional pay on time discounts) as of July 2020. Offers shown from lowest to highest for each category. Bill calculations based on 6,000kWh per annum, single rate, GST incl



4.2 Price dispersion – the “big three”

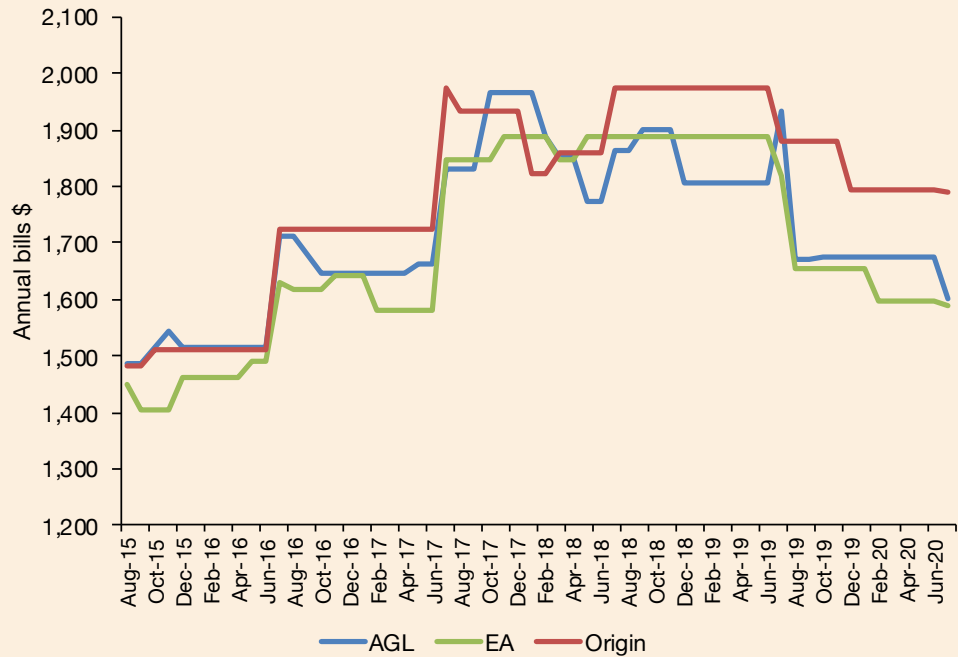
This section analyses monthly changes to the “big three” retailers’ (AGL, Energy Australia and Origin) electricity market offers and maximum price dispersion from August 2015 to July 2020 in NSW, Queensland, South Australia and Victoria.⁴⁴ It shows that the difference between the big three retailers’ offers is increasing in NSW and Queensland while it is decreasing in Victoria and South Australia.

Over the last five years, the maximum difference between the annual bills produced by the “big three” has been as high as \$225 in NSW (Ausgrid), \$210 in Queensland (Energex), \$265 in Victoria (Citipower) and \$385 in South Australia. In both NSW and Queensland the maximum price-spread peaked in the last year (since July 2019). In Victoria the maximum price-spread of \$265 occurred in January 2019 while the peak \$385 in South Australia occurred in July 2018.

In NSW’s Ausgrid network area, the average maximum price-spread over the last year was approximately \$195. The difference was lowest in December 2019 – January 2020 (\$140) and highest in August – November 2019 (approximately \$225). As of July 2020, the difference was around \$200.

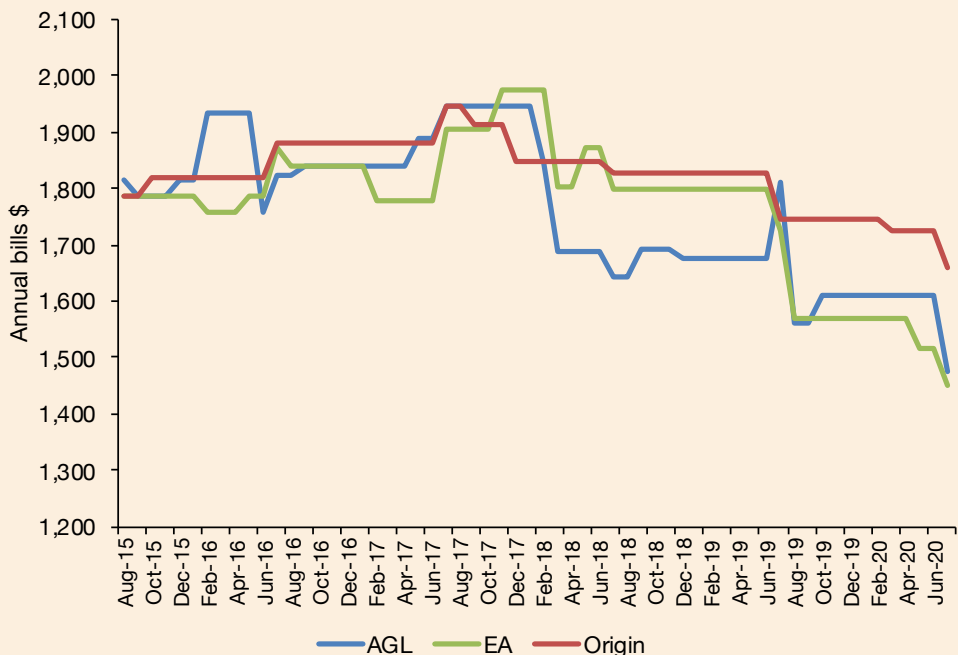
⁴⁴ In NSW the comparison is based on offers in the Ausgrid network and in Victoria it is based on offers available in Citipower’s network. The offers compared are Energy Australia’s ‘Flexi Saver’, AGL’s ‘Savers’ and Origin’s ‘Daily Saver Plus’ until it was discontinued in October 2015 and Origin’s ‘Saver’ product was introduced.

CHART 32 | NSW (Ausgrid), Annual retail bills (the big three) August 2015 – July 2020 inclusive of guaranteed and pay on time discount (6,000kWh per annum, single rate, GST incl).⁴⁵



In Queensland’s Energex network area, the average maximum price-spread over the last year was around \$185. The difference was lowest in March - April 2020 (approximately \$160) and highest in May - June 2020 (approximately \$210).

CHART 33 | Queensland (Energex), Annual retail bills (the big three) August 2015 – July 2020 inclusive of pay on time discount (6,000kWh per annum, single rate, GST incl).⁴⁶

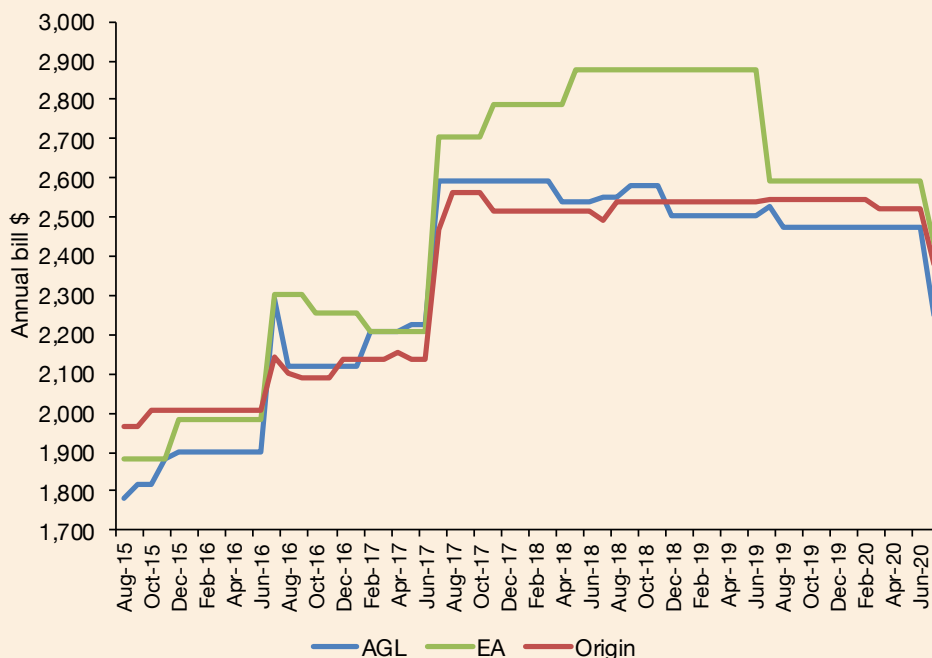


In South Australia, the average maximum price-spread over the last year was \$120. The difference was lowest from August 2019 to June 2020 (approximately \$115) and highest in July 2020 (approximately \$185).

⁴⁵ Note that as of July 2019, discounts are guaranteed off bill. Prior to July 2019, discounts were pay-on-time discounts off usage.

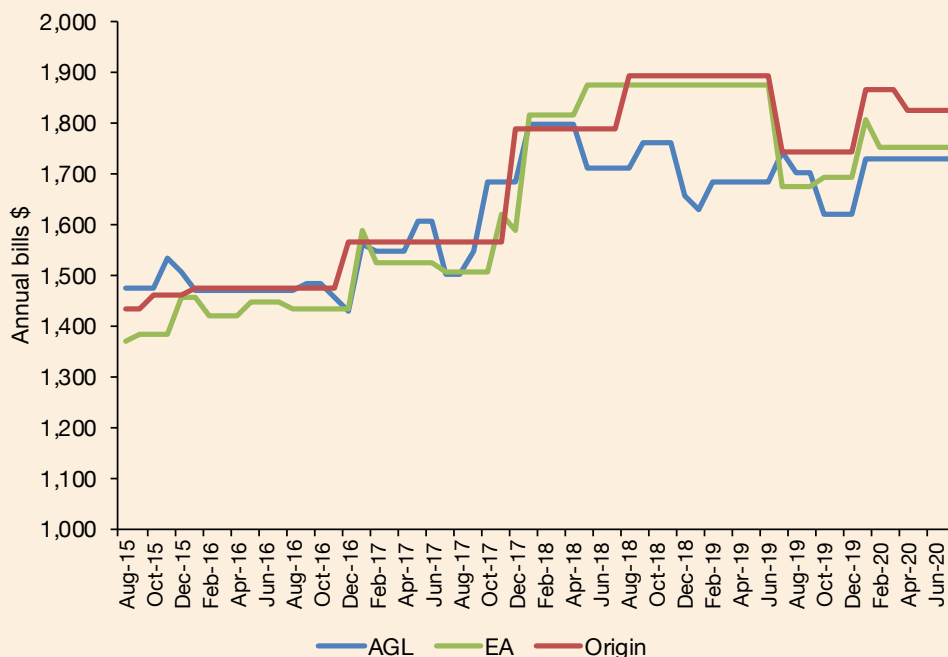
⁴⁶ Note that discounts have been guaranteed off bill since July 2019. Prior to July 2019, discounts were pay-on-time discounts off usage.

CHART 34 | South Australia (SAPN), Annual retail bills (the big three) August 2015 – July 2020 inclusive of pay on time discount (6,000kWh per annum, single rate, GST incl).⁴⁷



In Victoria’s Citipower network, the average maximum price-spread over the last year was approximately \$110. The difference was lowest in August - September 2019 (around \$70) and highest in January – March 2020 (approximately \$135).

CHART 35 | Victoria (Citipower), Annual retail bills (the big three) August 2015 – July 2020 inclusive of pay on time discount (6,000kWh per annum, single rate, GST incl).⁴⁸

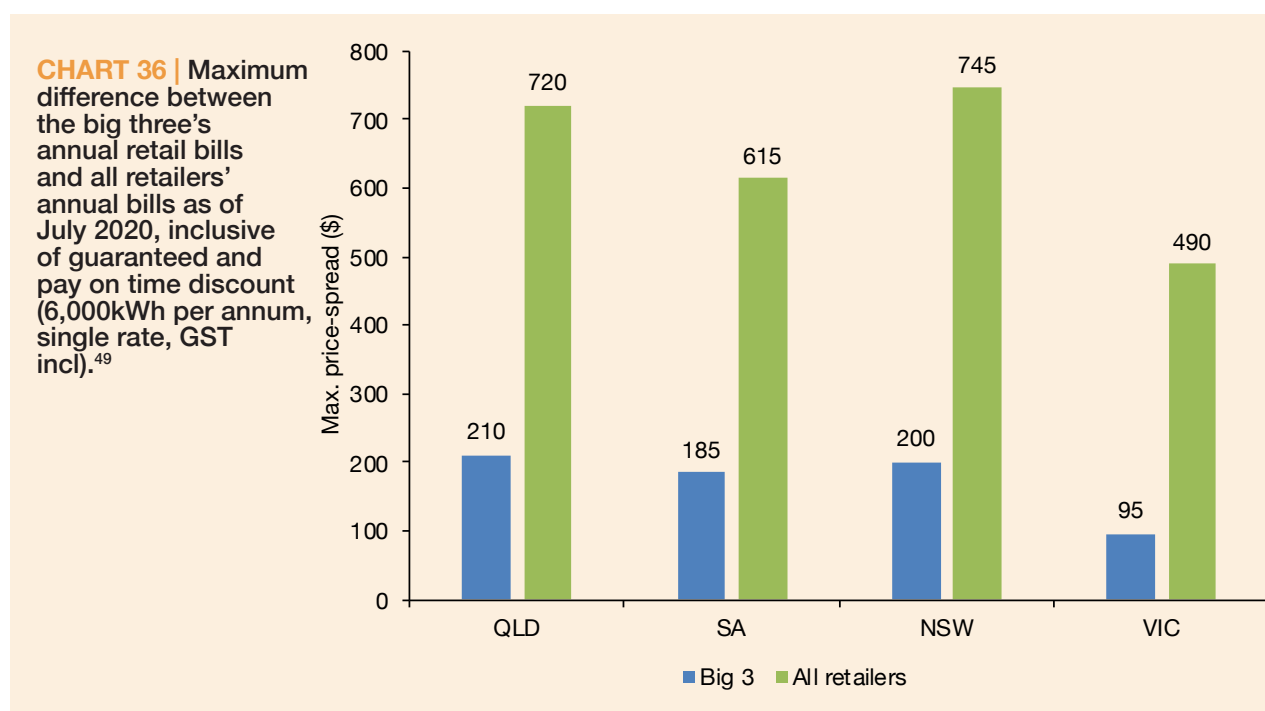


The above charts have analysed price-spread for the “big three” retailers only. Chart 15 below compares the maximum price-spread for all retailers to that of the “big three” for each jurisdiction as of July 2020, and it shows that **price-spread between the “big three” is much lower than the market overall**. Moreover, it shows that the price-spread is greatest in NSW and Queensland whether it is based on all retailers or the “big three” only. **The lack of price dispersion between**

⁴⁷ Note that discounts have been guaranteed off bill since July 2019. Prior to July 2019, discounts were pay-on-time discounts off usage.

⁴⁸ Note that discounts have been guaranteed off bill since July 2019. Prior to July 2019, discounts were pay-on-time discounts off usage.

the “big three” retailers also highlights the importance of having 2nd tier retailers that can put downward pressure on prices.



4.3 Changes to market offer base rates and discounts

As mentioned above, many retailers moved away from offering conditional discounts after the DMO/VDO took effect. In NSW and South East Queensland, only two retailers offer conditional pay on time (POT) discounts as of July 2020 compared to 12 in NSW and 8 in In South East Queensland in July 2018. **In South Australia only one retailer still offers conditional discounts compared to 10 previously.** In Victoria, there has been a similar impact as 5 retailers offer conditional discounts as of July 2020 compared to 14 in January 2019.

Tables 8 to 11 below show changes to additional discounts (guaranteed as well as conditional pay on time discounts) and percentage changes to base rates. In most cases the base rates have reduced where discounts have reduced or been removed.

TABLE 8 | NSW electricity market offers⁵⁰

Retailer	July 2018 discount	July 2019 discount	July 2020 discount	% change to average base rate [^]
Energy Locals	No	No	No	9%
AGL	20% POT off usage	7% guaranteed off bill	No	-21%
Alinta Energy	27% POT off usage	No	No	-22%
Click Energy	35% POT off bill	No	No	-44%

⁴⁹ Based on offers in the Energex network in Queensland, SAPN in South Australia, Ausgrid in NSW and Citipower in Victoria.

⁵⁰ Note that only retailers that had published market offers throughout the three-year period have been included in this comparison. Also, as most retailers have renamed their market offers since 1 July 2018 the comparison is based on the retailers’ “best but basic” market offer from each year. By taking a “best but basic” approach we do not include offer features such as direct debit discounts, fixed price products, dual fuel products etc.

Retailer	July 2018 discount	July 2019 discount	July 2020 discount	% change to average base rate [^]
Commander	20% POT off usage	No	No	-32%
CovaU	25% POT off bill	25% POT off bill	20% guaranteed off bill	-2%
Diamond Energy	7% POT off bill	7% POT off bill	7% POT off bill	-3%
Dodo Power & Gas	No	No	No	-29%
EnergyAustralia	28% - 32% guaranteed off usage ^{^^}	13% guaranteed off bill	16% guaranteed off bill	-10%
Mojo Power	No	No	No	-31%
Momentum Energy	No	No	No	-7%
Origin Energy	13% POT off usage	10% guaranteed off bill	14% guaranteed off bill	-4%
Powerdirect	25% POT off usage	12% guaranteed off bill	No	-20%
Powershop	12% POT off bill	15% POT off bill	6% POT off bill	-16%
Red Energy	10% POT off bill	10% POT off bill	No	-9%
Simply Energy	18% POT off usage	No	20% guaranteed off usage	-3%
1st Energy	22% POT off usage	7% POT off bill	13% guaranteed off bill	-16%

[^] Average change (across all network areas) in base rates (supply and usage charges) from July 2018 to July 2020 for households using 6,000 kWh per annum, single rate

^{^^}28% in Ausnet and Endeavour and 32% in Essential.

TABLE 9 | QLD electricity market offers⁵¹

Retailer	July 2018 discount	July 2019 discount	July 2020 discount	% change to average base rate [^]
AGL	26% POT off usage	6% guaranteed off bill	No	-22%
Click Energy	15% POT off bill	No	No	-31%
Diamond Energy	7% POT off bill	7% POT off bill	7% POT off bill	-2%
Dodo Power & Gas	No	No	No	-19%
EnergyAustralia	28% guaranteed off usage	11% guaranteed off bill	14% guaranteed off bill	-13%
Energy Locals	No	No	No	-1%
Origin Energy	12% guaranteed off bill	9% guaranteed off bill	10% guaranteed off bill	-10%
Powerdirect	24% POT off usage	11% guaranteed off bill	No	-21%
Simply Energy	18% POT off usage	No	17% guaranteed off usage	-15%

⁵¹ Note that only retailers that had published market offers throughout the three-year period have been included in this comparison. Also, as most retailers have renamed their market offers since 1 July 2019 the comparison is based on the retailers' "best but basic" market offer from each year. By taking a "best but basic" approach we do not include offer features such as direct debit discounts, fixed price products, dual fuel products etc.

Retailer	July 2018 discount	July 2019 discount	July 2020 discount	% change to average base rate [^]
Mojo Power	No	No	No	-35%
Powershop	12% POT off bill	15% POT off bill	6% POT off bill	-13%
Red Energy	10% POT off bill	10% POT off bill	No	-11%
Alinta Energy	28% POT off usage	No	No	-26%
Q Energy	No	No	No	-22%

[^] Change (Energen network) in base rates (supply and usage charges) from July 2018 to July 2020 for households using 6,000 kWh per annum, single rate

TABLE 10 | SA electricity market offers⁵²

Retailer	July 2018 discount	July 2019 discount	July 2020 discount	% change to average base rate [^]
AGL	11% POT off usage	8% guaranteed off bill	No	-20%
Alinta Energy	25% POT off usage	No	No	-20%
Click Energy	25% POT off bill	No	No	-38%
Commander	20% POT off usage	No	No	-19%
Diamond Energy	7% POT off bill	7% POT off bill	7% POT off bill	0%
Dodo Power & Gas	No	No	No	-22%
EnergyAustralia	20% guaranteed off usage	6% guaranteed off bill	6% guaranteed of bill	-20%
Lumo Energy	15% POT off bill	No	No	-19%
Momentum Energy	No	No	No	-10%
Origin Energy	10% POT off usage	12% guaranteed off bill	13% guaranteed off bill	-5%
Powerdirect	17% POT off usage	12% guaranteed off bill	No	-19%
Red Energy	10% POT off bill	10% POT off bill	No	-12%
Simply Energy	18% POT off usage	No	8% guaranteed off usage	-13%

[^] Change (SAPN network) in base rates (supply and usage charges) from July 2018 to July 2020 for households using 6,000 kWh per annum, single rate

TABLE 11 | VIC electricity market offers⁵³

Retailer	January 2019 discount	July 2019 discount	July 2020 discount	% change to average base rate [^]
1st Energy	20% POT off usage	15% POT off usage	15% POT off usage	-4%
AGL	33% POT off usage	No	No	-22%

⁵² Ibid.

⁵³ Note that only retailers that had published market offers both years have been included in this comparison. Also, as most retailers have renamed their market offers since 1 July 2019 the comparison is based on the retailers' "best but basic" market offer from each year. By taking a "best but basic" approach we do not include offer features such as direct debit discounts, fixed price products, dual fuel products etc.

Retailer	January 2019 discount	July 2019 discount	July 2020 discount	% change to average base rate [^]
Alinta Energy	30% guaranteed off usage	No	No	-25%
Click Energy	27% POT off bill	No	No	-16%
Commander	20% POT off usage	No	No	-27%
CovaU	30% POT off usage	30% POT off usage	30% POT off usage	6%
Diamond Energy	7% POT off bill	7% POT off bill	3% POT off bill	-7%
Dodo Power & Gas	No	No	No	-27%
EnergyAustralia	32% guaranteed off usage	7% guaranteed off bill	9% guaranteed off bill	-18%
GloBird	34% POT off bill	32% POT off bill	No	-31%
Lumo Energy	3% POT off bill	3% POT off bill	No	0%
Momentum Energy	No	No	No	-7%
Origin Energy	20% POT off usage	3% guaranteed off usage	5% guaranteed off bill	-16%
Tango Energy	No	No	No	16%
Powerdirect	41% POT off usage	No	No	-22%
Powershop	20% POT off bill	23% POT off bill	10% POT off bill	-7%
Red Energy	10% POT off bill	10% POT off bill	No	1%
Simply Energy	40% POT off usage	No	15% guaranteed off bill	-13%
Sumo Power	43% POT off usage	6% POT off usage	6% POT off bill	-17%

[^] Average change (across all network areas) in base rates (supply and usage charges) from January 2019 to July 2020 for households using 6,000 kWh per annum, single rate

* Dodo previously offered a discount conditional upon customers paying bills by direct debit. This discount is no longer available, and the base rates have thus been reduced but the current offer still requires customers to pay by direct debit.

5. COVID-19 assistance, increased usage and debt

The Australian Energy Regulator (AER) issued a statement of expectations that retailers do not disconnect customers for non-payment until 31 October 2020 (and potentially beyond) if they have contacted their retailer or are receiving support from their retailer.⁵⁴ The AER also expected retailers to:

- Agree to a period in which no payment will be made, if this is what customers' circumstances require.
- Defer referrals to debt collection agencies until 31 October and potentially beyond.
- Not undertake any default listing for customers with payment difficulties until 31 October and potentially beyond.

In Victoria, the Essential Services Commission (ESC) similarly amended the Energy Retail Code (latest version effective on 1 October 2020) to allow for additional customer protections and requirements on retailers in relation to customers facing payment difficulties.⁵⁵ Some of these amendments are set to be effective for the 'coronavirus obligation period' which is 6 months (unless extended).

The regulators are encouraging all households that are experiencing financial hardship to contact their retailer to discuss payment plans or other hardship arrangements.

The jurisdictional governments have also, to varied extent, offered support to households to manage energy costs during the pandemic:

- Under the Queensland Government's COVID-19 economic relief package all Queensland households automatically received a \$200 rebate on their electricity bills.⁵⁶ The rebate was applied automatically to customers' bills from April 2020 onward. The Queensland Government has also announced that all households will receive a \$50 Asset Ownership Payment each year for the next two years.⁵⁷ The first payment will be applied as a credit to electricity bills from September 2020.
- Under the ACT Government's COVID-19 assistance package all ACT concession card holders automatically received a \$200 additional rebate on their electricity bills.⁵⁸
- Households in NSW struggling to pay their energy bills due to reduced income caused by COVID-19, or otherwise, may be eligible for a \$50 Energy Accounts Payment Assistance (EAPA) voucher.⁵⁹ Households that have already received an EAPA voucher this financial year and have since been impacted by COVID-19 can be assessed for another application.⁶⁰
- Under the South Australian Government's COVID-19 assistance package all Cost of Living

⁵⁴ See AER, Statement of Expectations of energy businesses: Protecting customers and the market during COVID-19, Updated July 2020 at <https://www.aer.gov.au/system/files/AER%20Statement%20of%20Expectations%20-%20From%201%20August%202020.pdf>

⁵⁵ See <https://www.esc.vic.gov.au/electricity-and-gas/codes-guidelines-and-policies/energy-retail-code>

⁵⁶ See <https://www.qld.gov.au/community/cost-of-living-support/concessions/energy-concessions/covid-19-household-utility-relief>

⁵⁷ See <https://www.qld.gov.au/community/cost-of-living-support/concessions/energy-concessions/asset-ownership-dividend>

⁵⁸ See <https://www.covid19.act.gov.au/business-and-work/economic-survival-package/families-and-households#Household-utilities-and-concessions>

⁵⁹ See <https://www.service.nsw.gov.au/transaction/energy-accounts-payment-assistance-eapa-scheme>

⁶⁰ See <https://energy.nsw.gov.au/government-and-regulation/covid-19-information/advice-covid-19-energy-customers>

Concession recipients will receive a once-off boost of \$500 to their concession in 2020/21.⁶¹ Centrelink JobSeeker recipients who are not currently receiving the Cost of Living Concession, have also had the opportunity to apply for the \$500 payment (applications closed 31 October 2020). The Cost of Living Concession is designed to help those on low or fixed incomes with cost of living expenses such as council rates, electricity, gas, water or medical bills.

- In response to the COVID-19 pandemic, the Tasmanian Government announced a cap on energy prices in April 2020. This cap ensures that energy prices do not increase for the next 12 months.⁶² Aurora Energy established a \$5 million Customer Support Fund to help impacted customers with bill relief, freezing debts, payment plans as well as waiving additional fees and charges.⁶³
- In the Northern Territory, the Government announced a freeze on electricity prices in March 2020. The freeze means that households will not see any price increases until 1 July 2021.⁶⁴
- The Western Australian Government introduced an additional one-off Energy Assistance Payment (EAP) of \$305 in May 2020.⁶⁵ It also announced a freeze in electricity prices until 1 July 2021. Furthermore, the Government announced a \$600 household electricity credit in October 2020 and while this is not strictly a COVID-19 assistance measure (the credit is funded by the recent Bell Group settlement), it has been framed as an important assistance and stimulus for the economic recovery phase.⁶⁶
- The Victorian Government did not initially provide any additional financial support to households struggling with energy bills during the pandemic. The Victorian regulator, however, introduced regulatory measures to support households during this period. From 1 October 2020, retailers have been required to support customers in applying for the Victorian Government's utility relief grants and conduct a 'tariff check' for all customers receiving tailored assistance.⁶⁷ While retailers already were required to provide customers with information about the best offer available to them on their bills, this additional 'tariff check' requirement means that retailers must "go beyond providing the best offer message on a customer's bill, by proactively contacting customers receiving tailored assistance to discuss whether another tariff would be more appropriate based on their circumstances".⁶⁸ A successful utility relief grant application can provide debt relief of up to \$650 per fuel. On 17 November 2020, the Victorian Government did announce additional support for low-income and disadvantaged households. There will be a one off \$250 payment available to concession card recipients in 2021 as well as energy efficiency measures that will target low-income households and tenants. The Victorian Government announced that these measures are designed to reduce the burden of higher energy bills as a result of staying home more.⁶⁹

⁶¹ See <https://www.sa.gov.au/topics/care-and-support/concessions-and-grants/concessions/cost-of-living-concessions>

⁶² See <https://coronavirus.tas.gov.au/media-releases/protecting-tasmanian-water,-gas-and-electricity-customers>

⁶³ See <https://www.auroraenergy.com.au/faqs/health-and-safety/how-can-aurora-help-me-during-coronavirus>

⁶⁴ See <https://www.powerwater.com.au/customers/safety-and-emergencies/information-about-covid-19>

⁶⁵ See <https://www.wa.gov.au/service/community-services/grants-and-subsidies/apply-energy-concession>

⁶⁶ Government of Western Australia, Media statement, Every WA household to receive a \$600 electricity bill credit, 4 October 2020 at <https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/10/Every-WA-household-to-receive-a-600-dollar-electricity-bill-credit.aspx>

⁶⁷ The latter measure is in place for a six-month period while the utility relief grant application measure is permanent. See ESC, Supporting energy customers through the coronavirus pandemic, Final decision, 24 August 2020 at <https://www.esc.vic.gov.au/electricity-and-gas/inquiries-studies-and-reviews/supporting-energy-customers-through-coronavirus-pandemic-2020>

⁶⁸ ESC, Supporting energy customers through the coronavirus pandemic, Final decision, 24 August 2020, 22

⁶⁹ Premier of Victoria, Helping Victorians pay their power bills, Media Release, 17 November 2020 at <https://www.premier.vic.gov.au/helping-victorians-pay-their-power-bills>

Unsurprisingly, electricity consumption has increased for residential consumers during the pandemic. The Australian Energy Market Operator (AEMO) has reported that residential electricity demand in Victoria was up by 10 to 15% for the 3rd quarter in 2020.⁷⁰ The Victorian network businesses have reported that residential electricity consumption between 1 April and 6 November was 11% higher in 2020 compared to 2019.⁷¹ The greatest increase occurred in the Jemena network (Melbourne’s inner west and north-western suburbs) where the increase in electricity usage was 14%. In the CBD centered Citipower network, the increase was 9%.

Many retailers have allowed their customers to defer payments/debt during the pandemic and while there has been a significant decrease in deferred debt since mid-August 2020 the AER’s figures show that there were still around 36,000 non-Victorian residential customers with deferred debt as of 19 October 2020 amounting to a total electricity and gas debt of \$14.8 million.⁷² In Victoria, the Essential Services Commission (ESC) has observed that as of late October 2020, the number of residential customers who cannot pay for their on-going energy consumption is decreasing but the average debt outstanding has been increasing and is at its highest since April 2020.⁷³ In the week ending 25 October 2020, the average arrears for electricity customers receiving assistance was \$691 and \$510 for customers not receiving assistance.⁷⁴ In relation to gas, the average arrears for customers receiving assistance was \$557 and \$435 for customers not receiving assistance. Tables 12 and 13 below outline the number of customer accounts in arrears or with deferred payment and average amounts outstanding as of October 2020.

TABLE 12 | Number of Victorian customers in arrears or with deferred payments as of week ending 25 October 2020⁷⁵

	Electricity	Gas	Total accounts
Number of customers in arrears and receiving assistance	52,340	46,982	99,322
Number of customers who deferred payments	2,968	2,520	5,488
Number of customers in arrears and <i>not</i> receiving assistance	277,418	228,486	505,904
Total accounts	332,726	277,988	610,714

TABLE 13 | Average arrears or deferred payment as of week ending 25 October 2020⁷⁶

	Electricity	Gas
Average arrears for customers receiving assistance	52,340	46,982
Average amount deferred	2,968	2,520

⁷⁰ AEMO, Quarterly Energy Dynamics, Q3 2020, 9 at <https://www.aemo.com.au/-/media/files/major-publications/qed/2020/qed-q3-2020.pdf?la=en>

⁷¹ Jemena, Vic DNSP weekly energy consumption 20201113 (workbook)

⁷² AER, COVID-19 Retail market data dashboard, Weekly summary as at 19 October 2020 at <https://www.aer.gov.au/system/files/Retail%20market%20data%20dashboard%20-%202019%20October%202020%20-%20COVID-19.pdf>

⁷³ ESC, Energy customers during the coronavirus epidemic, Update – observations up to week ending 25 October 2020 at <https://www.esc.vic.gov.au/electricity-and-gas/market-performance-and-reporting/energy-customer-support-during-coronavirus-pandemic>

⁷⁴ Customers that receive assistance are those in contact with their retailer and have a payment plan.

⁷⁵ ESC, Energy customers during the coronavirus epidemic, Update – observations up to week ending 25 October 2020 at <https://www.esc.vic.gov.au/electricity-and-gas/market-performance-and-reporting/energy-customer-support-during-coronavirus-pandemic>

⁷⁶ Ibid.

	Electricity	Gas
Average arrears for customers <i>not</i> receiving assistance	277,418	228,486
Total accounts	332,726	277,988

Federal Government coronavirus supplement payments and direct assistance provided to energy customers by jurisdictional governments have in all likelihood decreased energy related hardship thus far during the pandemic. With the supplement payments being reduced and customers using more because they stay at home, there could be a spike in households unable to pay for their energy bills. Victoria is the only jurisdiction where both electricity and gas prices increased in 2020 and that, combined with being the hardest hit jurisdiction by the pandemic to date, will make energy affordability an even more precarious situation in Victoria. We therefore welcome the Victorian energy stimulus measures announced in November 2020 and urge all jurisdictions to monitor energy debt and the need for assistance measures as we move into 2021.⁷⁷

⁷⁷ The next Victorian Tariff-Tracking report will be based on January 2021 data and we will analyse price changes as well as the assistance measures in more detail in that report.