IPART
Independent Pricing and Regulatory Tribunal
New South Wales

REVIEW OF
The performance and competitiveness of the NSW
RETAIL ELECTRICITY MARKET

2018-19

FINAL REPORT

November 2019

ENERGY REVIEWS

IPART reports annually on the performance and competitiveness of the retail electricity market.

We look at outcomes for residential and small business customers in NSW by considering:

- Price and product diversity
- Customer participation and outcomes
- Barriers to entry, exit and expansion
- Price movements and rivalry.

We also consider whether there are any actions needed to improve the competitiveness of the market.

Findings

1. Competition in the retail electricity market continued to improve as reflected by several indicators in 2018-19:

- Changes in price were consistent with underlying costs:
  - The median of lowest offers in the market has fallen.
  - However for customers that are not engaged in the market, prices increased in the Ausgrid and Essential Energy network areas
- The market share of small retailers continued to increase, and
- More customers have engaged in the market - both switching rates and the number of customers that are being supplied on market contracts have increased.

Recommendations

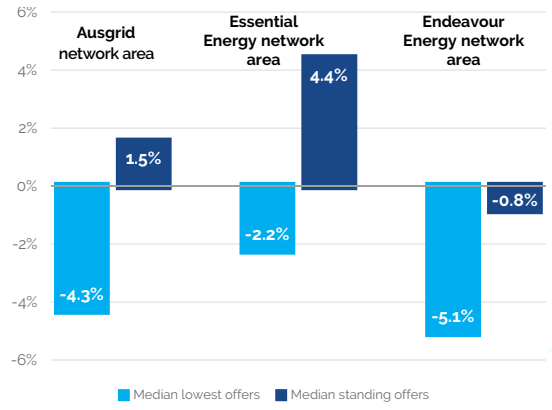
1. Energy Made Easy and NSW Energy Switch should allow customers to input interval meter data to make more accurate estimates of customers' bills under different offers. This should be ready for the launch of the Consumer Data Right* on 1 July 2020.
2. That the NSW Government publish information on the distribution of consumption and bills for customers that have used NSW Energy Switch. This should be broken down by network area, market vs standing offer and financial year.
3. That the NSW Government remove the requirement for IPART to monitor and report annually on the retail electricity market in NSW. Where required, the NSW Government can request IPART to review or investigate NSW-specific energy matters.

* The ACCC will introduce a Consumer Data Right for energy customers from 1 July 2020 to give consumers greater control over their data.

In 2018-19 Competition continued to improve in the retail market

Prices for engaged customers fell

Retail price changes by network area 2017-18 to 2018-19



But prices for median standing offers across all retailers increased in the Ausgrid and Essential Energy network areas

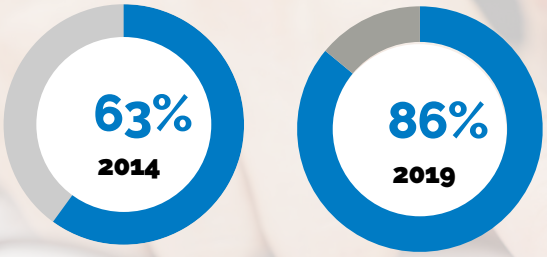
The median lowest prices across retailers are likely to have reduced by more than the costs of supply, which reduced slightly.

Wholesale costs

Environmental costs

Other costs relatively unchanged

86% of customers were on market offers

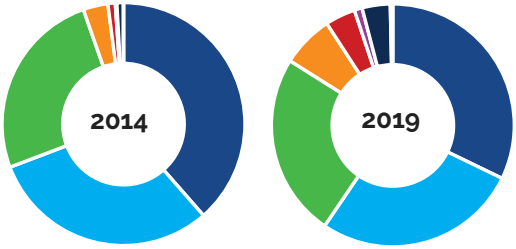


470,000 small customers remain on standing offers.

One in five NSW households and small businesses changed retailer

Market concentration fell

Since 2014-15 retailers other than Origin, EnergyAustralia and AGL have grown from 8% to 16% market share.



- Origin Energy
- Energy Australia
- AGL
- Snowy Hydro
- Other - retailer with generation
- Other - retailer with renewable generation
- Other - standalone retailer
- Other - retailer in embedded network

Retail prices have increased over the longer term, with the largest price increases before 2013-14 when prices were still regulated

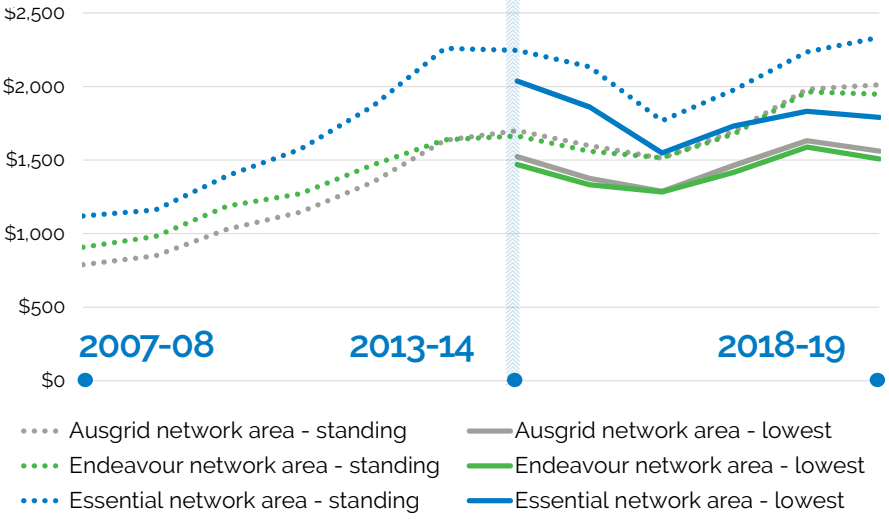
Prices x2

Regulated retail prices
2007-08 to 2013-14

Retail prices deregulated
2014-15 to 2018-19

Prices more than doubled in some parts of NSW

Lowest offers increased by less than the cost of living, but prices fluctuated



Annual bill for a customer using 5,100 kWh, based on median lowest and standing offer by network area (GST-inclusive, nominal)

Prices increased between 2007 and 2014 largely due to very high levels of network investment.

In five years, the typical electricity customer's bill increased by between $730 and $1,140 per year (nominal, GST-inclusive).

2014 to 2016

-13% to -24%

Retail prices decreased by 13-24% as network prices fell

These decreases did not offset the large increases from 2007-2013, with the median lowest market offers across all retailers in June 2016 for a typical customer still $375 to $500 more than the regulated charges in 2007-08.

2016 to 2018

+18% to + 27%

Prices increased by around 18-27%. This was largely due to increases in wholesale costs, with hedging costs more than doubling, pushing lowest market offers up another $280 to $340 (nominal, GST-inclusive).

2018-19

The lowest prices across retailers decreased. However, electricity prices are much higher than they were in 2007.

Retailers have a wide variety of offers available

Different customers have different needs, preferences and values. Retailers in the competitive market give customers choice in offers. We have seen that offers can vary by:

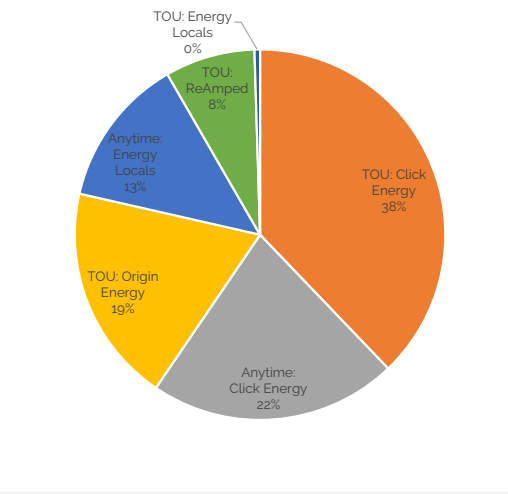
- Prices and discounts
- Eligibility
- Solar feed-in tariffs
- Sources of generation
- Bundling gas, phone and internet
- Packages to manage private swimming pools
- Additional offers including movie tickets reward points and benefit programs

At June 2019 there were over 50 market offers available to households in each network area

But retailers are not tailoring their offers to different demand tariffs

Different customers use different amounts of electricity in total and at different times of day. In a competitive market, we would expect to see retailers tailoring their offers to these different household consumption profiles. However, we have seen little evidence of retailers competing for customers based on their consumption profiles. We analysed the offers based on data from over 2,300 customers in the Ausgrid network. We found that just five offers were the cheapest for over 99% of customers.

TOU: time of use



Cheapest five offers

Residential customers who have moved to a market offer may be paying around 23% less than customers who have not. However, not all customers have moved to their cheapest offer.

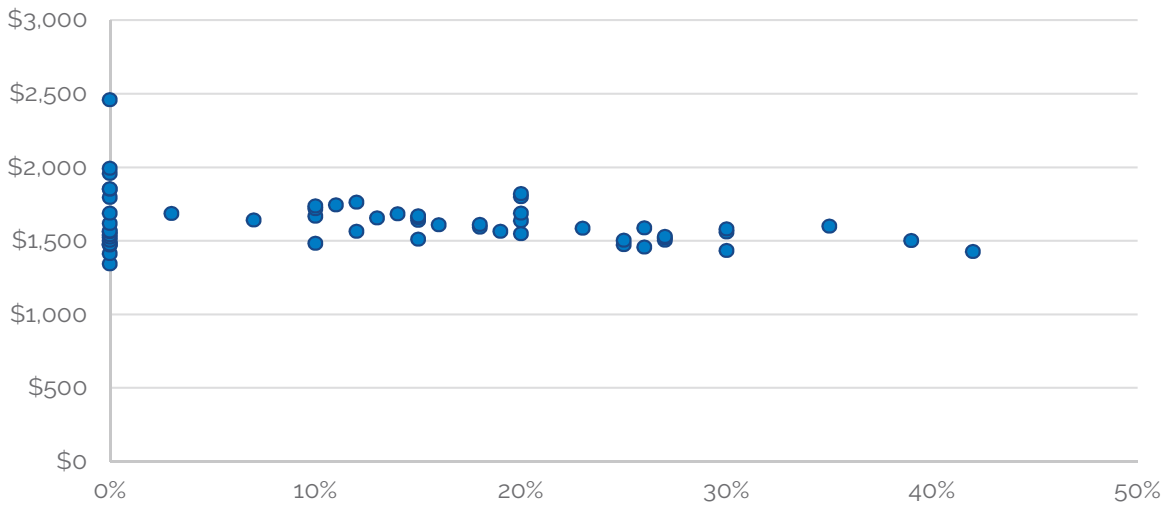
Comparing *market* offers can be difficult

There are many different market offers and comparing them can be difficult, especially when the discounting practices of the electricity companies can be confusing.

Higher discounts don't always lead to lower bills. Discounts may not be comparable as retailers have different standing offers.

Advertised discounts and total bills in the Endeavour Energy area (June 2019, 5,100 kWh per year, GST inclusive)

Similar discounts are available in other network areas



The AER has recently introduced a ***reference bill*** or price against which all market offers must be compared when they are advertised. This provides customers additional information when they are comparing offers.

Time varying and demand tariffs are also difficult to compare

Comparing time of use and demand tariffs is difficult using existing comparison tools. Customers' demand profiles vary and retailers can vary the price levels by time of day and season. In June 2018-19, we found that for most customers in the Ausgrid network area, the cheapest plan was a time of use offer. However customers currently on anytime tariffs (for example, where they pay the same for electricity at all times of the day) would find it very difficult to know if individually they would benefit from moving to a time of use offer.

Additionally we found that in the Ausgrid network different retailers apply peak charges at different times. At present, Energy Made Easy or NSW Energy Switch cannot accurately calculate the impact of these differences.

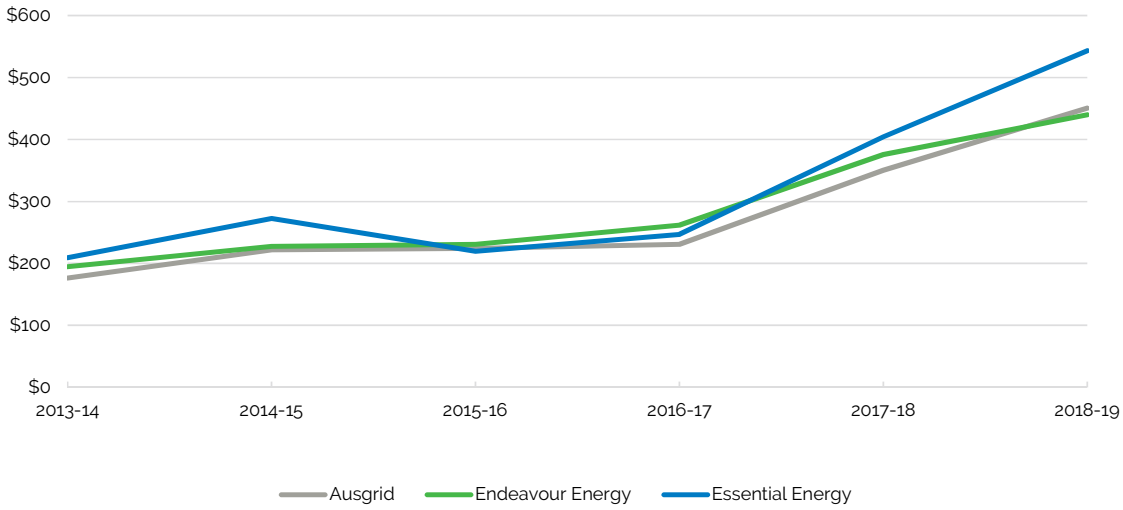
The Commonwealth Government's Consumer Data Right for energy creates the opportunity to make comparing offers easier.

Note: Our analysis focuses on Ausgrid's network area because in 2018-19, less than 4% of customers in Essential Energy's and Endeavour Energy's network areas had underlying cost reflective distribution tariffs. We consider that this is likely to reflect the distribution of retail customers on cost reflective tariffs.

For customers who have never switched, standing offers have become **more expensive** over time

The difference between the lowest offers and the standing offers (the 'spread') has increased since deregulation. This continued over 2018-19. While the lowest market offer prices fell, the median standing offer prices increased by 1-4% in the Ausgrid and Essential networks, and so the spread increased further.

Spread of median market and standing offers (5,100 kWh per year, GST inclusive)



This means that the 14% of customers who remain on standing offers are effectively paying a premium (often called a 'loyalty tax') for being on a standing offer over a market contract.

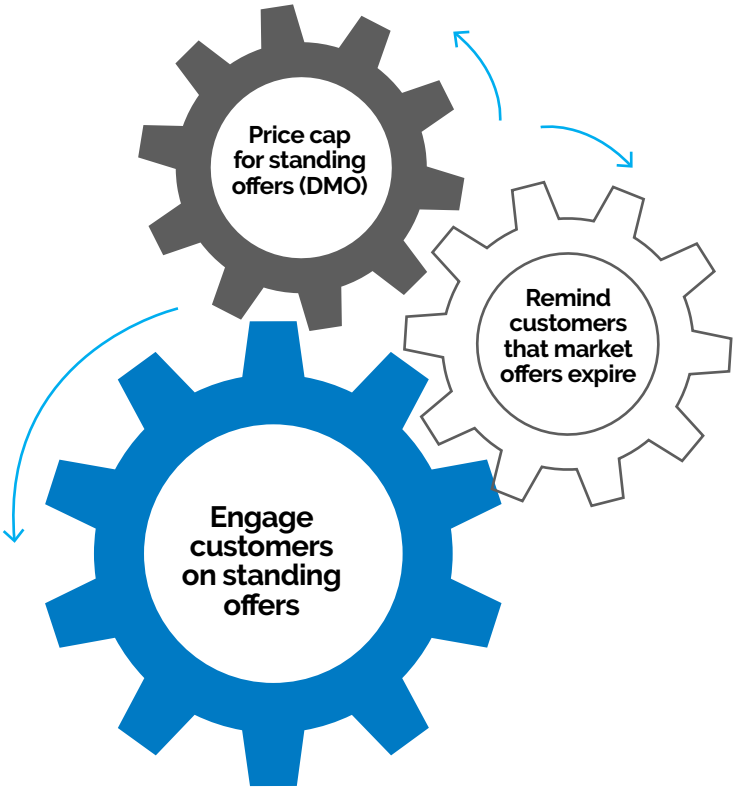
Allowing competition to continue to develop would deliver the best outcomes for customers in NSW

However, governments are concerned about customers who remain on standing offers.

In particular customers, who may have difficulty engaging in the market.

We agree that assistance should be available for vulnerable customers, although we note that hardship customers are less likely to be on standing offers than customers in general.

A number of measures have been taken recently to improve the outcomes in the retail electricity market



Electricity companies are required to write to customers on:

- Standing offers, to advise them they could save money by switching.
- Market offers, (before they expire) to encourage them to choose a new market offer (so they do not default to a standing offer).

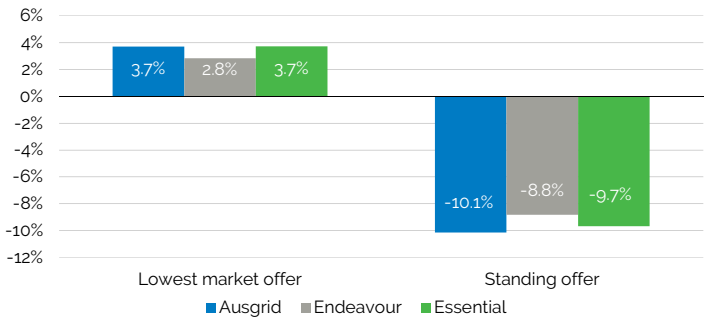
The Australian Energy Market Commission is also considering whether to limit conditional discount amounts to how much it costs the retailer when the customer does not comply with the condition.

On 1 July 2019 the Australian Government introduced a cap on standing offer prices (called a 'Default Market Offer' or DMO).
The DMO also acts as the reference bill.

The impacts of the default market offer are as expected

- Since 1 July 2019 the initial prices decreased for customers on standing offers but some market offer prices have increased.
- So while the spread between the standing offer price and the lowest market offer price grew during 2018-19, it shrank in July 2019.

Change lowest market offer and standing offer June 2019 to July 2019



The retail electricity market has responded to the introduction of the DMO as we would expect it to. However, a reform like this needs to be given time to set in before its impact can be fully understood and any further intervention with electricity retail prices is contemplated.

IPART is one of several regulators that reviews the retail electricity market

We consider that we can relinquish our market monitoring role with minimum risk, as the same issues are being considered and addressed by other regulators. Accordingly, we recommend that this be our last market monitoring review.

AEMC

Annual reviews of competition in retail energy markets since 2014

Reviews of electricity price trends since 2011

AER

Annual reports on the compliance and performance of the retail energy market

Sets the DMO price and will monitor changes to market and standing offer prices

ACCC

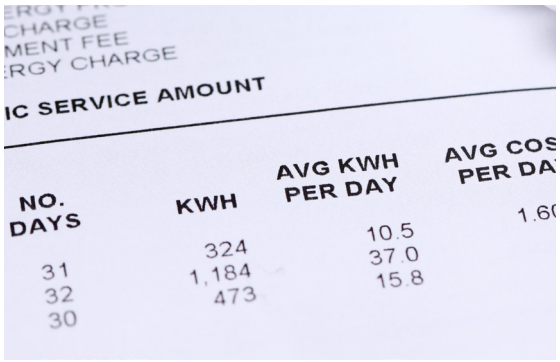
Ongoing electricity market monitoring role, and is required to report every six months beginning March 2019

Broad information gathering powers that allow it to compel information from businesses operating in the electricity industry

Market monitoring by multiple agencies increases costs for taxpayers, customers and retailers. A better use of resources would be for IPART to investigate or review NSW-specific matters as required.

How this report is structured

The rest of this Final Report provides more information on this review, our approach and our findings and recommendations



- **Chapters 1 to 5** focus on our review and findings on the performance and competitiveness of the NSW electricity market in 2018-19.
- **Chapter 6** discusses our findings on the change in prices following the introduction of the DMO from 1 July 2019.
- **Chapter 7** outlines our recommendations on IPART's role in the future monitoring of the retail market.

All figures in this report are nominal including GST unless otherwise stated.

Tribunal members

Ms Deboarah Cope, Acting Chair

Mr Ed Willett

Ms Anna Brakey

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Disclaimer

ISBN 978-1-76049-384-4

Contents

1 Retailers are competing to attract and retain customers

One of the characteristics of a competitive market is strong rivalry between retailers. Effective competition gives consumers lower prices, a wider range of products, faster and better incorporation of new technologies and more responsiveness to consumer preferences. The outcome of rivalry depends on a number of factors, including:

- The knowledge and understanding of customers.
- The ability of retailers to target certain products and services at customers (and, conversely, the ability to restrict customers from certain products and services).
- The ability of retailers to differentiate products.

The combination of these factors may result in lower margins, differentiated products that reflect customer preferences and willingness to pay or a mixture of both.

To assess the level of rivalry between retailers in 2018-19, we examined the range of market offers, products and services available to small customers in NSW. The sections below outline our findings, and then discuss them in more detail.

1.1 Overview of findings

In examining whether retailers competed to attract and retain customers in 2018-19 we have found that:

- 'Anytime tariffs' were still the most common price structure for electricity offers due to metering constraints.[1]
- Retailers competed using prices as well as discounts, solar feed-in tariffs and by packaging additional services into the electricity service.
  - We have found limited evidence of competition for customers based on their total level of consumption and some evidence of competition for customers based on the time they use electricity.[2]

We consider that these findings are compatible with a developing competitive retail electricity market.

1 Most customers have metering that only allows anytime tariffs. Customers can receive new meters if they request to change to a tariff that requires advanced metering.

2 See section 1.7.

1.2 Anytime tariffs are the most common price structure but more cost-reflective structures are available

Most electricity customers are on offers that typically comprise a fixed daily supply charge and a consumption charge per kilowatt hour (kWh) of electricity consumed (an anytime tariff). This is because most customers still have accumulation meters, which can only measure the total amount of energy consumed over a time period.

Customers on anytime tariffs pay either a flat tariff rate for all consumption over a period, or a higher or lower charge once a consumption threshold is reached (known as inclining or declining block tariffs). While anytime tariffs were still the most common type of tariff structure offered, other price structures were also available to some customers (Box 1.1). These alternative price structures are typically more cost reflective than anytime tariffs, in particular because they generally mimic underlying distribution tariffs.

Box 1.1 Types of electricity tariffs

The main types of electricity tariffs available in NSW are:

- Flat tariffs – customers pay the same for electricity at all times within the billing period. This is a form of anytime (or single rate) tariff.
- Block tariffs – customers pay different rates for electricity depending on how much they have used in the billing period. Under inclining block tariffs customers pay more after a consuming certain amount of electricity and under declining block tariffs they pay less after consuming a certain amount of electricity. This is a form of anytime tariff.
- Time of use – customers pay different rates for electricity depending on what time of day and what day they use the electricity.
- Demand – customers pay either flat tariffs or time of use tariffs, with an additional charge for the 30-minutes of maximum electricity used in the month during a set peak demand period (this is the 'demand' charge).

Source: AER, *Final Decision Ausgrid Distribution Determination 2019 to 2024*, Attachment 18 Tariff structure statement, April 2019, pp 6-7.

The AER reported that, during the third quarter of 2018-19, in NSW 72% of small customers were on anytime tariffs (either flat or block tariffs), with the remainder on cost reflective tariffs (either time-of-use or demand tariffs).[3] While other more cost reflective price structures were also available (and their market penetration is likely to have increased over the 2018-19 period[4]), we discuss these price structures in Chapter 5 and focus on anytime tariffs in the first three chapters of this report.

1.3 Retailers are competing on price

We compared each retailer's standing offer and lowest market offer as at June 2019. In general, a retailer's standing offer will be its highest offer (Box 1.2). We also examined how standing offer and market offer prices have changed, both over 2018-19 and the longer term.

3 AER, *Retail energy market performance update for Quarter 3, 2018-19*, 21 June 2019, Schedule 2.
4 See section 5.2.

Box 1.2 Standing offers

Residential and small business energy plans are either a standing offer or a market offer. All retailers must have a 'standing' offer in the regions that they are active. A standing or standard offer contract contains terms and conditions including:

- Retailers must inform customers about price increases.
- Prices cannot change more than once every six months.
- There is a minimum amount of time before customers can be disconnected if they do not pay their bill.

Source: AEMC, *2019 Retail Energy Competition Review,* Final Report, 28 June 2019, p 55; and *National Electricity Retail Rules,* Schedule 1.

In response to our Draft Report, the Public Interest Advocacy Centre (PIAC) recommended that we revise our approach by testing aspects of the nature of competition and how it performs in relation to the actual impacts and outcomes for NSW. It argued that using median and average bill data provides an incomplete and potentially misleading picture of the market and presumes general availability of these offers and high engagement.[5]

Box 1.3 below sets out how we have compared prices and calculated annual residential bills. The overall finding in our Draft Report focused on the outcomes for customers on the median lowest market offer and standing offers. Our previous market monitoring reports have examined changes in the average bill for a typical residential customer across the whole of NSW.

Our revised approach provides information on the lowest market offers and also prices available to those customers that do not engage in the competitive market (standing offers). [6] This provides a range of useful information to assist stakeholders. In addition, further information on retail prices is also available in the AER's annual report which includes the range of market offer prices for each retailer plus the median standing offer price across all NSW retailers and the median market prices across all NSW retailers. We consider that this is an appropriate approach that provides a representative picture of the market while not duplicating analysis already undertaken by the AER.

5 PIAC, Submission to Draft Report, November 2019, pp 1-2.

6 We also note that the offers we have used in our analysis are available to all customers on the Energy Made Easy (EME) website (eg, we excluded offers that required customers to be members of a football club to be eligible).

Box 1.3 How we estimated annual residential bills in this report

For this report, we obtained price data from Energy Made Easy at a point in time and estimated bills using the prices of the median lowest market offer and the median standing offer (across all retailers), for:

- Each of the three network areas (Ausgrid, Endeavour Energy and Essential Energy), and
- The typical residential customer using 5,100 kWh of electricity a year (see Appendix B).

This is a change from how we have estimated bills in past market monitoring reports. Previously, we estimated an average bill for the typical residential consumer across the whole of NSW. We did this by:

1. Estimating an average price for each network area, by weighting prices by the number of customers on standing and market offers, by retailer.
2. Weighting the average price for each network area by the proportion of customers in each network area.[a]

We considered this approach provided a reasonable estimate of the average residential bill paid across NSW. However we have revised our approach, as we consider it is more meaningful to consider the prices available in the most and least competitive segments of the market. In our view this is appropriate given our finding that retailers are competing on price.

a For further details see IPART, *Review of the performance and competitiveness of the NSW retail energy market – From 1 July 2017 to 30 June 2018*, Final Report, November 2018, p 66.

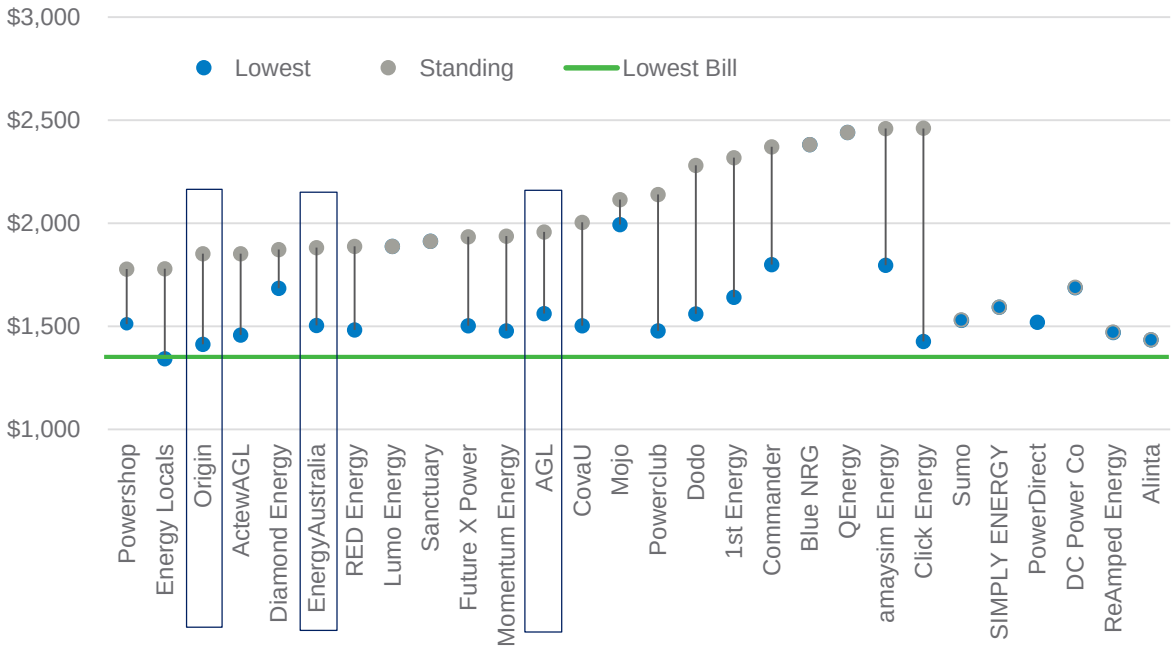
Figure 1.1 shows the difference between the bills for each retailer's anytime standing offer and lowest market offer, based on the offers available in the market as at June 2019 for a typical customer using 5,100 kWh per year in the Endeavour Energy network area. For many of the smaller retailers, their standing offers were significantly higher than those of the big three retailers (marked with a border).

As shown in Figure 1.1, most retailers offer a competitive lowest market offer to customers, although there can be large differences between an individual retailer's standing and lowest market offers. For example, Origin is the largest retailer in NSW and had the lowest market offer of the big three retailers in June 2019. We also found that:

- The ten highest standing offers were each offered by small retailers.
- The two lowest standing offers were each offered by small retailers.
- Retailers' lowest market offers were not correlated with their standing offers.
- The most expensive anytime tariff was 83% more expensive than the cheapest.

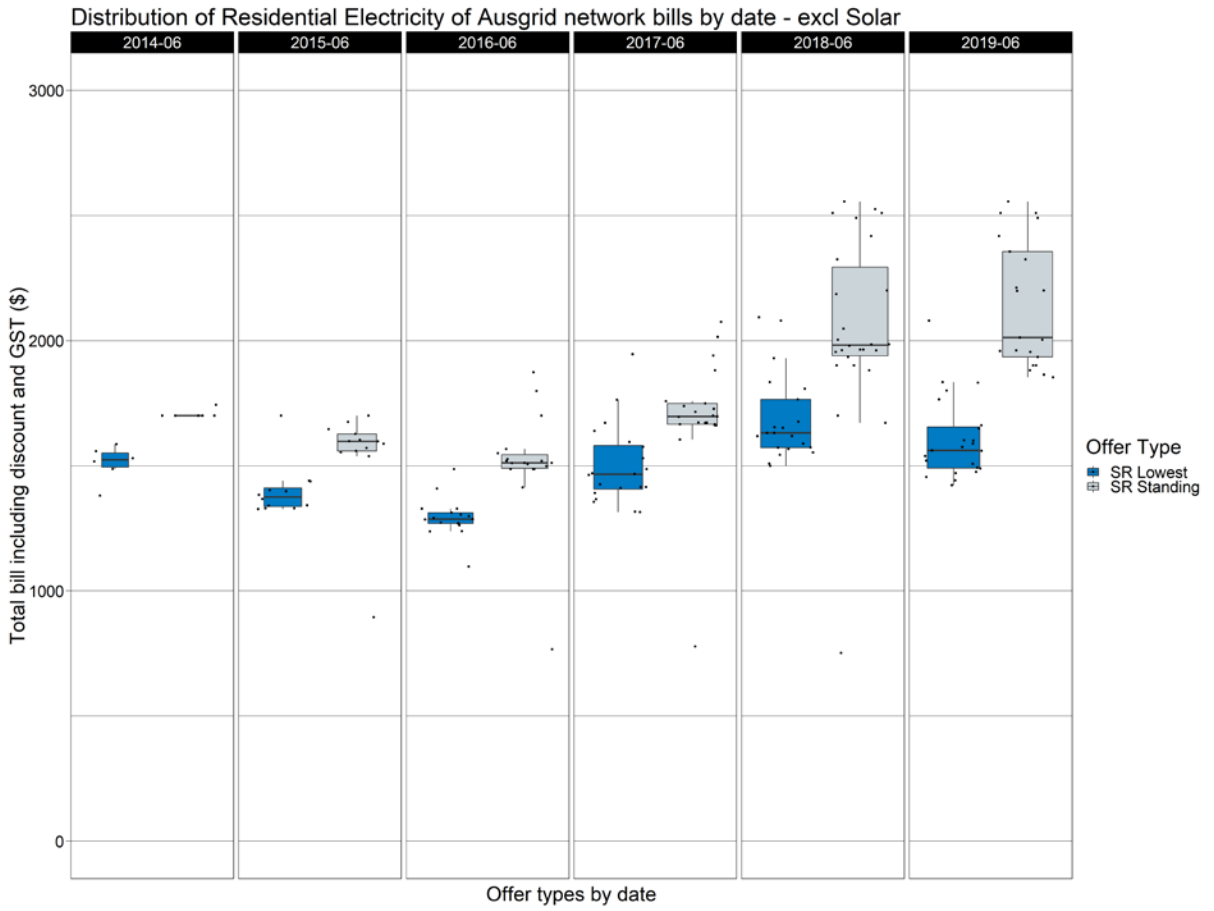
We found similar results in the Ausgrid and Essential Energy network areas (although in the Essential Energy area Origin had the lowest standing offer). Figure 1.2 shows that the spread of offers in the Ausgrid network area has increased significantly over time.

Figure 1.1 Electricity bills for residential Endeavour customers on anytime tariffs (5,100kWh pa, nominal, GST-inclusive)



Note: Some retailers did not have any published standing offers available on Energy Made Easy in June 2019.
Data source: Energy Made Easy, IPART calculations.

Figure 1.2 Spread of anytime (single rate or SR) tariff offers for residential customers in Ausgrid network area (5,100kWh pa, nominal, GST-inclusive)



Note: The above lowest market offers are inclusive of discounts.
Data source: Energy Made Easy, IPART calculations.

In response to our Draft Report, PIAC raised concerns about our views on the intrinsic value of competition and the degree of price dispersion in the market. It considered that while price dispersion is reasonable and expected in relation to differentiated products, in a market with little variation between sellers of a product and an objectively narrow-ranging cost to serve, a wide price spread is a sign of market failure. It recommended that our analysis cover the number of offers above the efficient cost of service, and how many consumers are impacted by excess cost offers.[7] It also considered our analysis of retail price trends over the period 2007-2019 to be misleading and suggested that we should consistently track network and wholesale costs over time.

PIAC also argued that the dispersion of offers inappropriately results in retailers 'benefiting' from inefficient pricing. Retailers are assumed to need to charge a significant proportion of consumers above an efficient price, to provide scope to offer other consumers lower prices, and to develop and employ innovative products.[8]

7 PIAC, Submission to Draft Report, November 2019, pp 1-3.
8 PIAC, Submission to Draft Report, November 2019, pp 3-4.

Some level of price dispersion – with some customers paying more than others - is appropriate in the retail energy markets (as it is in other workably competitive markets) and can drive greater efficiencies. Higher market offers allow retailers to recover more of their fixed costs for the customers that are less price sensitive, which allows other offers for price sensitive customers to be priced at or close to the marginal cost of supply, increasing the level of efficiency in the market.

However, as noted by the ACCC, persistently high levels of price dispersion may also reflect inefficient price discrimination by retailers between customers who regularly search for, and can easily identify, better offers to meet their needs and customers who, for whatever reason, do not actively participate in the market.[9] As competition further develops, we expect that price dispersion may reduce.

In addition, as discussed in Chapter 4, the previous pricing practices of some retailers may have increased transaction costs for some customers. However we expect that over time, changes in market rules and the DMO will help customers engage and lower transaction costs.

We consider that workably effective competition – in combination with the consumer protections in the National Energy Rules and general consumer law – should provide the best outcomes for customers in the retail electricity (and gas) markets in the medium term. The incentives for retailers to outperform their competitors should lead to retailers buying wholesale electricity at cheapest costs, providing new types of product that are tailored to different types of customers, and providing quality customer service through efficient systems. This should lead to prices that reflect the costs of supply and better products for customers.

1.3.1 Prices for market offers fells in 2018-19 but prices for standing offers increased

Our analysis of market and standing offers, by network area, found that from June 2018 to June 2019 the median:

- Lowest market offer price (across all retailers) decreased in all of NSW, by 4% in the Ausgrid network area, 5% in the Endeavour Energy area and 2% in the Essential Energy area.
- Standing offer price (across all retailers) increased by 2% in the Ausgrid network area and 4% in the Essential Energy area, and decreased by 1% in the Endeavour Energy area.

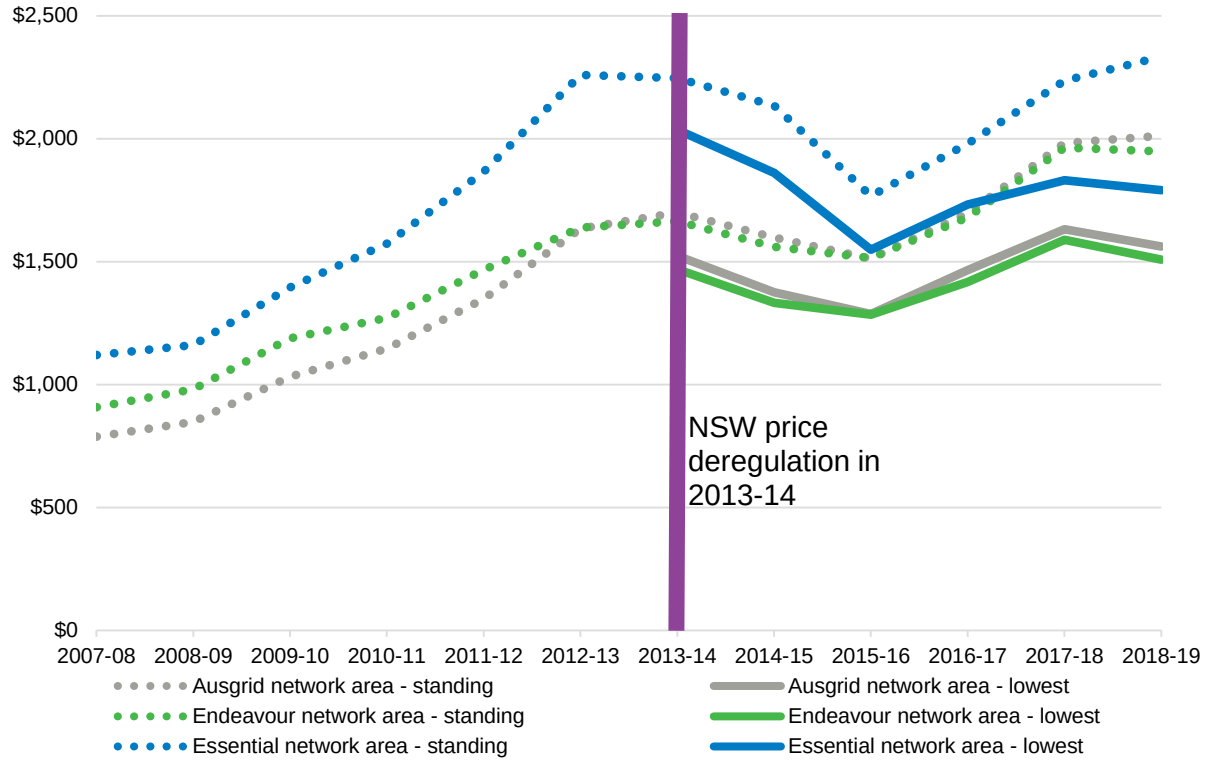
This means that the spread between median lowest market offer and the median standing offer, across all retailers, grew throughout NSW in 2018-19 (Figure 1.3).

1.3.2 Prices have increased significantly over the last decade

Electricity prices increased substantially before price deregulation on 1 July 2014 (Figure 1.3).

9 ACCC, Monitoring of supply in the National Electricity Market, March 2019 report, p 35, Available from https://www.accc.gov.au/system/files/1516_Monitoring%20of%20electricity%20in%20the%20National%20Electricity%20Market_D06.pdf , Accessed 27 November 2019.

Figure 1.3 Annual residential electricity bills under the median lowest market offer and median standing offer, across all retailers, by each NSW distribution network area (5,100kWh pa, nominal, GST-inclusive)



Data source: Energy Made Easy, IPART calculations.

In terms of price trends we observe the following:

- From 2007 to 2013 retail electricity prices more than doubled in the Ausgrid and Essential Energy network areas, and increased by 80% in the Endeavour Energy network area. These increases were largely due to very high levels of network investment. In five years, bills for residential customers on the regulated tariff increased between $730 and $1,140 per year depending on their network area.
- From 2014 to 2016 competitive retail electricity prices (shown as the median lowest market offer across all retailers) decreased by between 13% and 24%. However, these price decreases did not offset the large increases from 2007 to 2013, with the median lowest market offers across all retailers in June 2016 for a typical residential customer still $375 to $500 more than the regulated charges in 2007-08.
- From 2016 to 2018 competitive retail electricity prices again increased, this time by 18% to 27%. These price increases were largely due to increases in wholesale costs, and the median lowest market offers across all retailers increased by another $280 to $340.
- In 2018-19 competitive retail electricity prices fell throughout NSW. However, prices are still higher than they were in 2007. Nonetheless, in the period since prices were deregulated in 2013-14, engaged customers on the lowest market offers (ie, the median lowest market offers across all retailers) have seen their electricity prices increase by less than the cost of living (as measured by the Consumer Price Index (CPI), which increased 8.4% between June 2014 and June 2019).

Competition for the lowest market offer is consistent with our finding that competition in the retail electricity market is increasing. Most customers are on market offers, and are benefiting from competition in the retail electricity market. However, as seen in Figure 1.3, since deregulation the spread between the lowest market offer and the standing offer has grown. (The average spread between the median lowest market offer and the median standing offer, across all retailers, has grown from 10% in 2013-14 to 23% in 2018-19.[10]) This is an expected consequence of a workably competitive market as retailers compete for new customers, and profit off customers that are not active in the market.[11] Although on 1 January 2019, the largest retailers reduced the bills of some customers on standing offers (Box 1.4).

Box 1.4 Retailers reduced bills for vulnerable standing offer customers

After meeting with the Commonwealth Minister for Energy, the Hon. Angus Taylor MP, the four largest retailers announced that from 1 January 2019:

- AGL customers that stay on a standing offer for over a year will receive a 10% discount on their usage
- EnergyAustralia concession customers will receive a 15% discount, and customers in its hardship program and on default tariffs received a rate equivalent to its lowest market offer
- Origin Energy customers holding concession cards on standing or non-discounted plans will get a 10% discount on their usage, and
- Snowy Hydro's retailers announced a 10% discount to all customers on their standing offer.

Source: ACCC, *Monitoring of supply in the National Electricity Market*, March 2019 Report, 15 March 2019, p 24.

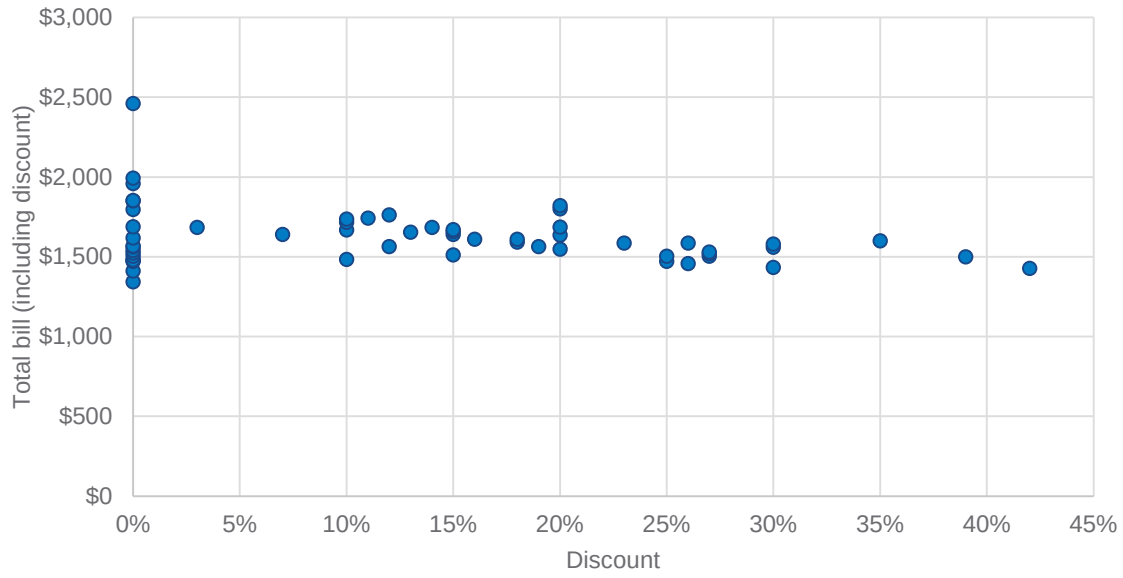
1.4 Discounts to standing offers are still the main way to attract customers

During 2018-19, retailers continued to advertise price discounts relative to a standing offer as the main way to attract customers. In its 2019 Retail Energy Competition Review, the AEMC found that discounts remain the predominant form of pricing competition.[12] In addition, these headline discounts became higher, with the maximum discount being over 40% in June 2019.

However, the discounts were not comparable, as retailers have different standing offers. Figure 1.4 below shows that higher discounts do not mean customers will face lower bills. In fact, higher advertised discounts often reflected higher underlying prices, rather than a better deal for customers. (A discount to a higher offer price can seem more attractive to customers than the equivalent undiscounted price due to the 'framing effect', see Box 1.5). Figure 1.4 also shows there is little correlation between discount size and total bill. In June 2019 the lowest anytime offer for a typical customer consuming electricity in the Endeavour Energy network area included no discounts.

10 Based on a simple average with each distribution network representing a third of customers.
11 Customers on standing offers in the Ausgrid and Endeavour Energy network areas have seen electricity prices increase by more than the cost of living.
12 AEMC, *2019 Retail Energy Competition Review*, Final Report, 28 June 2019, p XV.

Figure 1.4 Annual bill by advertised discount (based on the Endeavour network area, 5,100 kWh pa, GST inclusive)



Data source: Energy Made Easy, IPART calculations.

Box 1.5 The Framing Effect

Many studies of consumer perception use the Prospect Theory of Kahnemann and Tversky, which suggested that consumers may have different perceptions of the same information depending on how it is presented. This change in a consumer's perception is called the Framing Effect, under which even where the key features of a decision-making situation are maintained, consumers will have different perceptions of that situation, a result that should not occur in rational decision-making.

That is, the Framing Effect occurs when people make a decision based on the way the information is presented, as opposed to just on the facts themselves. The same facts presented in two different ways (eg, a discount to a higher electricity price versus the equivalent undiscounted price) can lead to people making different judgments and decisions.

Source: Tversky, Amos and Kahneman, Daniel, *The Framing of decisions and the psychology of choice,* Science, Vol 211, No 4481, 30 January 30, 1981, pp 453–58.

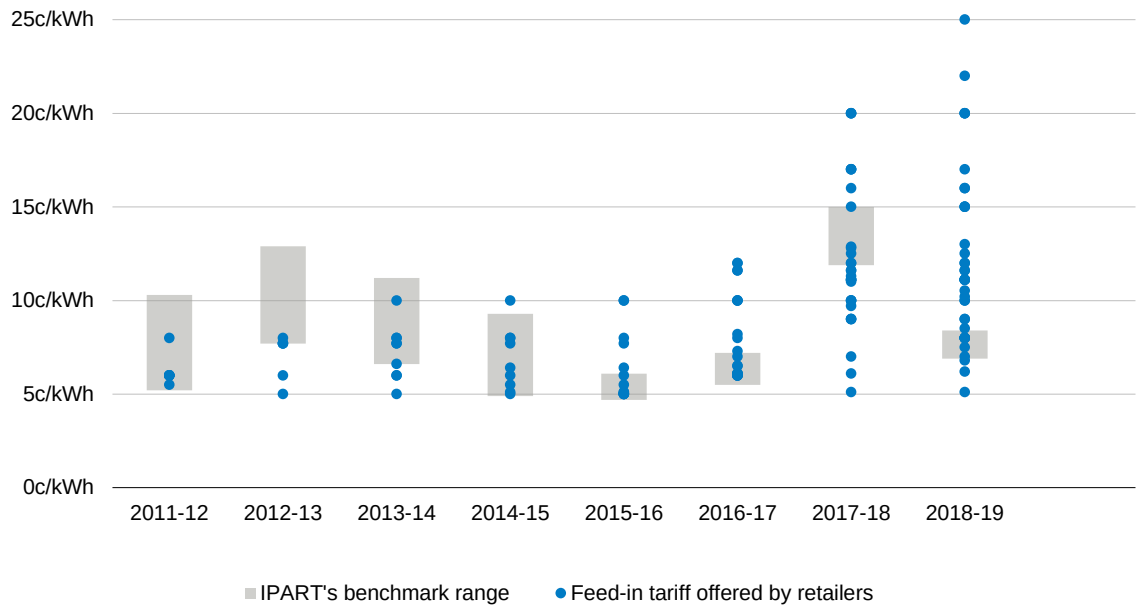
On 1 July 2019 the Australian Government introduced a Default Market Offer (DMO), determined by the AER, which limits (or caps) the prices that retailers can charge customers on standing offers over 2019-20 (see Chapter 6). The DMO will also act as a reference bill or price against which all market offers[13] must be compared when advertised. This measure is expected to help address the problem of a lack of comparability of market offers.

13 Estimated using the model annual usage amount also determined by the AER.

1.5 There is a wide variation in solar feed-in tariffs

It is common for retailers to differentiate themselves through their solar feed-in tariff offering. Each year IPART sets a solar feed-in tariff benchmark range to reflect the likely value of solar energy to the retailer (based on the value of avoided costs of purchasing the equivalent energy from the wholesale market at the times that solar is being exported to the grid). However, over the most recent years, retailers have been competing to offer higher solar feed-in tariffs to attract solar customers. Figure 1.5 shows that there is now a very wide range of feed-in tariffs being offered to customers, with the vast majority above the IPART benchmark range for 2018-19.

Figure 1.5 Solar feed-in tariffs over time compared to IPART's benchmark (2011-12 to 2018-19, nominal)



Data source: IPART and Energy Made Easy.

1.6 Retailers also use a variety of other ways to differentiate products and attract customers

There are limited ways to differentiate an electricity service. However, we found that retailers offer other alternatives to traditional tariff structures and products to appeal to different market segments by:

- Offering locked-in tariffs for up to 2-years. AGL's Essentials and Essentials Plus plans fix rates for 12 months and 24 months respectively.[14]

14 AGL, *Electricity and gas plans*, https://www.agl.com.au/get-connected/electricity-gas-plans#/, accessed 19 September 2019.

- Allowing customers to prepay for electricity. Under Amaysim's electricity plans a customer pays the same upfront monthly price for a set amount of energy.[15] Going even further, Powershop allows customers to pre-purchase units of energy when it is convenient and offers periodic sales and discounts.[16, 17]
- Offering carbon neutral or renewable electricity packages. All energy usage by Powershop customers is certified carbon neutral at no extra cost,[18] and Energy Locals offsets all greenhouse gas emissions associated with the electricity provided to its customers.[19] EnergyAustralia offers residential customers the ability to opt in to a Go Neutral product, under which EnergyAustralia will offset the carbon emissions from the customer's electricity at no additional cost to the customer.[20,21]
- Installing solar systems and battery systems. EnergyAustralia and Origin Energy offer solar panels, inverter and installation, as well as battery storage systems.[22, 23]

Retailers have also found other ways to increase the value they can offer customers, including:

- Packages that bundle services together, mostly commonly gas and electricity but also internet and energy.[24]

15 Any overruns are charged for in the next month. Similarly unused energy can be rolled over into the next month's allowance. See Amaysim, *Subscription energy*, https://www.amaysim.com.au/energy/subscription/how-it-works?cid=landing-hero, accessed 19 September 2019.

16 Powershop, *Powerpacks*, https://www.powershop.com.au/powerpacks/, accessed 19 September 2019.

17 These types of pricing structures are in their infancy, but the take-up of smart meters will enable retailers to develop new pricing models, as energy consumption is measured in real time, and customer demand-response options become valuable to retailers (that is, customers agreeing not to use energy in times of peak demand, and a value being assigned to this avoided consumption).

18 Powershop, *Carbon neutral*, https://www.powershop.com.au/carbon-neutral/, accessed 19 September 2019.

19 Energy Locals, *Carbon neutral power*, https://energylocals.com.au/carbon-neutral-power/, accessed 19 September 2019.

20 Offsetting starts when the customer has had the same account with EnergyAustralia for six months. EnergyAustralia, *Go neutral*, https://www.energyaustralia.com.au/home/bills-and-accounts/go-neutral/opt-in-for-carbon-neutral, accessed 19 September 2019.

21 Almost all retailers offer 'GreenPower'. Customers that sign up to GreenPower will have some or all of their electricity use offset by their retailer with electricity purchases from accredited renewable generators. Unlike carbon neutral electricity, which may invest in programs anywhere to offset the emissions caused by customers' electricity usage, GreenPower directly invests in Australian solar, hydro and wind power. Canstar Blue, *Carbon neutral energy*, https://www.canstarblue.com.au/electricity/carbon-neutral-energy/, accessed 19 September 2019.

22 EnergyAustralia, *Solar Power Systems,* https://www.energyaustralia.com.au/home/solar-and-batteries/solar-power/solar-power-systems, accessed 19 September 2019. Origin Energy, *Solar & Batteries,* https://www.originenergy.com.au/solar.html, accessed 19 September 2019.

23 Enova Energy is establishing a solar garden in the Northern Rivers region of NSW, which is designed for people who are renting, living in apartments, moving, or in houses that are shaded, or who are not able to afford to invest in a solar system. Enova Energy, *Community projects*, https://enovaenergy.com.au/not-for-profit/community-projects/, accessed 19 September 2019.

24 Retailers commonly offer electricity and gas together however Dodo, Next Business Energy, and Origin Energy, also supply customers in both the energy and broadband markets. See eg, Origin Energy, *Bundle and save*, https://www.originenergy.com.au/for-home/campaign/broadband-compare.html, accessed 19 September 2019.

- Credits either towards the first bill or on an ongoing basis. Momentum Energy offers a $50 online sign up bonus for the first bill.[25] Diamond Energy offers customers a 2% discount on their usage and daily supply charges for 'referring a friend'.[26]
- Membership to benefits programs (eg, NRMA Blue, AGL Rewards) and Rewards points (eg, Simply Energy and Red Energy providing Qantas Points,[27] AGL providing flybuys).[28]
- Other benefits (eg, movie tickets, smart devices).

Product differentiation appears to be occurring across all retailers, regardless of their size, rather than being limited to either the big three retailers or the smaller retailers. Instead, all retailers look to be providing improved offerings to customers. We consider that the range of products on offer indicates that retailers are innovating to compete for customers.

1.7 Retailers are not generally targeting customers based on total consumption

As outlined above, electricity offers are typically made up of a number of different tariff components, including a supply charge, and different consumption charges. Depending on the relativities between these tariff components, customers with different usage profiles could be better off on different types of offers. For example, a low consumption customer might be better off with a lower fixed tariff, and higher prices for consumption. In contrast, a high consumption customer might be better off with lower usage rates and a relatively higher fixed charge.

In a competitive market, we would expect to see retailers tailoring their offers to these different household consumption profiles. To target different consumption retailers would offer a range of tariffs that suit different consumption profiles, or focus their tariffs on a specific group of customers. We have seen limited evidence that retailers are tailoring their products for different usage levels. Figure 1.6 below shows the cheapest fifteen offers (limited to one offer per retailer) for customers using 5,100kWh per year in the Endeavour Energy area.[29] It shows a minor variation in the best offer for different usage levels. For example, the Energy Locals offer is the best offer for typical and high residential users, it is not the best offer for low users.

25 Momentum Energy, *Electricity rates*, https://www.momentumenergy.com.au/residential/gas-electricity-prices/electricity-rates, accessed 19 September 2019.

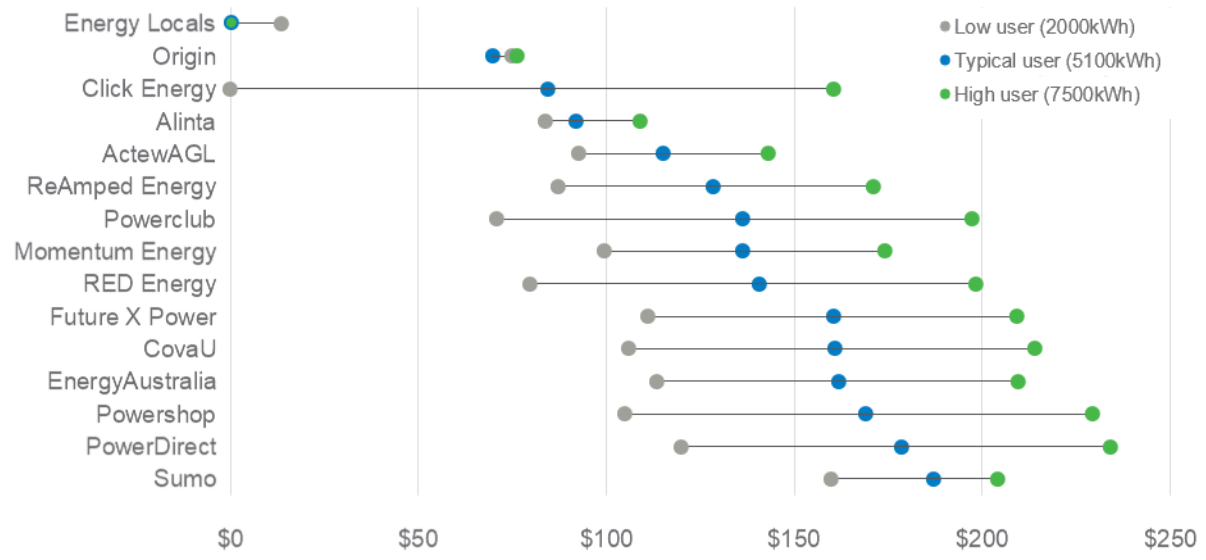
26 After the new customer has been with Diamond Energy for 2 years, the discount attributable to the new customer reduces from 2% to 1%. Diamond Energy, *Thrive*, https://diamondenergy.com.au/thrive/, accessed 19 September 2019.

27 For example, see Red Energy, *Earn Qantas Points for being a Red Energy customer* https://www.redenergy.com.au/qantas/, accessed 19 September 2019.

28 Although the ACCC has recently released a report identifying a number of concerns with customer loyalty schemes. ACCC, *Customer loyalty schemes – Draft report*, September 2019.

29 The high and low usage scenarios are roughly consistent with a five person household and a single person household.

Figure 1.6 Premium on the cheapest anytime offer by usage (Endeavour Energy network area, June 2019)



Data source: Energy Made Easy June 2019.

2 Customers are relatively engaged and active

In workably competitive markets we would expect most customers to be engaged and active in the market. For example, they would be aware of the choices available to them and be shopping around for better deals. The more well-informed and engaged customers are, the more pressure there is on retailers to offer competitive prices and services.

To assess customer engagement and activity in the retail electricity market in 2018-19, we looked at awareness of retail competition, switching rates, customers' contract types and customers' satisfaction with the market. We also examined the reasons why some customers do not participate in the market.

We relied primarily on the AEMC's Competition Reviews. Previously, the AEMC commissioned its own survey of residential customers,[30] but this year it has again commissioned a survey of business customers only. For residential customers, it has again relied on the results of a different survey undertaken by Energy Consumers Australia. Therefore, our analysis in this chapter refers to both the results of the AEMC's survey of residential customers in 2017, and the AEMC's reporting of the 2019 survey results of the Energy Consumer Sentiment Survey.

The sections below outline our findings and then discuss them in more detail.

2.1 Overview of findings

In NSW, customer participation in the electricity market remained high over 2018-19, and both switching rates and the proportion of customers on market offers continued to increase. In line with previous years, 18% of residential customers reported that they intend to switch retailer in the next 12 months.[31]

The difficulty of comparing offers continued to constrain customer engagement. For example, the proportion of customers who reported they felt confident that they could find the best deal for them either stabilised or fell in 2018-19 compared to the previous year (see section 2.3.1 below). However some customers consciously decide not to engage in the market.

Governments and regulators have implemented a range of measures to make it easier for customers to compare offers. These include new measures or improvements to existing measures that have only recently come into effect.

We consider that these findings are compatible with a developing competitive retail electricity market.

30 See Newgate Research, *Consumer research for the Australian Energy Market Commission's 2017 Retail Competition Review*, April 2017.

31 See AEMC, *Jurisdiction New South Wales*, https://2019.aemc.gov.au/competition-review/jurisdiction/new-south-wales#residential-consumers, accessed 19 September 2019. The main reasons stated by residential customers for switching were they searched for a better deal on a comparison website (31%) and/or were not satisfied with the value for money from their retailer (31%).

2.2 Customer participation in electricity market remained high in 2018-19

The AEMC's findings on customer participation indicate that the level of participation in the electricity market in NSW remained high in 2018 (Table 2.1). Historically there have been high levels of awareness, and almost all customers knew they could choose their electricity retailer. In addition, 21% of small customers switched electricity retailers during 2018, up from 19% in the previous year.[32] The AEMC did not report on the number of residential customers who switched plan with the same retailer in 2018. However, Newgate found that this has tended to remain fairly constant in previous years at just under 20%.[33]

The AEMC's 2017 findings also indicated customer switching rates for electricity providers were higher than those for other products and services. In the five years to 2017, 39% of consumers surveyed had switched electricity providers, whereas 36% had switched car insurers, and 34% had switched mobile providers.[34]

Table 2.1 Summary of participation indicators (NSW)

Category	Customer type	Measure	2014	2015	2016	2017	2018
Awareness	Residential	Of choice of retailer	90%	89%	92%	94%	-
		Of choice of plans	NA	81%	82%	86%	-
	Business	Of choice of retailer	86%	95%	92%	95%	-
		Of choice of plans	NA	87%	86%	81%	-
Customer activity	Residential	Switched company at least once in year[a]	15%	16%	17%	19%	21%
		Switched plan with same company in year	NA	18%	15%	19%	-
	Business	Switched company at least once in year	NA	17%	15%[a]	11%[a]	15%[a]
		Switched plan with same company in year	NA	20%	12%[a]	19%[a]	17%[a]

a Updated data from AEMC, *2019 Retail Energy Competition Review*, Final Report, June 2019, pp 103, 114 and AEMC, *2018 Retail Energy Competition Review*, Final Report, June 2018, pp 97-98, 121. Other data in the table comes from Newgate Research.

Data source: Newgate Research, *Consumer research for the AEMC's 2017 Retail Competition Review*, April 2017, pp 102-106.

As Chapter 1 explained, standing offers are the default offers for customers who have not engaged in the market at their current supply address. Some customers will also be on standing offer prices because their market offer has expired.[35]

Figure 2.1 shows that there has been a substantial increase in the proportion of customers on market offers (for both residential and business customers). In the year to June 2018, this

32 See AEMC, *Jurisdiction New South Wales*, https://2019.aemc.gov.au/competition-review/jurisdiction/new-south-wales#residential-consumers, accessed 19 September 2019.

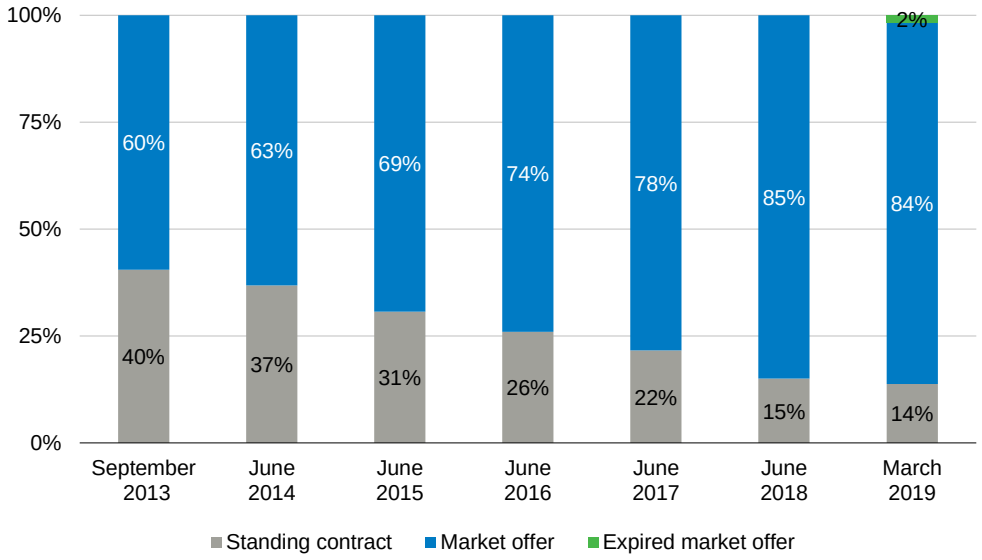
33 Newgate Research, *Consumer research for the Australian Energy Market Commission's 2017 Retail Competition Review*, April 2017, p 106.

34 AEMC, *2017 AEMC Retail Energy Competition Review,* Final Report, July 2017, p ii.

35 Most market offers do not expire but many have a 'fixed benefit period' when discounts apply. Customers then face undiscounted prices (usually standing offer prices) after this period.

proportion grew from 78% to 85%,[36] and as of March 2019 it had increased to 86% (including customers on market offers with expired benefit periods).

Figure 2.1 Proportion of standing and market contracts in NSW



Note: This is the first year where the AER has presented figures on the number of customers on market offers with expired benefit periods. In previous years, customers on expired market offers were counted as on market offers.

Data source: AER, *Retail energy market performance update for Quarter 3, 2018-19,* 21 June 2019, https://www.aer.gov.au/retail-markets/performance-reporting/retail-energy-market-performance-update-for-quarter-3-2018-19

The AEMC now uses the Energy Consumer Sentiment Survey and its own survey of business customers to assess the outcomes small customers are achieving from the market. The AEMC found that in April 2019, the level of satisfaction:

- For residential customers in NSW:
  - The level of competition was 48% (up 3% from the year before).
  - Customer service from electricity retailers was 59% (down 6%).
  - The value for money of electricity retailers was 45% (up 1%).
- For small business customers in NSW:
  - Customer service from electricity retailers was 52% (down 6%).
  - The value for money of electricity was 32% (down 9%).
  - Choice of energy companies and plans was 15% (down 6%).[37]

The AEMC also reported key statistics related to complaints to retailers and the ombudsman, the number of customers on hardship programs and their average debt, and customer disconnection rates for New South Wales.[38]

36 This jump is likely to reflect increased engagement in the market, following substantial media attention and political intervention in the market. For example, in August 2017, the Prime Minister reached an agreement with seven retailers that they would write to all of their standing offer customers and inform them of their cheaper offers.

37 See AEMC, *Jurisdiction New South Wales*, https://2019.aemc.gov.au/competition-review/jurisdiction/new-south-wales#residential-consumers, accessed 19 September 2019.

38 Ibid.

2.3 Difficulty of comparing offers continued to constrain customer engagement

For the past couple of years, 18% of residential customers reported that they are intending to switch retailer in the next 12 months.[39] For some customers, not participating in the market is a rational choice. In 2017, Newgate found a key reason that customers across the NEM had not investigated switching retailers was because they were happy with their current retailer (29% of residential and 25% of business customers who had not investigated switching).[40] We do not consider that this is necessarily a problem.

For other customers, the cost of their time to search for and switch to a cheaper deal outweighs their potential benefit from a lower bill. Newgate found that 15% of residential customers and 22% of business customers didn't investigate switching because they didn't have time. Similarly, 14% of residential and 10% of business customers felt it was too much hassle or couldn't be bothered.[41]

In addition, Newgate found that the main motivation for customers to switch retailer or plan was to reduce their bill,[42] but customers said that to seriously consider switching retailer or plan, they would need to make a significant saving. In 2017, residential customers wanted to save an average of $388 per year on their electricity bill,[43] and small business customers wanted to save about $796 per year.[44]

2.3.1 Some customers find comparing and identifying best offer confusing

In its last customer survey, the AEMC found that 8% of residential customers across the NEM reported that the reason they investigated switching offers but did not switch, was because it was too confusing.[45] In addition, the number of customers who reported that they can find the right information to help them compare offers either stabilised or fell over 2018-19:

- 50% of NSW residential customers said they were confident they could access easily understood information in April 2019, compared to 49% April 2018.[46]
- However, for small business customers, the level of confidence that they could find the right information to select a retailer or plan decreased significantly by 18%, down to 43% in 2019.[47]

39 See AEMC, *Jurisdiction New South Wales*, https://2019.aemc.gov.au/competition-review/jurisdiction/new-south-wales#residential-consumers, accessed 19 September 2019.
40 Newgate Research, *Consumer research for the Australian Energy Market Commission's 2017 Retail Competition Review*, April 2017, p 39.
41 *Ibid*.
42 *Ibid*, p 38.
43 *Ibid*, pp 46-47.
44 *Ibid*, pp 46-47, AEMC, *2018 Retail Energy Competition Review*, Final Report, June 2018, p 124.
45 Newgate Research, *Consumer research for the Australian Energy Market Commission's 2017 Retail Competition Review*, April 2017, p 40.
46 See AEMC, *Jurisdiction New South Wales*, https://2019.aemc.gov.au/competition-review/jurisdiction/new-south-wales#residential-consumers, accessed 19 September 2019.
47 Ibid.

In 2017 residential customers also thought the process of comparing and selecting energy offers was more complex than comparing and selecting other services, such as home/car/health insurance, internet and telecommunication plans, or banking services.[48]

2.3.2 Introducing a reference bill makes comparing anytime tariffs easier

We agree it can be difficult for some customers to compare electricity market offers. This is because they are made up of several different tariff components – including a supply charge, different consumption charges, and discounts that can be applied to some or each of these components. As Chapter 1 discussed, customers cannot rely on headline discounts to compare offers, because the base rate from which the discounts apply vary across retailers and plans.

However, on 1 July 2019 the Australian Government introduced a Default Market Offer (DMO), determined by the AER, which limits (or caps) the prices that retailers can charge customers on standing offers over 2019-20 (see Chapter 6). The DMO will also act as a reference bill or price against which all market offers[49] must be compared when advertised. This measure is expected to help address the problem of a lack of comparability of market offers.

2.3.3 Good tools to help customers compare offers are available

Governments and businesses do have measures in place to help customers. The AER publishes independent comparisons of retailers' energy offers through its Energy Made Easy website. This website calculates the annual bills the customer would face under different market offers on a consistent basis, using their actual historical energy usage or their household characteristics, and ranks them by price. This makes it easy for customers to compare a large number of offers, and to assess their suitability for their individual circumstances.

In addition, in November 2018, the NSW Government launched 'Energy Switch', to make it easier for households to compare their current offer with the offers available. It identifies cheaper offers for households, how much they would save, and provides an option to initiate a change of retailer. It is offered both online and at ServiceNSW centres.[50] There are also a large number of privately run comparator websites that can help customers compare and switch offers (eg, Compare the Market and Canstar Blue). [51]

48 Newgate Research, *Consumer research for the Australian Energy Market Commission's 2017 Retail Competition Review*, April 2017, p 25.

49 Estimated using the model annual usage amount also determined by the AER.

50 NSW Government, *Energy Switch to save households hundreds of dollars*, November 2018, https://www.nsw.gov.au/your-government/the-premier/media-releases-from-the-premier/energy-switch-to-save-nsw-households-hundreds-of-dollars/, accessed 20 September 2019.

51 The ACCC in their 2018 retail energy pricing inquiry noted that commercial comparative switching services have the potential to add significant value for consumers but in several areas are not delivering good outcomes for consumers. They recommended that the Australian Government prescribe a mandatory code of conduct, which would include a requirement that offers be recommended based on price benefits to the consumer rather than the size of the commission received by the site. June 2018, pages 274-282

We consider that Energy Made Easy and Energy Switch are good tools for customers to compare offers when they are on anytime tariffs. We support the AEMC's recommendation that the Australian Government carry out actions to improve awareness of the enhanced Energy Made Easy[52] to allow consumers to benefit from the website.[53]

In response to our Draft Report PIAC suggested that we consider what offers consumers are engaging with, including how many consumers are on the range of different price offers available.[54] We agree that it would be useful to consider more information on the prices actually paid by consumers when assessing competition.

The National Energy Retail Law (NSW) limits the information we can consider as part of our reviews to:

- information provided by the AEMC and the AER
- publicly available information, and
- information provided by the retailers on customer numbers and offer prices.

We recommend that the NSW Government publish more information on the distribution of consumption and bills for customers that have used the NSW Energy Switch website to help inform regulators on how prices actually paid by customers are changing over time. This should be broken down by network area, market vs standing offers and published each financial year to identify differences pre and post the implementation of the Default market Offer (DMO).

52 The AER will have an enhanced website go live at the end of 2019 with iterative changes made through to July 2020.
53 AEMC, *2019 Retail Energy Competition Review*, Final Report, June 2019, p xi.
54 PIAC, Submission to Draft Report, November 2019, pp 2.

3 Prices fell more than underlying costs in 2018-19

The National Energy Retail Law requires us to consider whether price movements are consistent with a competitive market. Typically changes in price in a workably competitive market tend towards underlying costs. The sections below summarise our findings for 2018-19, and then discuss them in more detail.

3.1 Overview of findings on changes in electricity prices and costs

As noted in Chapter 1, competitive prices decreased in 2018-19 for customers that were engaged in the market. We found that the median of the lowest price available to these customers decreased by 2% to 5%. However for residential customers that have not actively engaged in the market and are supplied on a standing offer, median prices increased by 2% in the Ausgrid and 4% in the Essential network areas, and decreased by 1% in the Endeavour network area.

Overall we found that the changes in prices in 2018-19 were consistent with underlying costs and a developing competitive market. In our analysis of underlying costs we found that:

- wholesale hedging costs in 2018-19 were lower than in 2017-18 decreasing retailers'[55] costs by around 3%, however spot prices were at a record high likely offsetting some of the savings on the hedging costs
- environmental compliance costs in 2018-19 were higher than 2017-18 increasing standalone retailers' costs by around 1%, and
- there were small changes to network and retail costs.

3.2 Wholesale hedging costs fell while spot prices increased

Wholesale electricity costs have increased in recent years. Figure 3.1 shows average annual wholesale prices since 2013-14 for the spot market and hedging markets used by electricity retailers. While wholesale costs on a $/MWh basis are highly correlated with the wholesale spot price over time, there is some delay between changes in the spot price and wholesale costs as a result of retailers hedging their wholesale costs to reduce volatility.[56] Spot prices are also more volatile than hedging contracts.

Wholesale prices in 2017-18 were more than double prices in 2014-15 in both the spot and hedging markets. Wholesale prices remain much higher than the levels seen in 2014-15. However in the period 2017-18 to 2018-19, we found that the weighted average:

55 That is, retailers active in the hedging markets.

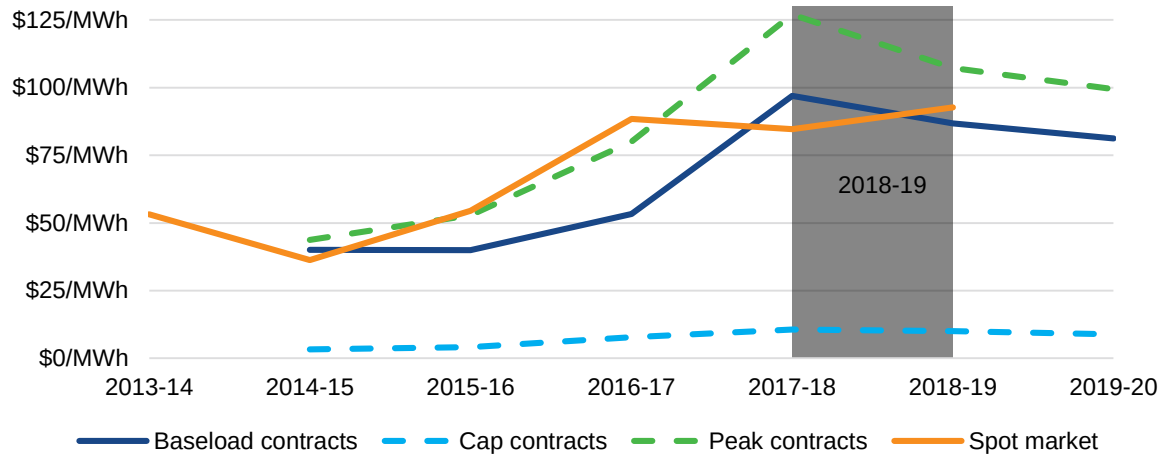
56 ACCC, Inquiry into the National Electricity market report – August 2019, p 15, available from https://www.accc.gov.au/system/files/Inquiry%20into%20the%20National%20Electricity%20Market%20report%20-%20August%202019.pdf , Accessed 19 September 2019.

- Price of exchange traded hedging contracts fell by 10%,[57] and
- Spot price increased by 9% to a record average financial year high of $92.68 per MWh.[58]

Most retailers manage wholesale price risks through hedging and use hedging prices in setting prices as they are forward looking. However, it remains important to consider the spot market as many retailers remain exposed to it.

Wholesale costs make up about one third of a typical customers' bills,[59] and so a 10% decrease in the price of wholesale costs suggests about a 3% decrease in underlying costs.

Figure 3.1 Average annual wholesale prices from 2013-14



Note: We have included average prices for 2019-2020 based on Bloomberg trading data to 13 September 2019.
Data source: AEMO and Bloomberg data

In our 2018 Energy Market Monitoring report, the NSW Government asked us to project costs into 2018-19. We found, as at 1 June 2018, that market data indicated that wholesale costs would fall 35% in 2018-19.[60] The differences between the estimates above and last year's report are due to differences in the timing and method analysis (see Box 3.1 for more details).

57 IPART analysis of Bloomberg data. We have calculated the change based on changes baseload, cap and peak contracts weighted by the total number of trades for each contract in the 24-months before expiry.
58 IPART analysis of AEMO spot market data.
59 AEMC, *2018 Residential Electricity Price Trends,* Final Report, 21 December 2018, p 70, and ACCC, *Monitoring of supply in the National Electricity Market,* March 2019 Report, 15 March 2019, p 69.
60 IPART, *Review of the performance and competitiveness in the NSW retail energy market From 1 July 2017 to 30 June 2018,* Final Report, November 2018, p. 69.

Box 3.1 Reporting forward estimates and actual costs

Our 2018 report calculated future wholesale costs at a point in time

When forecasting we have incomplete data. When we forecast wholesale costs we apply a point in time estimate, by looking at a particular date we consider the difference in hedging costs between two years (over one day and one month). We apply this method as it represents the costs a new market entrant would need to pay to hedge a year's worth of electricity at that point in time.

The point in time estimate can be relatively volatile, and does not always reflect what spot prices or contract prices eventuate over the year. However, it remains a useful forward estimate of the next year's wholesale costs.

This report calculates wholesale costs based on completed contract data

In this report, we have the advantage that the 2018-19 financial year has ended. We have actual data on both the spot prices and wholesale contract prices throughout the year. We calculated:

- The average spot price as a weighted average of actual demand and actual spot prices. Every 30 minute interval price is weighted by how many MWh were purchased in that 30 minutes.
- Wholesale hedging prices using a 24-month trade weighted average of trading prices for base, caps and peak contracts traded on the Australian Stock Exchange. The overall figure of 10% is a weighted average (based on total trades) of each type of contract. In 2018-19, average prices of baseload contracts decreased by 10%, cap contracts decreased by 6% and peak contracts decreased by 16%.

3.3 Environmental compliance costs increased around 16%

For our 2018 energy market monitoring report, we engaged ACIL Allen to forecast the costs of complying with green schemes. They applied a variation of our point in time approach to wholesale costs (see Box 3.1), using spot prices for large-scale generation certificates and small-scale generation technology certificates as a proxy for expected certificate prices. ACIL Allen found that green scheme costs were forecasts to increase by 16% in 2018-19.[61]

This estimate is supported by the ACCC's March 2019 Electricity Market Monitoring report. The ACCC also found that for a typical customer the costs of complying with the large-scale and small-scale renewable energy schemes had increased by 16% in 2018-19. The ACCC found the most of this increase was due to increased costs of complying with the small-scale renewable energy target.[62]

Environmental costs account for 5% of retailers costs.[63] A 16% increase in environmental costs, increases a retailers' underlying costs by around 1%.

61 ACIL Allen, *Cost drivers of recent retail electricity prices for small NSW customers*, Final Report, 21 November 2018, p 21.
62 ACCC, *Monitoring of supply in the National Electricity Market,* March 2019 Report, 15 March 2019, pp 86-89.
63 AEMC, *2018 Residential Electricity Price Trends*, Final report, 21 December 2018, p xiii.

3.4 There were small changes to network costs

In April 2018, the AER approved 2018-19 network prices for Ausgrid, Endeavour Energy and Essential Energy. Residential anytime network charges:

- Decreased by 0.5% in Ausgrid's network
- Decreased by 0.2% in Endeavour Energy's network, and
- Increased by 0.8% in Essential Energy's network.[64]

Network charges for small business customers increased by more than residential network charges.[65]

Network costs are the largest components to retailers' underlying costs. However, these changes would impact underlying costs by less than 0.5%. We discuss time of use network charges in Chapter 5.

3.5 Retail margins have decreased in 2018-19

In 2018 ACIL Allen found no evidence for a change in retailer operating costs. We have found no additional evidence to suggest operating costs have changed.

As a consequence, our analysis finds that retail margins decreased in 2018-19. Competitive retail prices fell by 2% to 5% across NSW, while combined wholesale, network, environmental costs and retailer operating costs fell by 2% to 2.6%.

This finding is supported by the ACCC, which found that listed electricity retailers have likely seen reductions in their retail margins.[66]

64 IPART analysis of approved prices for network businesses.
65 ACIL Allen, *Cost drivers of recent retail electricity prices for small NSW customers*, Final Report, 21 November 2018, p 23.
66 ACCC, *Monitoring of supply in the National Electricity Market,* March 2019 Report, 15 March 2019, pp 19-24.

4 Barriers to entry are relatively low

The National Energy Retail Law requires us to consider barriers to entry, exit and expansion. In markets where there are barriers to entry, exit and expansion, existing businesses have greater capacity to exercise market power through increasing their profit margins.[67] To examine barriers to entry, exit and expansion, we looked at AER data, the ACCC's Retail Electricity Pricing Inquiry and Inquiry into the National Electricity Market and the AEMC's 2019 Retail Competition Review.

We found that barriers to entry and exit remain relatively low. However, retailers without generation have not been gaining large market shares.

4.1 Large number of retailers contest the electricity market

One measure of the barriers to entry in a market is how many businesses are in the market and how many have entered in recent years. In June 2019, 26 retailers (and 31 brands) advertised offers on Energy Made Easy (we have included a full list of retailers at Appendix C). Many of these retailers also offered gas.[68] Since September 2018, four retailers entered the market and advertised electricity offers in June 2019:

- DC Power Co
- Future X Power
- Powerclub, and
- ReAmped Energy.

This suggests that there are no substantial barriers to entry into the NSW retail electricity market. Supporting this, the ACCC reported in its 2018 Retail Electricity Pricing Inquiry that the barriers to entry are not significant,[69] including citing a submission that entry into the retail market would cost around $2.5 million.[70]

The National Energy Retail Law also requires to consider barriers to exit. Barriers to exit act as barriers to entry, where potential entrants seeing a high cost of failure are less likely to enter and compete. As a result, our analysis focuses on barriers to entry (see Box 4.1 for more information).

In its submission to our Draft Report Powershop broadly agreed with our finding that barriers to entry remain relatively low but noted there are important challenges to new entrants. For example, retailers wanting to compete on a national level to leverage scale face a confusing

67 This could be not passing through cost savings and/or increasing prices more than underlying costs.
68 This is discussed further in our 2018-19 gas market monitoring report.
69 The ACCC did note that some barriers to entry were identified that were unlikely to be broadly impeding market entry. However, in its explanation of this statement focuses on Victoria not being a part of the National Energy Customer Framework.
70 Australian Competition and Consumer Commission, *Restoring electricity affordability and Australia's competitive advantage*, Retail Electricity Pricing Inquiry – Final Report, June 2018, p 149.

regulatory landscape with one of the biggest markets (Victoria) not being bound by the National Energy Customer Framework[71].

Box 4.1 Barriers to exit dampen risk taking and entry

In functioning competitive markets, there will be firms that are successful and firms that fail. Barriers to exit are market features that make it difficult or costly to fail or leave a market. Barriers to exit chill competition in two ways:

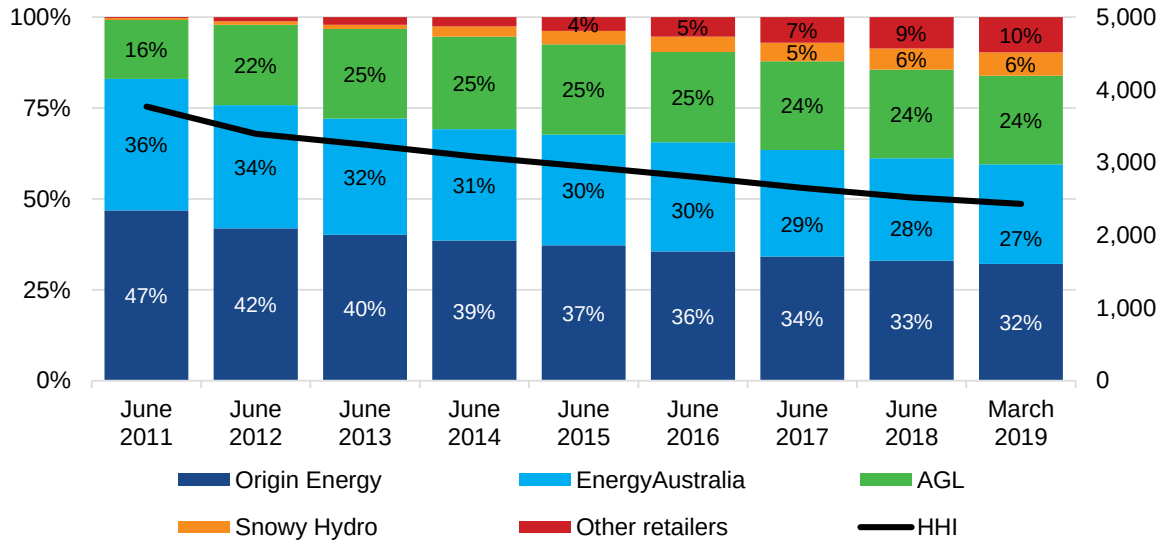
- They act as barriers to entry, where potential entrants seeing a high cost of failure are less likely to enter and compete, and
- They reduce risk taking, where incumbent firms decide not to compete aggressively as the costs of failure are too large.

Source: AER and AEMO

4.2 Four vertically integrated businesses serve 90% of the market

Since competition was introduced to the retail electricity market, we have seen new entrants gain market share. Figure 4.1 shows that since 2011, the market has become less concentrated, with more retailers and with the purchasers of Government owned retailers consistently losing market share.[72] Since 2014, most growth in market share has been outside the big three (AGL, Origin Energy, and Energy Australia), with Snowy Hydro growing to 6% of the NSW market and Alinta Energy growing to 2.5% of the NSW market.

Figure 4.1 Smaller retailers have gained market share every year since 2011



Data source: AER

71 Powershop, Submission to IPART's Draft Report, November 2019, page 2

72 TRUenergy (purchaser of EnergyAustralia) and Origin Energy were active in the retail market before their acquisitions of the Government owned retail businesses.

The level of market concentration has fallen consistently since 2011. The most common measure of market concentration, the Herfindahl-Hirschman Index (HHI) has fallen from 3,737 in 2011 to 2,433. For context:

- The ACCC's merger guidelines considers a post-merger industry with a HHI of 2,000 is less likely to raise competition concerns.[73]
- The Australian mobile telecommunications market had a HHI over 4,000 in 2016,[74] and
- The United States Department of Justice and Federal Trade Commission's horizontal merger guidelines state market concentrations above 2,500 are highly concentrated.[75]

The consistent fall in the HHI is further evidence that competition is developing in NSW.

However, there is a trend towards vertical integration that means that four vertically integrated business serve 90% of customers (see Box 4.2). In its 2018 Retail Electricity Pricing Inquiry, the ACCC concluded that there were substantial barriers to expansion. We consider that barriers to expansion may be an impediment to the NSW retail market's competitiveness, particularly for retailers that do not own baseload generation assets.

In response to our Draft Report Powershop notes that there are significant challenges for new entrants including volatile wholesale price increases that the risk and costs for retailers especially non-vertically integrated energy businesses.[76]

73 ACCC, *Merger Guidelines,* November 2008 (amended in November 2017), p 35.

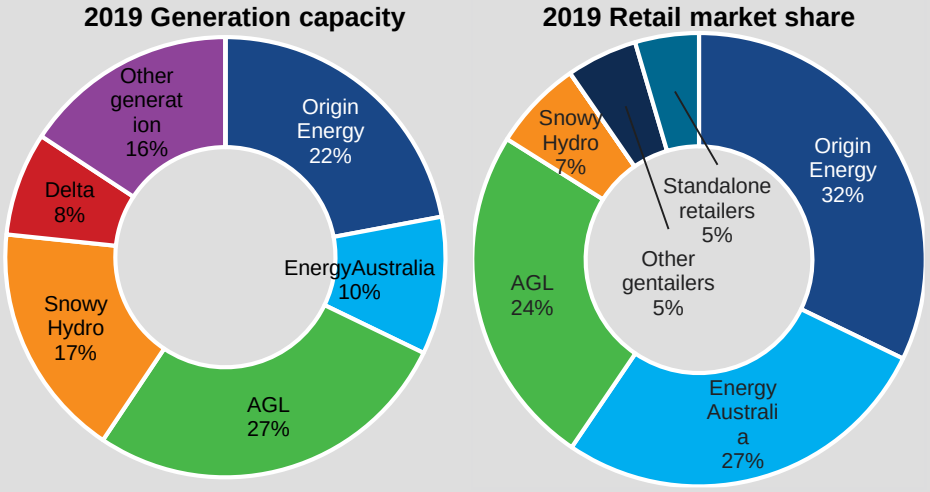
74 Vodafone Hutchison Australia, *Inquiry into the Competition and Consumer Amendment (Misuse of Market Power) Bill 2016*, Submission to Senate Economics Legislation Committee, January 2017, p 1.

75 U.S. Department of Justice and the Federal Trade Commission, *Horizontal Merger Guidelines,* 19 August 2010, p 19.

76 Powershop, Submission to Draft Report, November 2019, p 3.

Box 4.2 The ACCC found that vertical integration has a mixed impact on retail competition

In its 2018 Retail Electricity Pricing Inquiry, the ACCC examined the market trend towards vertical integration. In NSW, the four largest retailers are also the four largest electricity generators. Gentailers (retailers that own baseload generation capacity) dominate the NSW retail electricity market. Amaysim is the largest standalone retailer, with a 1.5% market share. Similarly no retailer with predominantly intermittent renewable generation capacity has a market share over 1%.



The ACCC found that there were advantages and disadvantages of vertical integration. It found the main costs of vertical integration were:

- Decreased activity in the contract market by that business, and
- Limited ability for standalone retailers to secure a wholesale supply that supports an aggressive expansion.

The ACCC found that the trend towards vertical integration may reflect competitive advantages of that business structure and has the potential to be pro-competitive. The ACCC notes that small and medium sized retailers are vertically integrated. The ACCC remains concerned about the current combination of vertical integration and market concentration (both in wholesale and retail markets) and considered that such a combination reduces the likelihood that vertical integration is enhancing competition

Source: AEMO and AER

4.2.1 Aggressive retention activity is constraining entrant growth

The ACCC found that there is a significant incumbency advantage that is constraining the growth of retailers with smaller market shares. The ACCC found that the 'big three' held customers for longer and had a higher proportion of customers on standing offers.[77] Retailers are able to target the most profitable customers in their retention activities.

77 ACCC, *Restoring electricity affordability and Australia's competitive advantage,* Retail Electricity Pricing Inquiry – Final Report, June 2018, p 141.

In response to our Draft Report, Red Energy disagreed that aggressive retention activity is constraining entrant growth. It considered that retention activity is simply an example of consumer engagement and therefore provides benefits to customers.[78]

We consider that in general, retention and win-back activity increases competition because it provides better outcomes for individual customers who decide to switch. It can provide customers with greater choice and the opportunity to achieve the best possible deal, putting downward pressure on prices. However, this activity was not occurring on a level playing field in the NSW electricity market, hampering competition.

EnergyAustralia and Origin have a greater advantage than incumbents in other industries. They are likely to have a much higher proportion of 'sticky customers' because they purchased a large proportion of their customers from government retailers, rather than 'winning' them and are able to identify them in their customer base. This means that some of these customers have never switched retailers and may be less likely to engage in the market in the future, because they have not engaged in the market previously.

In last year's review we recommended a temporary ban on retailers from engaging in retention and win-back activities for six-months after a customer initiates a switch to another retailer.[79] The ACCC also recommended that

- That retailers are only notified of a switch after the switch has occurred, and
- For AEMO to reduce transfer time between customers initiating a switch and the switch occurring to reduce the timeframe for win-back opportunities to occur.[80]

The AEMO submitted a rule change request in May 2019 that aims to speed up the process for customers to transfer to a new electricity retailer.[81] The AEMC is currently reviewing the rule change request and the ACCC will continue to monitor trends in retail costs until 2025. We consider that this rule change should be considered and the impacts monitored prior to any further recommendations to address win-back activities.

4.2.2 The NSW electricity derivatives market is reasonably liquid

As noted in Box 4.2, the ACCC is concerned about vertical integration in its 2018 report reducing liquidity in the wholesale market as vertically integrated firms may sell less generation in the market. The ACCC considered two potential market interventions - to introduce market making obligations, which it had recommended for South Australia (which has the least active derivatives market in the National Electricity Market) and requiring vertically integrated retailers to operate at 'arms length' from their wholesale arm. The ACCC's recommended market making model was to require large vertical integrated retailers

78 Red Energy, Submission to Draft Report, November 2019, p 3.
79 IPART, *Review of the performance and competitiveness in the NSW retail energy market From 1 July 2017 to 30 June 2018,* Final Report, November 2018, p 98.
80 ACCC, Restoring electricity affordability & Australia's competitive advantage, June 2018, pp 152-153
81 AEMC, *Reducing customers' switching times,* https://www.aemc.gov.au/rule-changes/reducing-customers-switching-times access 30 September 2019.

to make offers to buy and sell specified hedge contracts each day, in order to boost hedge market activity.[82]

Since the ACCC's 2018 report:

- The ACCC's March 2019 monitoring report found that trading markets in NSW were reasonably liquid in the March 2019 quarter,[83] and
- On 1 July 2019, the ASX commenced a voluntary market making scheme for NSW's quarterly baseload contracts to increase contract market liquidity.

The ACCC will continue to monitor electricity derivative market liquidity until 2025. Therefore, we consider that there is no need for any additional actions at this time.

4.2.3 The National Electricity Market should have consistent regulations

We have found in past reports inconsistent regulations across the NEM drive additional costs and make it difficult for retailers to expand across jurisdictions. The ACCC also found this in its 2018 Retail Electricity Pricing Inquiry.[84] Most notably the Victorian Government opted out of the National Energy Customer Framework. However, AEMC's 2018 survey noted that the NSW Social Programs for Energy Code is a barrier to expansion into NSW.[85] Powershop also noted in its submission to our Draft Report that the NSW Social programs reporting requirements are time consuming and costly to compile only providing minimal insights[86]. Red Energy strongly agreed with IPART that inconsistent regulations across the national energy market drive additional costs. They also believe that an opportunity exists for the NSW Government to align the NSW Social Code and concessional rebates with other jurisdictions.[87] We consider that jurisdictions should work to harmonise electricity regulation.

82 ACCC, *Restoring electricity affordability and Australia's competitive advantage,* Retail Electricity Pricing Inquiry – Final Report, June 2018, p xviii.
83 ACCC, *Monitoring of supply in the National Electricity Market,* March 2019 Report, 15 March 2019, p 54.
84 ACCC, *Restoring electricity affordability and Australia's competitive advantage,* Retail Electricity Pricing Inquiry – Final Report, June 2018, p 226.
85 AEMC, *2018 Retail Energy Competition Review,* Final Report, 15 June 2018, pp 268, 274.
86 Powershop, Submission to IPART's Draft Report, November 2019, p 2
87 Red Energy, Submission to IPART's Draft Report, November 2019, p 2

5 Time of use tariffs can be cheaper

In June 2019, the AER reported that around 72% of electricity customers are on anytime retail tariffs where customers are charged the same consumption charge per kilowatt hour regardless of when they consume electricity. The remaining 28% of customers are on time of use or flexible retail tariffs where charges vary depending on electricity consumed.[88] For example:

- Time of use tariffs – where customers pay a usage charge that varies by the time of day the household or small business consumes electricity,
- Demand tariffs – where customers pay a demand charge based on their maximum 30 minutes of usage within a charging window on a day, month or year.

These tariffs better reflect the underlying costs of supplying electricity where both the wholesale and network costs vary by time of day. Retailers often mimic network tariff structures in their retail tariffs as this helps them align their revenues to their costs which can reduce their risks.

To this point our analysis has focused on outcomes for customers on anytime tariffs. The sections below look at the retail tariffs of the remaining customers who are not on anytime tariffs. Customers with underlying ***distribution network*** time of use or flexible tariffs are more likely to be on ***retail*** time of use or flexible tariffs. As there are more customers in the Ausgrid network area with underlying distribution time of use or flexible network tariffs, our analysis focuses on this network area.

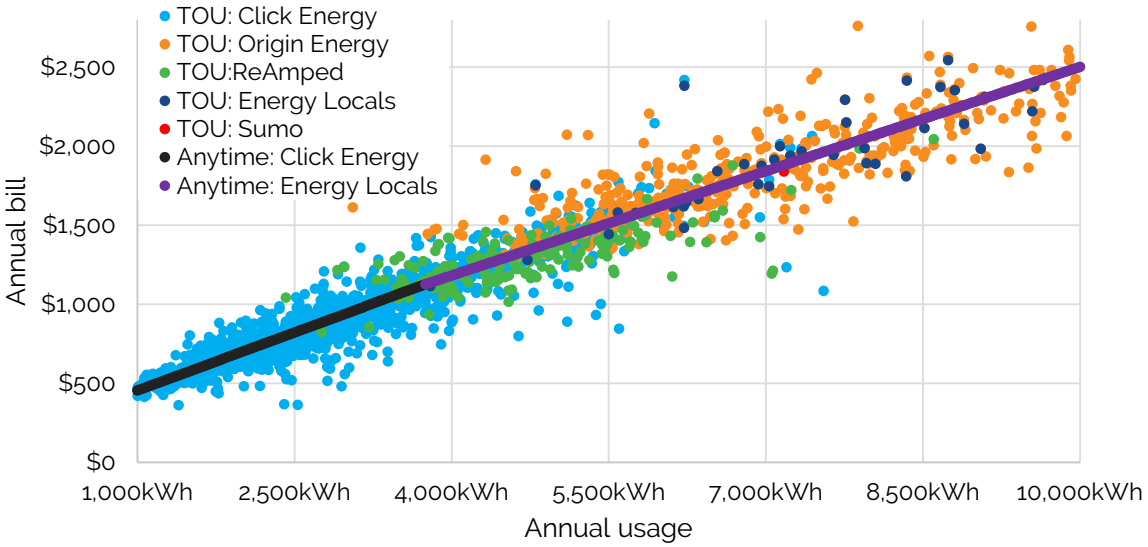
5.1 Most customers face cheaper prices on time of use tariffs

Based on a sample of interval meter data provided by Ausgrid[89] we found that 65% of customers in the Ausgrid network can save money moving to time of use retail tariffs. Figure 5.1 shows the cheapest retail time of use offer for each customer in the database and the cheapest anytime offer for each level of consumption. Customers with time of use offers (blue, orange, green, navy and red dots) below the cheapest anytime tariff for their consumption level (purple and black line), can save money by switching to a time of use tariff (if they are not already on the cheapest time of use tariff).

88 These customers have interval (type 5) or smart (type 4) meters which can measure the amount of electricity consumed in different time periods. See AER, *Retail energy market performance update for Quarter 3, 2018-19 Schedule 2 Tariff Structures*, 21 June 2019.

89 Ausgrid provided IPART a sample of 5,000 residential and small business consumers. Our analysis looks at residential customers without solar generation or controlled load, the sample was over 2,200.

Figure 5.1 Cheapest offers for residential customers in Ausgrid network in June 2019



Data source: Energy Made Easy offers and interval meter data provided by Ausgrid.

This suggests that retailers are competing on price with time of use tariffs with some competition for customers with different demand profiles.

5.2 We expect more customers to move to retail time of use and demand tariffs

In June 2019, the AER reported that 28% of customers face cost reflective retail tariffs. In addition, 93% of customers with cost reflective retail tariffs have underlying cost reflective network tariffs.[90] We consider that it is likely that the penetration of cost reflective retail tariffs increased in 2018-19 for two key reasons:

1. Retailers commenced assigning customers to cost reflective network tariffs. For example, Ausgrid and Essential Energy began assigning new customers and customers with new meters to time of use tariffs, by default. Ausgrid and Endeavour Energy commenced assigning new customers and most customers with new meters to demand tariffs on 1 July 2019. As distribution network businesses move customers to cost reflective network tariffs, we expect retailers to offer those customers cost reflective retail tariffs.[91]
2. From 1 December 2017, the AEMC's 'Power of Choice' reforms required the installation of smart meters for all new connections and replacement meters. Customers require interval or smart meters to face cost reflective retail tariffs. As at June 2019, 9% of customers in NSW had smart meters.[92] In Box 5.1 we discuss issues we found in our review of metering in 2018.

90 AER, *Retail energy market performance update for Quarter 3, 2018-19,* 21 June 2019.
91 Retailers often mimic network tariff structures in their retail tariffs, this helps retailers align their revenues to their costs which can reduce their risks.
92 IPART analysis of data provided by AEMO.

Box 5.1 IPART's 2018 metering review

As part of this review last year, we were asked to review NSW electricity retailer's metering practices. We found that retailers were not delivering an acceptable level of customer service to customers requesting a meter, with the time taken to install a new meter on average between 60 and 72 days in December 2017.[a]

We made a number of recommendations that would simplify the meter installation process and complement the AEMC's draft rule determination on metering timeframes. From 1 February 2019, the AEMC introduced mandatory timeframes for retailers to provide small customers with new or replacement electricity meters. The AEMC will monitor the impact of this rule by extending its monitoring program to include the general rollout of smart meters across the national grid. There has been no public data reported on compliance with this new rule. In June 2019, EWON reported there had been a decline in customer complaints about metering timeframes in the last quarter of 2018-19.

AEMO reports that in June 2019, 9% of NSW customers had smart meters, compared to 5% a year earlier.

a: IPART, *Retailers' metering practices in NSW,* Final Report, November 2018, p 4.

Source: AEMC, AEMO and EWON.

We expect that more customers will move to cost reflective retail tariffs in the future. The AER's network determinations mean:

- All customers in Ausgrid's network area that receive a new meter from 1 July 2019, will no longer be eligible for anytime network tariffs,[93] and
- Endeavour Energy and Essential Energy will assign all customers that receive a new meter from 1 July 2019 to cost reflective network tariffs by default, and optional anytime network tariffs will be more expensive for a majority of customers.[94]

5.3 It is difficult for customers to compare retail time of use and demand tariffs

We have found that is difficult for customers to compare offers for retail time of use and demand tariffs, particularly if they are among the 72% of customers currently on anytime tariffs. This is because comparison websites are based on assumed consumption rather than reflecting a customer's actual consumption profile. At present, the Commonwealth Government's Energy Made Easy website provides an effective comparison for some time of use tariffs, giving customers the option to:

- Input their peak, shoulder and off-peak usage based on current bills, or
- Get an estimate from Energy Made Easy.

NSW Energy Switch will read customers' bills to search for the best offer.[95]

93 Ausgrid, *Attachment 10.01 – Tariff Structure Statement,* AER approved, April 2019, pp 8-10.

94 Endeavour Energy, *Tariff Structure Statement 1 July 2019 – 30 June 2024,* AER approved, 30 April 2019, pp 13-14; AER, *Final Decision Essential Energy Distribution Determination 2019 to 2024,* Attachment 18 Tariff structure statement, April 2019, p 10.

95 Service NSW, *Use the Energy Switch comparison tool,* https://www.service.nsw.gov.au/transaction/use-energy-switch-comparison-tool accessed on 2 October 2019.

However, the range of tariffs makes it difficult for comparator website to accurately estimate offers. For example, in the Ausgrid network retailers apply peak charges at different times (some retailers do not apply Ausgrid's seasonal charging windows). It is also difficult to accurately calculate demand tariffs, without knowing customers demand profile.

The ACCC will introduce a Consumer Data Right for energy customers from 1 July 2020.[96] Additionally, the AEMC's 'Power of Choice' reforms are increasing the penetration of interval and smart metering. This creates an opportunity for NSW Energy Switch and the AER's Energy Made Easy to provide better estimates of bill impacts for time of use and demand tariffs. This will help more customers find the best offer for their needs.

These recommendations were supported by stakeholders in response to our Draft Report.[97]

96 Australian Government The Treasury, *Consumer Data Right,* https://treasury.gov.au/consumer-data-right accessed 2 October 2019.

97 See Endeavour Energy, Submission to Draft Report, November 2019, p 1; Red Energy, Submission to Draft Report, November 2019, p 2; Powershop, Submission to Draft Report, November 2019, p 2.

6 Introduction of a Default Market Offer (DMO)

On 1 July 2019 the Australian Government introduced a Default Market Offer (DMO), which limits (or caps) the prices that retailers can charge customers on standing offers in NSW over 2019-20. While a reform like this needs to be given time to set in before its impact can been fully assessed, we have undertaken preliminary analysis of the changes in price since it took effect.

This chapter sets out the:

- Rationale behind the introduction of a DMO.
- Approach the AER took in setting the DMO.
- Change in offer prices we have observed since the DMO took effect.
- Expected change in input costs over the time the DMO is in place.

6.1 Overview of preliminary observations

We have found that, between June 2019 and July 2019, there was a degree of price compression in the retail electricity market in NSW, as the prices of the median standing offer and the median lowest market offer (across all retailers) in each network area began to converge.

This pattern of price movements was similar across all three network areas. However, input costs in the Ausgrid area (over 2019-20) are expected to fall significantly compared to costs in the other two network areas. This may create an expectation that prices would move differently in the Ausgrid area. However we recognise that the extent to which retail prices (in a given network area) change in response to changes in underlying input costs depends on a number of factors, including how those costs change and retailers' individual pricing strategies.

We consider that recently implemented regulatory measures should be given 12 months to become fully embedded, and their effects fully understood, before further intervention with energy retail prices is contemplated.

6.2 A DMO was introduced on 1 July 2019

In our 2018 market monitoring review we found that, overall, competition for residential and small business customers in NSW retail energy markets was continuing to develop and was delivering benefits to customers. While we considered that Governments should continue to actively support customers in engaging in the market to place more pressure on retailers to offer competitive prices and services, we concluded that re-regulating prices is likely to lead to higher prices in the longer term by reducing the level of competition.[98]

98 IPART, *Review of the performance and competitiveness in the NSW retail energy market - From 1 July 2017 to 30 June 2018*, Final Report, November 2018, p 1.

However, in its 2018 Retail Electricity Pricing Inquiry, the ACCC found that many customers are not benefiting from competition and made 56 recommendations intended to increase efficiency and improve competitive outcomes across the supply chain and for customers.[99] One of the key recommendations was a cap on prices for standing offer customers through a 'default market offer' or DMO. The ACCC considered that a DMO should be applied where a standing offer is currently used, ie including for customers who:

- Have moved into a premises but have not contacted the retailer.
- Do not select a new offer prior to the expiry of an existing offer.
- Were switched through a retailer-of-last-resort process.[100]

The ACCC recommended that standing offers be replaced with DMOs, set by the AER, for each network area in jurisdictions where prices are not regulated. The ACCC noted that the two primary benefits of the DMO would be that:

- It would cap the 'loyalty tax' that disengaged customers have to pay, addressing the problem of unreasonably high standing offers being charged to disengaged customers.
- It would be used to calculate a reference bill from which all discounts must be calculated, and so would address the 'discounts off what' issue and the problem of a lack of comparability of market offers.[101]

In October 2018 the Australian Government requested that the AER develop a mechanism for DMO prices and a reference bill by 30 April 2019, in time for the Government to implement them by 1 July 2019.[102]

6.3 In setting the DMO the AER determined consumption and price levels

Consistent with the ACCC's recommendations, the AER determined DMO prices to apply from 1 July 2019 to 30 June 2020.[103] These prices apply to standing offer customers in NSW, South-Eastern Queensland and South Australia – that is, areas where there is no retail price regulation.

The AER determined DMO prices for three types of small customers:

- Residential customers on a flat rate usage tariff
- Residential customers on a flat rate usage tariff with controlled load (CL)
- Small business customers (less than 100 MWh per year) on a flat rate usage tariff.[104]

We refer to flat rate usage tariffs elsewhere in this report as 'anytime tariffs'.

99 ACCC, *Restoring electricity affordability and Australia's competitive advantage*, Retail Electricity Pricing Inquiry – Final Report, June 2018,, pp xvii-xxv.
100 Ibid., p 252.
101 Ibid., p 249.
102 The Hon Josh Frydenberg, Treasurer and the Hon Angus Taylor, Minister for Energy, Letter to the AER, 22 October 2018. Available at: https://www.aer.gov.au/system/files/Letter%20to%20the%20AER%20Chair%20-%20dafault%20pricing.pdf.
103 AER, *Default Market Offer Prices 2019-20*, Final Determination, April 2019, p 6.
104 Ibid, p 22.

As set out in the table below, for each customer type in each network area, the AER determined:

- How much electricity a broadly-representative small customer would consume in a year and, for residential customers, the pattern of that consumption (the model annual usage amount).
- A reasonable total annual price for supplying electricity (in accordance with the model annual usage) to small customers (the DMO price).

Table 6.1 DMO prices and model annual usage amounts in NSW for 2019-20

Distribution region	Residential Flat rate	Residential Flat rate with CL	Small business Flat rate
Ausgrid			
DMO price	$1,467	$2,059	$7,371
Model annual usage	for 3,900 kWh p.a.	for 6,800 kWh p.a.	for 20,000 kWh p.a.
Saving from standing offer median	$129	$200	$878
Endeavour Energy			
DMO price	$1,720	$2,166	$6,204
Model annual usage	for 4,900 kWh p.a.	for 7,400 kWh p.a.	for 20,000 kWh p.a.
Saving from standing offer median	$175	$236	$579
Essential Energy			
DMO price	$1,957	$2,375	$8,045
Model annual usage	for 4,600 kWh p.a.	for 6,600 kWh p.a.	for 20,000 kWh p.a.
Saving from standing offer median	$181	$231	$709

Note: Median saving is the difference between the median standing offer price and the DMO price in that distribution region, based on the AER's model annual usage.

Source: AER, *Default Market Offer Prices 2019-20*, Final Determination, April 2019, p 25.

The AER used a price-based, top-down approach for determining DMO prices. The final decision was that DMO prices would be set at the mid-point (50th percentile) of the range between the median market offer and median standing offer in each network area, based on generally available offers in Energy Made Easy in October 2018.[105] In setting the DMO price point, the AER had regard to forecast changes in key cost inputs, including network charges and wholesale costs, for 2019-20 (see section 6.5 below).

Retailers must structure standing offer prices so that they do not exceed the DMO price (for the model annual usage amount).[106]

As set out in Chapter 2, in NSW around 85% of customers are on market offers. These offers are not affected by the DMO (ie, prices for market offers remain uncapped). However, the DMO price will also be used as the reference bill to which all market offers (estimated using the model annual usage amount) must be compared when advertised.[107] The AER also determined annual period usage for time-of-use (TOU) tariffs, ie, the amount of energy

105 Ibid, p 42.
106 Ibid, p 9.
107 Ibid, p 10.

consumed in peak, off-peak, shoulder 1 and shoulder 2 periods (as applicable).[108] These amounts must be used by retailers when comparing their TOU offers to the reference bill.

6.4 As expected, standing offer and market offer prices began to converge in July 2019 compared to June 2019

Prior to the introduction of the DMO, the AEMC was requested by the COAG energy council to provide advice on the customer and competition impacts of a default offer in the retail electricity market.[109] In its advice, the AEMC considered that the short terms risks of implementing a DMO include:

- Lower levels of price dispersion than in markets without price regulation (price compression was experienced in the UK on the re-regulation of prices under a temporary price cap),
- An attempt by retailers to recover any lost revenue (ie, where the DMO is lower than the retailer's standing offer) by raising market offer prices.[110]

The AEMC's quantitative analysis indicated that the introduction of a DMO potentially results in:

- A decrease in price dispersion from:
  - A reduction in the price of standing offers.
  - A reduction in the price of high priced market offers.
  - Price increases in the lower priced market offers available to customers.
- Customers on standing offers and market offers that were above the default offer being better off.
- Customers on lower priced market offers being worse off.[111]

Our preliminary analysis of standing and market offers for residential customers found that, from June 2019 to July 2019:

- The median standing offer decreased by 10% in the Ausgrid and Essential Energy network areas and 9% in the Endeavour Energy network area.
- The median lowest offer (across all retailers) increased 4% in Ausgrid and Essential Energy's network areas and 3% in Endeavour Energy's area.

Similarly, for small business customers:

- The median standing offer decreased by 10% in the Ausgrid network area, 8% in the Endeavour Energy area and 7% in the Essential Energy area.
- The median lowest offer (across all retailers) increased by 4% in the Ausgrid network area, 1% in the Endeavour Energy area and 2% in the Essential Energy area.

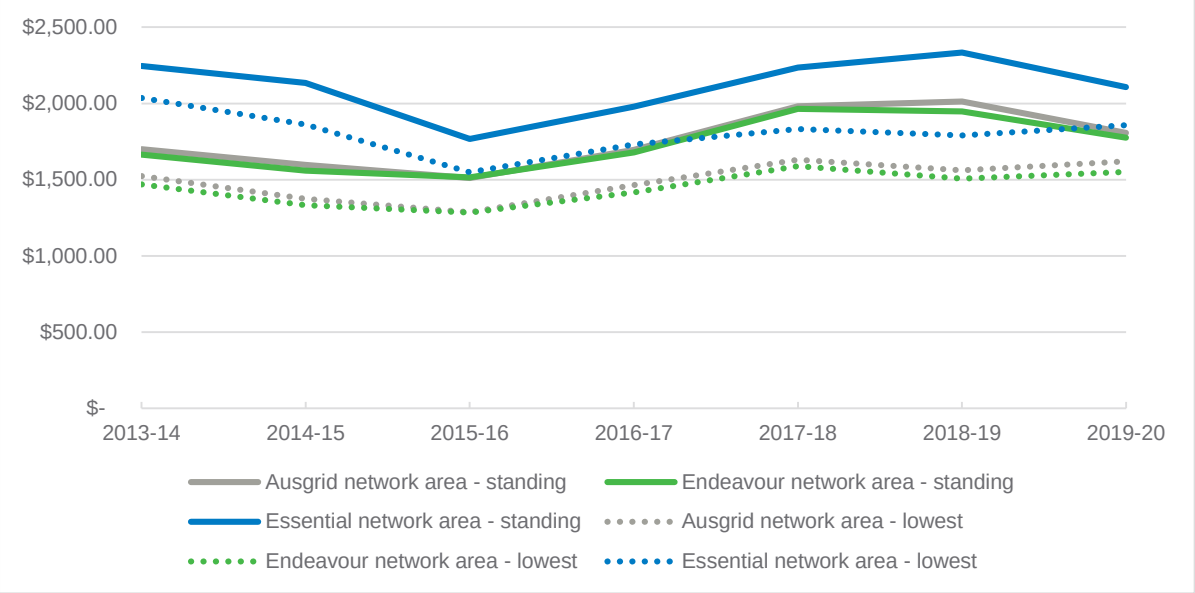
108 Ibid, pp110-111, 113.
109 AEMC, *Advice to COAG Energy Council: Customer and competition impacts of a default offer*, Final Report, 20 December 2018, p i.
110 Ibid, p iii-iv.
111 Ibid, pp 36, 40.

This means that the spread between the median standing and median lowest offers reduced throughout NSW (see Figure 6.1 and Figure 6.2). These preliminary findings are broadly consistent with findings recently released by AER,[112] which include that:

- As expected, the price of the majority of standing offers and high priced market offers from October 2018 have reduced to the DMO level.
- The median market offer price has not changed significantly throughout October 2018 to July 2019 but the AER has observed a reduction in the number of market offers.
- The AER has seen a slight reduction in the price of the lowest market offers for the residential flat rate (up to 3%) compared to October 2018 but a more significant fall for small to medium businesses (between 6% and 17%).
  - This appears to be largely driven by Tier 2 retailers. Tier 1 retailers have removed some of their lowest priced market offers in some regions.
  - In contrast, from June 2019 the price of the lowest market offers have increased (up to 6 per cent) in the Essential and SAPN (South Australia) zones, and remained flat or marginally increased in the other zones.
  - However, the prices for small businesses have mostly reduced post-DMO.

Our findings are also consistent with the experience of re-introducing price regulation in the UK, where retailers responded by increasing the prices of the lowest-priced market offers.[113]

Figure 6.1 The spread of bills based on the median standing and median lowest retail market offers reduced in July 2019 for residential customers

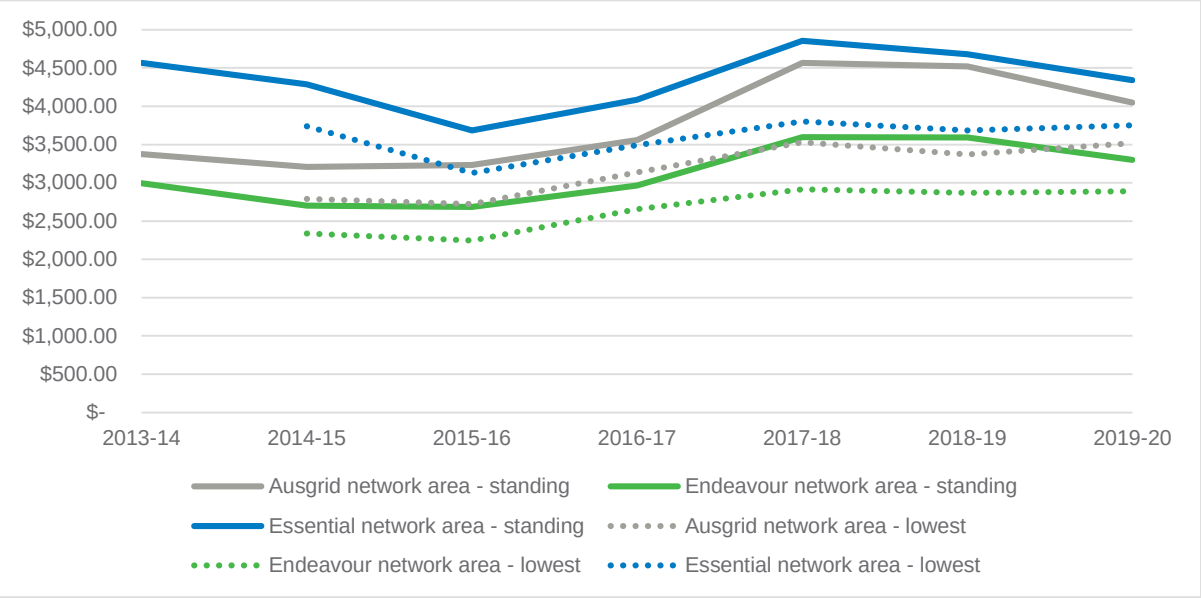


Data source: Energy Made Easy, accessed June and July 2019, IPART calculations.

112 See AER, *Default Market Offer Price 2020-21 – Position Paper*, September 2019, p 18. Note that the AER's findings are for flat rate tariffs across all network areas subject to the DMO and there are a number of differences between the AER's methodology and our methodology. In particular, in analysing market offers the AER considered the highest, lowest and median offers for each network area. By comparison, in our analysis we have considered the median lowest offer across all retailers for each network area.

113 AEMC, *Customer and competition impacts of a default offer*, Final Report, 20 December 2018, p 31.

Figure 6.2 The spread of bills based on the median standing and median lowest retail market offers reduced in July 2019 for small business customers



Note: Small business bills calculated on the basis of 10,000 kWh pa consumption.

Data source: Energy Made Easy, accessed June and July 2019, IPART calculations.

6.5 Total costs are expected to remain stable between 2018-19 and 2019-20 except in the Ausgrid area

In determining DMO prices for 2019-20, the AER was required to take into account forecast changes in input costs (such as network charges, wholesale costs and environmental costs). The AER did this by having regard to publicly available information on forecast changes in key input costs when selecting the DMO price point (ie, the point within the range given by the median market offer and the median standing offer as at October 2018).[114]

In particular, the AER considered:

- The AEMC's Annual Price Trends Review estimate of wholesale costs updated for actual electricity contract price and volume information for 2019-20 contracts available at the end of March 2019.[115]

  The AER found that wholesale costs in relevant network areas for 2019-20 are expected to decrease when compared to wholesale costs in 2018-19, despite contract prices increasing between October 2018 and March 2019 (ie, the period of the update).[116]

- The AER's own determinations for network costs.

  The AER found that, aside from the Ausgrid network area, network charges are forecast to increase at low nominal levels between 2018-19 and 2019-20.

114 AER, *Default Market Offer Prices 2019-20*, Final Determination, April 2019, pp 43-60.
115 Ibid., p 49.
116 Ibid.

- Ausgrid will return excess revenue (related to the Ausgrid transmission network and recovered in 2014-19 regulatory period) to its customers over the 2019-24 control period. With that adjustment, the network costs in Ausgrid's area are forecast to decrease moderately in 2019-20.[117]

- The AEMC's Annual Price Trends Review estimate of environmental costs, updated for the Clean Energy Regulator's revised RET figures for 2019 (published in March 2019).[118]

  The AER found that changes in environmental costs between 2018-19 and 2019-20 vary:
  - The Large-scale Renewable Energy Target cost is forecast to decline moderately.
  - The Small-scale Renewable Energy Scheme cost is forecast to increase moderately.
  - Changes in the cost of meeting jurisdictional schemes are likely to be negligible.

Based on the AER's assessment of retail costs, these costs are expected to remain constant in real terms and this cost component has been adjusted by changes in CPI.

The AER's forecasts of changes to input costs between 2018-19 and 2019-20 and the forecast impact on retail prices in each network area are set out in the table below. We consider that these forecasts are the best publicly-available data at present on potential cost changes over 2019-20.

Table 6.2 AER forecast changes in input costs and overall impact on retail prices in 2019-20 (nominal)

Network area	Wholesale	Network	Environmental	Overall price impact[a]
Ausgrid	8.7% reduction	16.3% reduction	1.3% increase	10.2% reduction
Endeavour Energy	4.7% reduction	0.9% reduction	1.3% increase	1.9% reduction
Essential Energy	9.5% reduction	0.7% increase	1.3% increase	2.4% reduction

a This includes adjusting the retail component by inflation.

Source: AER, *Default Market Offer Prices 2019-20*, Final Determination, April 2019, p 59.

The AER decided not to adjust the DMO price point (ie, the mid-point between the median market offer and median standing offer) on the basis of the forecast changes in input costs. According to the AER:

We consider this is a reasonable approach given:

- The DMO price point in 2018-19 is the mid-point of the price range of the median market offer and median standing offer price in each distribution zone.

- The relatively modest forecast changes in the overall retail prices across most distribution zones in the context of our task, which is to estimate the likely direction and magnitude of cost changes.

117 This reflects the final remittal decision for the 2014-19 determination. As a result of that decision, under the 2019-24 determination there is:
- An 83% real reduction in Ausgrid's transmission revenue requirement in 2019-20 (Ausgrid's network determination covers both distribution and transmission services).
- A 17% per year real increase in the transmission revenue requirement thereafter.

118 The difference due to the update was minor and the AER did not amend the forecast change in environmental costs.

- In the case of Ausgrid, the unique underlying driver of the forecast reduction in network costs.
- This approach will provide some margin of error in terms of any potential cost increases that are not part of our cost forecast.

We will consider the impact of changes in key input costs annually as part of any future DMO price determination process.[119]

6.6 Preliminary observations on the impact of the DMO

In our view it is too early to draw any firm conclusions about the impact of the DMO on the retail electricity market (and we have not been asked to consider the cost reflectivity of prices in July 2019[120]). However, this report provides the opportunity to make preliminary observations on how prices have changed following the introduction of the DMO. Our preliminary observations are that:

- Between June 2019 and July 2019 there was a degree of price compression as the prices of the median standing offer and the median lowest market offer (across all retailers) in each network area began to converge.
- The pattern of price movements was similar across all three network areas,[121] despite the overall expected reduction in input costs over 2019-20 being moderately larger in Ausgrid's network area, compared to the other two network areas. However, the extent to which retail prices in a given network area change in response to changes in underlying input costs depends on a number of factors, including how those costs change and retailers' individual pricing strategies.

Implementing a DMO may therefore effectively create a trade-off between:

- Lower prices for the disengaged and
- Higher prices for engaged customers.

This may reduce the reward or incentive of searching for the best offer, leaving fewer customer engaged in the market. Additionally, a low DMO could create risks to the investment environment, and therefore to the long-term prospects for workable competition in both retail and wholesale markets, while a high DMO will provide little benefit to disengaged customers currently paying high prices on standing offers.

In addition to the DMO, other regulatory changes to retail markets have been announced or implemented. In particular, under new and proposed changes to the National Electricity Retail Law retailers are required to:

119 AER, *Default Market Offer Prices 2019-20*, Final Determination, April 2019, p 60.

120 For the last three years, the NSW Government asked us to undertake additional reviews looking at the changes in electricity and gas prices into July in the next year and whether these reflect efficient costs (ie, in our 2017-18 review the Minister asked us to look at changes into July 2018). We have not been asked to undertake this additional analysis this year.

121 Eg, for residential customers, the lowest median market offer as a proportion of the median standing offer changed from 78% to 90% in the Ausgrid network area, 77% to 87% in the Endeavour Energy area and 77% to 88% in the Essential Energy area.

- Write to customers on market offers before the expiration of their current offer (to prevent them from defaulting to the standing offer).[122]
- Write to customers on a standing offer advising them that switching to market offers would likely save them money.[123]

We expect that these changes mean that more customers are likely to move (or have moved) off standing offers and on to market offers. We also note that the AEMC is currently reviewing whether to limit conditional discount amounts to the financial costs to retailers from non-compliance with the condition.[124] Conditional discounts are discounts customers can receive on their energy bills when they meet certain conditions eg, paying on time or paying by direct debit. Under the proposed Rule change, the maximum discount that could be offered by retailers would be limited to an estimate of how much it costs the retailer when the customer does not comply with the condition (eg, how much it costs the retailer when a customer does not pay on time or does not pay by direct debit).

Any change in the regulatory framework needs to be given time to take effect before we can make definitive findings on its impact. We have previously expressed the view that the most effective way for governments to ensure sustainable retail energy prices in the future is to provide a stable policy framework to enable investment in both generation and network infrastructure. We therefore consider that recently implemented measures should be given 12 months to become fully embedded, and their effects fully understood, before further intervention with retail energy prices is contemplated.

In response to our Draft Report, Powershop agreed with our conclusion on the impact of the Default Market Offer on the market and specifically on customers that are 'not engaged'.[125] It considered that the 'DMO still requires more time and analysis to fully understand'. Momentum Energy considered that at least 24 months will be required to provide a picture of whether additional intervention is necessary.[126]

122 AEMC, *Notification of end of fixed benefit period*, https://www.aemc.gov.au/rule-changes/notification-of-end-of-fixed-benefit-period, accessed 23 September 2019.
123 AEMC, *Long term standing offer notice*, https://www.aemc.gov.au/rule-changes/long-term-standing-offer-notice, accessed 23 September 2019. We note that following several roundtable meetings with the Prime Minister in August 2017, many retailers started doing this voluntarily last year. See AEMC, *2018 Retail Energy Competition Review*, Final Report, June 2018, p 50.
124 See AEMC, *Regulating Conditional Discounting*, Consultation paper, 1 August 2019.
125 Powershop, Submission to IPART's Draft Report, November 2019, p 2.
126 Momentum Energy, Submission to Draft Report, November 2019, p 1.

7 Many regulators monitor the electricity market

The NSW Government opened the electricity and gas retail markets to competition in 2002. After more than 10 years of contestability, the NSW Government decided to remove retail electricity price regulation effective 1 July 2014 and gas price regulation from 1 July 2017.[127] As part of these decisions, it gave IPART a new role to monitor and report annually on competition in the retail electricity and gas markets. This chapter looks at the role of IPART and other regulators in the electricity market.

7.1 IPART's role is to monitor the retail electricity market

IPART's market monitoring role is set out in the *National Energy Retail Law (NSW)* (the Act).[128] The Act specifies the indicators we must have regard to when assessing the performance of the market for small customers, and the information we are able to have regard to. We must consider these factors in combination – no single factor is conclusive in determining whether competition is effective. These factors are set out in Table 7.1.

Table 7.1 Factors we are required to consider in determining whether competition is effective

Factor	Report reference
The participation of small customers in the market and, if the Market Monitor thinks it appropriate, particular groups of small customers	Chapter 2
Prices of electricity for small customers in regional areas	Chapter 1
Any barriers to entry or exit from, or expansion in the market	Chapter 4
The extent to which retailers are competing to attract and retain small customers	Chapter 1
Whether price movements and price and product diversity in each market are consistent with a competitive market	Chapter 1
If the Market monitor is of the opinion that it is required, steps necessary to improve the competitiveness of each market	Not applicable
Whether there is a need to for a detailed review of retail prices and profit margins in each market.	Chapters 3 and 7.

Source: *National Energy Retail Law (NSW)*, s 234A (3).

In conducting our analysis, the Act limits the information we can consider to:

- Information provided by the AEMC and the AER
- Any publicly available information

127 AEMC, *2014 Retail Energy Competition Review*, Final Report, 22 August 2014, pp vi, 19; Department of Planning and Environment, *Retail gas prices deregulation,* http://www.resourcesandenergy.nsw.gov.au/?a=580322 , accessed 27 September 2019.

128 *National Energy Retail Law (NSW)*, s 234A (3).

- Information provided by a retailer with particulars of the number of market offer customers of the retailer, the market offer prices of those customers, the number of customers on each standing offer price offered by the retailer that has been publicly advertised, and those standing offer prices.[129]

7.2 IPART is one of several regulators monitoring the electricity market

A number of other regulators also review the retail electricity market.

7.2.1 The AEMC reviews prices and competition

The AEMC began conducting reviews of competition in retail energy markets in 2014, these reviews report on NEM-wide trends and also each state separately.[130] As part of these reviews, it surveys retailers in each year. The AEMC also reviews electricity price trends on a state-by-state basis each year to provide guidance on likely future price trends, and has been doing so since 2011.[131]

7.2.2 The AER reports annually on retailers and the state of the energy market

Following the implementation of the National Electricity Law in 2012, the AER has been required to report on the compliance and performance of the retail energy market during the previous financial year in November each year. The AER reports on:

- Competition indicators including retailers' shares of small and large customer markets, the number of customers on standard and market retail contracts and switching activity.
- Energy retailer performance, including customer service and complaints, the assistance given to customers experiencing payment difficulties (including hardship programs) and disconnections.
- Energy affordability, including estimates of the annual bills of households, and bills as a proportion of household disposable income.[132]

The AER publishes its annual state of the energy market report that provides information on the wholesale electricity and gas markets, the transmission and distribution networks, and the retail sector.[133]

7.2.3 The ACCC will monitor the electricity market until 2025

Following its 2018 Retail Electricity Pricing Inquiry, the ACCC was given a monitoring role from 2018 to 2025. Unlike the other regulators reviewing the energy market, the ACCC has

129 Section 234A(7),(8) of the *National Energy Retail Law (NSW).*
130 *2014 Retail Competition Review*, https://www.aemc.gov.au/markets-reviews-advice/2014-retail-competition-review, accessed 20 September 2019.
131 AEMC, *Possible Future Retail Electricity Price Movements: 1 July 2011 to 30 June 2014*, November 2011.
132 AER, *Annual report on the performance of the retail energy market 2012-13*, Revised February 2014, pp 2-3.
133 https://www.aer.gov.au/publications/state-of-the-energy-market-reports

broad information gathering powers that enable it to compel information from market participants.

The ACCC is required to monitor electricity prices and the spread of offers in the market, whether prices reflect the costs of supply, and the profits of generators and retailers. It must also consider the wholesale market, including prices, bidding behaviour, and contract market liquidity, and whether vertically integrated suppliers are restricting competition and new entry. The ACCC also needs to monitor the effect of any policy changes.[134]

7.3 There is limited need for continued monitoring by IPART

We recommend that the NSW Government removes IPART's requirement to monitor the retail electricity market in NSW. There are five key reasons for this recommendation:

1. Both the AEMC and the AER monitor the electricity market in NSW and provide detailed information by network area as part of their reporting.
2. The ACCC has stronger information gathering powers that allows it to undertake more in depth analysis of specific areas such as retail margins and wholesale costs.
3. The retail electricity market has become more competitive each year that we have conducted this review. As the market becomes more competitive there is a decreasing need for multiple agencies to monitor the same retail market.
4. There are additional costs of multiple agencies monitoring the same retail market. These costs are funded by taxpayers. There are also costs incurred by stakeholders (retailers and consumers) engaging in multiple market monitoring reviews.
5. IPART's role is restricted to monitoring the retail electricity market whereas the ACCC, AEMC and AER each monitor both the wholesale and retail markets, and the AER regulates the network businesses.

In response to our Draft Report, Red Energy, Powershop, Momentum Energy and AGL supported our draft recommendation for the NSW Government to remove IPART's requirement to monitor the retail electricity market in NSW. Red Energy also agreed that the duplication of these reporting requirements is inefficient and increases costs to the market and consumers. [135] However PIAC supported an on-going role for IPART in monitoring the performance and competitiveness of the NSW retail electricity market. PIAC acknowledged there is duplication but that IPART has scope to go beyond its current assessment with wider and more targeted analysis to better promote the interest of NSW households and other energy users. [136]

Market monitoring by multiple agencies increases costs for taxpayers, retailers and consumers. Rather than requiring IPART to duplicate annual market monitoring, a better use of resources would be for IPART to investigate or review NSW specific matters as required. This was supported by submissions to the Draft Report.[137]

134 *Electricity market monitoring 2018-2025,* https://www.accc.gov.au/regulated-infrastructure/energy/electricity-market-monitoring-2018-2025, accessed 27 September 2019.
135 Red Energy, Submission to IPART's Draft Report, November 2019, p3
136 PIAC, Submission to IPART's Draft Report, November 2019, page 1
137 Red Energy, Submission to IPART's Draft Report, November 2019, page 3

A IPART's statutory role

National Energy Retail Law (NSW) No 37a

234A—Market Monitor

(1) In this Part, the Market Monitor is the person prescribed by the NSW regulations as the Market Monitor for the purposes of this Part.

(2) The Market Monitor is to monitor the performance and competitiveness of the retail electricity market and the retail gas market in New South Wales for small customers.

(3) The Market Monitor is to report annually to the Minister on the performance and competitiveness of each of the retail electricity market and the retail gas market in New South Wales for small customers, including on the following matters—

(a) the participation of small customers in each market and, if the Market Monitor thinks it appropriate, particular groups of small customers;

(b) prices of electricity or gas for small customers in regional areas;

(c) any barriers to entry to or exit from, or expansion, in each market;

(d) the extent to which retailers are competing to attract and retain small customers;

(e) whether price movements and price and product diversity in each market are consistent with a competitive market;

(f) if the Market Monitor is of the opinion that it is required, steps necessary to improve the competitiveness of each market;

(g) whether there is a need for a detailed review of retail prices and profit margins in each market;

(h) any other matters the Market Monitor thinks appropriate.

(4) An annual report is to be prepared for each year commencing on 1 July.

(4A) The first annual report for the retail gas market is to be for the year commencing 1 July 2017.

(5) The annual report is to be provided to the Minister not later than 30 November following the end of the year to which the report relates.

(6) The Minister is to lay the annual report or cause it to be laid before both Houses of Parliament of this jurisdiction not later than 30 days after receiving the report.

(7) In preparing an annual report, the Market Monitor is to have regard only to the following—

(a) information provided by the AEMC and the AER;

(b) any publicly available information;

(c) information provided by a retailer under subsection (8).

(8) The Market Monitor may, by notice in writing served on a retailer, require the retailer to provide particulars to the Market Monitor of the number of market offer customers of the retailer, the market offer prices of those customers, the number of customers on each standing offer price offered by the retailer that has been publicly advertised and those standing offer prices.

B Consumption for a “typical” customer

Box B.1 Electricity consumption for a typical residential customer

Throughout our analysis, we have calculated residential electricity bills for consumption of 5,100 kWh per year.

We adopted this consumption level last year based on the ACIL Allen survey for the AER’s energy consumption benchmarks, which are published on customer bills and used to calculate bills on the AER’s Energy Made Easy website.

A household consuming 5,100 kWh per year most closely reflects a two-person household in metropolitan NSW. This consumption rises to an average of 5,400 kWh and 6,600 kWh for three-person households and four person households’ respectively. The average consumption for a one-person household is 3,400 kWh.

ACIL Allen’s surveys showed that the average level of electricity consumption fell across almost all jurisdictions since it was first conducted in 2011.

Source: IPART, *Review of the performance and competitiveness of the NSW retail energy market – From 1 July 2017 to 30 June 2018*, Final Report, November 2018, p 47.

C List of electricity retailers

Table C.1 Electricity retailers contesting in NSW as at June 2019

		Network area where available (Ausgrid/Endeavour/Essential)					
		Residential			Business		
	Retailer	Any Time (Single Rate)	Time of Use (TOU)	Demand Tariffs	Any Time (Single Rate)	Time of Use (TOU)	Demand Tariffs
1	Origin Energy	All	All		All	All	Ausgrid
2	EnergyAustralia	All	All		All	All	Ausgrid
3	AGL	All	All		All	All	Ausgrid
3 (i)	Powerdirect	All	All		All	All	Ausgrid
3 (ii)	Actew AGL	Endeavour and Essential	Endeavour and Essential		Endeavour and Essential	Endeavour and Essential	
4	1st Energy	All	All		All	All	Ausgrid
5	Alinta Energy	All	All		All	All	Ausgrid
6	Blue NRG	All	All		All	All	Ausgrid
7	Amaysim	All	All		All	All	
7 (i)	Click Energy	All	All		All	All	
8	Commander	All	All		All	All	
8 (i)	Dodo	All	All				
9	CovaU	All	All	Essential	All	All	Ausgrid and Essential
10	DC Power Co	All	All				
11	Diamond Energy	All	All		All	All	
12	Energy Locals	All	All		All	All	Ausgrid and Essential
13	Enova Energy	Essential	Essential		Essential	Essential	
14	Future X Power	All			All		
15	Red Energy	All	All		All	All	Ausgrid
15 (i)	Lumo Energy	All	All		All	All	
16	Mojo	All	All				
17	Momentum Energy	All	All		All	All	Ausgrid
18	Next Business Energy				All	All	Ausgrid and Endeavour
19	Powerclub	All	All		All	All	
20	Powershop	All	All		All	All	Ausgrid
21	QEnergy	All	All		All	All	Ausgrid
22	ReAmped Energy	All	All				
23	Sanctuary Energy	All	All				
24	Simply energy	All	All		All	All	
25	Sumo	All	All		All	All	Ausgrid

Source: Energy Made Easy, accessed June 2019.

D Data tables

The following tables set out electricity bills calculated using the median lowest market offer and the median standing offer, across all retailers, for residential and small business customers, in each network area.

Table D.1 Median residential electricity bill by network area (5,100 kWh pa, GST-inclusive, nominal)

Network area	Offer type	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Cumulative change
Ausgrid	Lowest	$1,523	$1,376	$1,287	$1,466	$1,631	$1,561	2.5%
	Standing	$1,700	$1,597	$1,512	$1,697	$1,982	$2,012	18.4%
Endeavour	Lowest	$1,469	$1,332	$1,284	$1,417	$1,588	$1,508	2.6%
	Standing	$1,664	$1,560	$1,515	$1,679	$1,1,964	$1,948	17.1%
Essential	Lowest	$2,037	$1,861	$1,548	$1,732	$1,831	$1,791	-12.1%
	Standing	$2,246	$2,134	$1,768	$1,979	$2,236	$2,334	3.9%

Source: Energy Made Easy. IPART calculations.

Table D.2 Median small business electricity bill by network area (10,000 kWh pa, GST-inclusive, nominal)

Network area	Offer type	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Cumulative change
Ausgrid	Lowest		$2,788	$2,722	$3,134	$3,531	$3,371	20.9%
	Standing	$3,374[a]	$3,207	$3,232	$3,558	$4,567	$4,520	41.0%
Endeavour	Lowest		$2,338	$2,247	$2,655	$2,916	$2,867	22.6%
	Standing	$2,993[a]	$2,703	$2,687	$2,965	$3,598	$3,592	32.9%
Essential	Lowest		$3,737	$3,126	$3,490	$3,799	$3,682	-1.5%
	Standing	$4,567[a]	$4,287	$3,683	$4,087	$4,856	$4,679	9.1%

[b] Prices were still regulated by the NSW Government in this year.

Source: Energy Made Easy. IPART calculations.