ICRC

independent competition and regulatory commission

Retail electricity price investigation 2020–24

Final report

Report 9 of 2020, June 2020

The Independent Competition and Regulatory Commission is a Territory Authority established under the Independent Competition and Regulatory Commission Act 1997 (the ICRC Act). The Commission is constituted under the ICRC Act by one or more standing commissioners and any associated commissioners appointed for particular purposes. Commissioners are statutory appointments. Joe Dimasi is the current Senior Commissioner who constitutes the Commission and takes direct responsibility for delivery of the outcomes of the Commission.

The Commission has responsibilities for a broad range of regulatory and utility administrative matters. The Commission has responsibility under the ICRC Act for regulating and advising government about pricing and other matters for monopoly, near-monopoly and ministerially declared regulated industries, and providing advice on competitive neutrality complaints and government-regulated activities. The Commission also has responsibility for arbitrating infrastructure access disputes under the ICRC Act.

The Commission is responsible for managing the utility licence framework in the ACT, established under the Utilities Act 2000 (Utilities Act). The Commission is responsible for the licence determination process, monitoring of licensees' compliance with their legislative and licence obligations, and determination of utility industry codes.

The Commission's objectives are set out in section 7 and 19L of the ICRC Act and section 3 of the Utilities Act. In discharging its objectives and functions, the Commission provides independent robust analysis and advice.

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Executive Summary

The Independent Competition and Regulatory Commission (the Commission) received terms of reference from the ACT Government on 28 May 2019 to determine a price direction for the supply of electricity by ActewAGL to customers on its regulated retail tariffs for the period 1 July 2020 to 30 June 2024. The terms of reference also required the Commission to investigate whether changes are needed in the Territory to improve the transparency and comparability of electricity offers.

The Commission released an issues paper on 2 September 2019 as the first step in the consultation process for the investigation. The release of the draft report on 4 February 2020 was the second key milestone in the Commission's consultation process. The publication of the final report and price direction completes the investigation.

This report sets out the Commission's final decision on the regulatory approach and pricing model for the regulatory period, and the price adjustment for 2020-21. It also includes the Commission's final recommendations to improve the transparency and comparability of retail offers in the ACT retail electricity market.

Pricing model and cost components

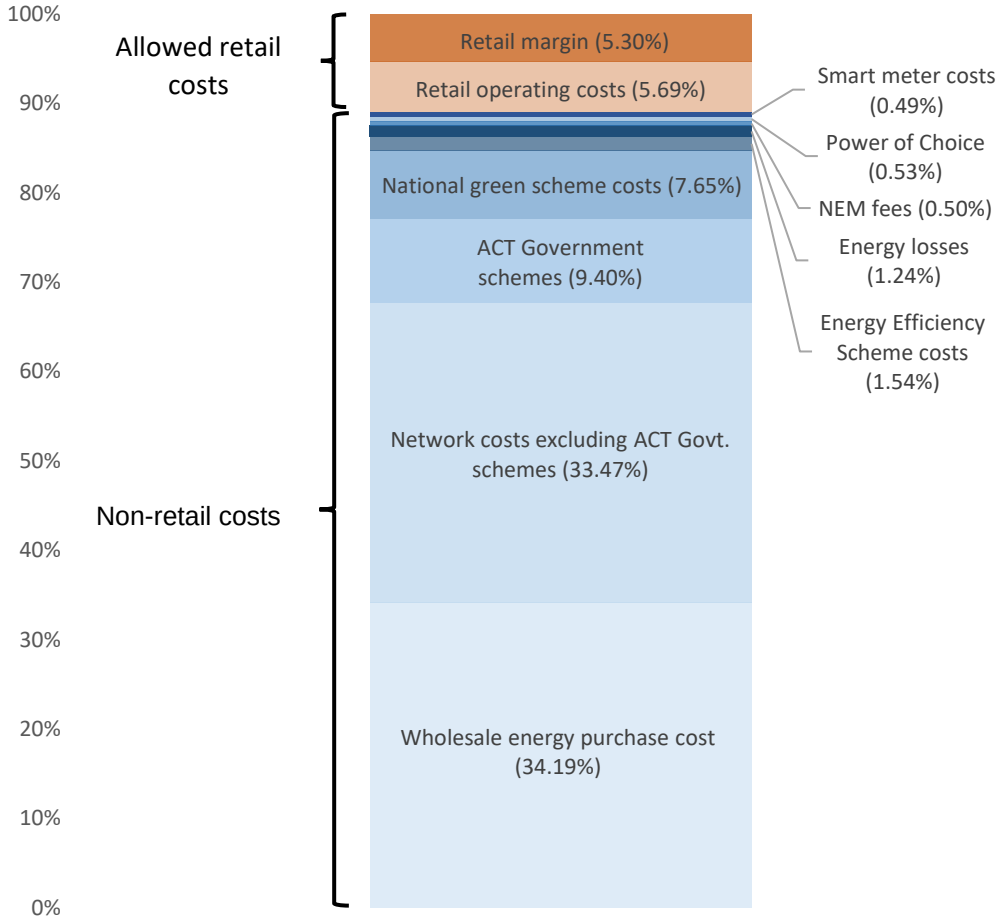
The Commission's pricing model is used to determine the maximum average percentage increase that ActewAGL can apply to its suite of regulated standing offer tariffs each year. The Commission decided to apply an updated method for estimating the cost components in the model as part of the electricity model and methodology review undertaken during 2018-19. This price investigation considered inputs to the pricing model that will be used during the 2020-24 regulatory period.

The Commission's pricing model contains three main cost categories:

- Wholesale electricity costs, which include costs associated with purchasing electricity from the wholesale market, national green scheme compliance costs, energy losses and National Electricity Market (NEM) fees. These costs make up about 44 per cent of total costs.
- Network costs, which include electricity transmission and distribution costs and the jurisdictional scheme costs (such as the ACT Government's feed-in tariff schemes). They account for about 43 per cent of the total costs.
- Retail costs, which include retail operating costs, Energy Efficiency Incentive Scheme (EEIS) compliance costs, smart meter costs, and a retail margin. These costs account for around 13 per cent of total costs.

The share of each cost component in the total costs in 2020-21 is shown in Figure ES. 1

Figure ES. 1 Cost components as a share of total cost, 2020-21



Source: Commission's calculations

A large proportion of costs (89 per cent) are not within the control of the retailer and hence are not regulated by the Commission. These include energy purchase costs (except for the particular hedging strategy used by the retailer), the costs of complying with Commonwealth and Territory environmental obligations, costs associated with energy losses, and the network charges.

The costs that are within the control of the retailer include retail operating costs and the retail margins. These costs accounted for 11 per cent of the total cost.

The Commission's final decision will result in lower electricity prices in 2020-21

The Commission's final decision will result in the average price of ActewAGL's basket of regulated tariffs falling by around 2.56 per cent in 2020-21 (Table ES.1). This is equivalent to a real decrease of 4.31 per cent (after adjusting for inflation).

Table ES. 1 sets out the percentage change in the cost components used to calculate the minimum decrease, on average, in regulated retail electricity prices for 2020-21.

Table ES. 1 Cost components for 2020-21

Cost	2019-20 ($/MWh)	2020-21 ($/MWh)	% change
Wholesale energy purchase cost	92.93	85.97	-7.49%
National green scheme costs	25.73	19.22	-25.30%
Energy losses	3.81	3.13	-17.90%
NEM fees	0.92	1.26	36.85%
Total energy purchase cost	**123.39**	**109.58**	**-11.19%**
Network costs (excluding ACT Government scheme costs)	73.96	84.16	13.79%
ACT Government schemes	28.28	23.63	-16.44%
Total network costs	**102.24**	**107.79**	**5.43%**
Retail operating costs	14.41	14.30	-0.76%
Energy efficiency scheme costs	4.00	3.86	-3.39%
AEMC Power of Choice costs	1.02	1.32	30.08%
Smart meter costs	NA	1.24	NA
Total retail costs	**19.43**	**20.73**	**6.68%**
Total energy + retail + network costs	**245.06**	**238.10**	**-2.84%**
Retail margin	12.99	13.33	2.66%
Total costs	**258.05**	**251.43**	**-2.56%**

Source: Commission's calculations.

The price reduction is primarily driven by reductions in wholesale costs and national green scheme costs (Table ES.2). Wholesale costs contributed 2.7 percentage points while green scheme costs have contributed 2.5 percentage points to the price decrease. The reduction in wholesale costs was driven by an increase in generation capacity, mainly from renewable sources. Green scheme costs declined because of a fall in prices of large-scale generation certificates. This reflected high growth in the expected number of renewable energy projects, above what was needed to meet the 2020 national renewable energy target.[1]

A decline in ACT Government scheme costs also contributed to the price fall. This cost declined because of a fall in feed in tariff (FiT) support payments. The FiT support payments recovered by Evoenergy depend on forecasts of the payments; the forecast payments for 2020-21 declined relative to the forecast payments for 2019-20.

Changes to the Commission's pricing model that were made as part of the methodology review have also contributed to the price fall. The pricing methodology was improved to ensure that the Commission's cost estimates are based on more up-to-date and efficient retailer practices, including a more efficient wholesale market hedging strategy and a more cost-effective approach to complying with green scheme requirements. The

[1] Details available at: http://www.cleanenergyregulator.gov.au/RET/Pages/About%20the%20Renewable%20Energy%20Target/How%20the%20scheme%20works/Large-scale%20generation%20certificate%20market%20update%20by%20month/Large-scale-generation-certificate-market-update---February-2019.aspx

changes to the Commission's pricing methodology have contributed around 1.3 percentage points to the price decrease. This contribution is not shown separately in Table ES. 2 as the impact of the changes is included in the cost components.

Table ES. 2 Percentage point contribution to the total cost change from 2019-20 to 2020-21

Cost components	Percentage point
Wholesale energy purchase cost	-2.70%
National green scheme costs	-2.52%
ACT Government scheme costs	-1.80%
Energy losses	-0.26%
Energy Efficiency Scheme costs	-0.05%
Retail operating costs	-0.04%
Power of Choice costs	0.12%
NEM fees	0.13%
Retail margin	0.13%
Smart meter costs	0.48%
Network costs (excluding ACT Govt schemes)	3.95%
Total cost	**-2.56%**

Source: Commission's calculations.

Changes between the draft decision and final decision

The minimum decrease in the final decision (2.56 per cent) is less than the minimum decrease estimated in the draft report (6.75 per cent). This change reflects data updates between the draft and final reports, particularly in relation to network costs (see Table ES. 3).

Table ES. 3 Changes in cost components between the draft and final decisions

Cost components ($/MWh)	Draft decision $/MWh	Final decision $/MWh	Change $/MWh	Contribution to the 4.19 ppts difference between the draft and in final (ppts)
ACT government scheme costs	28.28	23.63	-$4.65	-1.80
Energy purchase cost	87.3	85.97	-$1.33	-0.51
Retail operating costs	14.67	14.30	-$0.37	-0.14
Energy Efficiency Scheme costs	4.01	3.86	-$0.15	-0.06
NEM fees	1.3	1.26	-$0.04	-0.02
Power of choice (metering) cost	1.03	1.32	$0.29	0.11
Energy losses	2.72	3.13	$0.41	0.16
Retail margin	12.11	13.33	$1.22	0.47
Smart meter costs	NA	1.24	$1.24	0.48
LRET and SRES costs	15.22	19.22	$4.00	1.55
Network costs (**excludes ACT govt schemes**)	73.96	84.16	$10.20	3.95
Total	240.62	251.43	$10.81	**4.19**
Weighted average price change	-6.75%	-2.56%	4.19 ppts	

The Commission updated the network cost component of the cost stack with the data released by the AER in May 2020. Network cost data was not available when the Commission released the draft report. This update reduced the price decrease by 3.95 percentage points.[2] This is the main reason for the final price decrease being 4.19 percentage points less than the draft price decrease.

The network prices approved by the AER increased by around 1.9 per cent and resulted in a 5.4 per cent increase in total network costs for standing offer customers. The increase in total network costs (5.4 per cent) is larger than the network price increase (1.9 per cent) because of a change in the mix of standing offer customers, from customers on low cost network tariffs (such as controlled load tariffs) to relatively higher cost tariffs (such as demand network tariffs). This change in the customer mix has come in the context of a substantial change in the number of consumers on regulated standing offers as consumers move to market offers and other retailers.

The Commission considers that the way in which network costs are allocated may become increasingly important as the number and mix of standing offer customers continues to change. The Commission will therefore examine the form of price control during the 2020-24 regulatory period. As part of the review, the Commission will consider current and expected regulatory and market developments that may have implications for the effectiveness of the form of control to apply in the regulatory period from 1 July 2024.

Another factor contributing to the change from the draft decision is an update to national green scheme costs. These costs were updated using data released by the Clean Energy

[2] Table ES.3 reports network costs and ACT Government schemes separately while the 'total network cost' increase of 5.4 per cent refers to the network cost including ACT Government schemes.

Regulator in March 2020 and publicly available price data for green scheme certificates. This update reduced the price decrease from the draft decision by 1.55 percentage points. This is because the small-scale technology percentage for the 2021 calendar year increased due to continuing high take-up of solar panels across Australia.

In addition, the Commission has included smart meter costs in the cost stack as these are now an essential part of supplying electricity to a growing number of ACT consumers. The Commission also increased the retail margin from 5.3 per cent to 5.6 per cent to account for recent substantial falls in wholesale energy costs which will reduce the margin in dollar value terms. These two changes collectively reduced the price decrease by around 1 percentage point.

Impact on customers

The Commission's final decision will reduce the annual electricity bill for an average customer who uses 6,500 kWh of electricity by $43 in 2020-21 compared to 2019-20. The impact on non-residential customers ranges from a reduction of $265 per year for a large customer to $66 for a small customer. The final decision will mean that ACT consumers would continue to pay amongst the lowest standing offer electricity prices in Australia.

Comparability and transparency of electricity offers

As part of this investigation, the Commission considered whether changes are needed in the Territory to improve the transparency and comparability of electricity offers. The Commission examined how offers and discounts are marketed in the ACT, both for standing offers and market offers. The Commission gathered information on offers from electricity retailers in the ACT, as well as from publicly available sources. Stakeholder views were gathered through:

- submissions to the issues paper and the draft report;
- a workshop with electricity retailers and consumer groups;
- targeted consultation with consumer groups, retailers and financial counsellors;
- a survey of ACT electricity consumers;
- a public hearing on the draft report; and
- feedback from consumers via the Commission's online feedback form.

The Commission has found that many ACT electricity consumers have difficulties finding the best offer for their circumstances, and that comparability and transparency of electricity offers could be improved:

- the large number of offers makes comparing offers difficult;
- there are many different terms and conditions on plans;
- it can be difficult to understand how discounts are calculated; and
- many consumers do not understand the different tariff types.

The ongoing regulation of the retail electricity market in the ACT has meant that retailers have not been able to charge inflated standing offer prices as has been found in other

jurisdictions. While standing offer price regulation in the ACT has contributed to the ACT having lower retail electricity prices than other capital cities, the Commission found that differences between market offer and standing offer prices mean that some consumers could save by shopping around. Improving consumers' ability to find a better offer could result in savings on electricity bills.

The Commission has concluded that two main measures would improve the transparency and comparability of offers. These are:

- developing a reference bill amount which consumers can use as a common point of comparison for assessing electricity offers; and
- requiring retailers to regularly notify their customers if they have a better offer and ask customers to call them for information and assistance with switching.

The Commission has made two final recommendations to achieve this.

Similar measures have recently been introduced in other Australian jurisdictions. Initial market outcomes from these jurisdictions suggest these measures have helped consumers find the best offer for their circumstances.

The Commission has revised its draft recommendation on the best offer notification, which proposed that electricity retailers should notify customers of their best offer for an individual customer's circumstances. The Commission found that the costs of implementing a personalised best offer on the bill are likely to be high in the ACT relative to the benefits realised by customers. Due to the low number of smart meters in the ACT, there are difficulties in obtaining detailed data on individual customer's usage patterns, which is needed to identify the best plan for each customer. Recognising these data limitations, the Commission considers a more cost-effective approach is to require retailers to notify customers if they offer a plan that appears to better suit the customer's circumstances and ask those customers to call them for more information. The retailer's staff could then talk with the customer about their consumption pattern and their needs so they can work with the customer to identify a better offer for that customer.

The Commission considers that if the recommended 'better offer' notification requirement were to be implemented in the ACT, it should be implemented with a requirement on retailers to help customers navigate to the retailer's offer that suits their circumstances the most, as well as explain any contractual terms to customers that could lead them to pay more than they expect (known as a Clear Advice Entitlement).

In the Commission's view, implementing these final recommendations together as a package is likely to increase the benefits to consumers, given the relative advantages and limitations of each measure. For example, a reference bill amount can only be set for an 'average' customer or a small number of 'average' customers of certain types. Individual consumers whose usage patterns differ from the average would be better informed if their retailer notifies them of a better offer, along with advice on how to contact the retailer for further information and assistance in choosing the right offer for them.

The Commission is also encouraging retailers to regularly notify their customers that they can visit the Energy Made Easy website to check whether better offers are available

from other retailers. This is because a 'better offer' notification would only apply to plans offered by the customer's current retailer. The customer could find an even better offer in the market by using the Energy Made Easy website.

While regulated standing offer prices only apply to ActewAGL, the Commission proposes that its recommendations on improving comparability and transparency of electricity offers would, if adopted by the Government, apply to all retailers operating in the ACT.

List of final recommendations

The Commission's final recommendations are:

1. A reference bill amount should be developed to provide ACT consumers with a common point of comparison for assessing electricity offers. The reference bill should be based on existing regulated standing offer prices.
2. The ACT Government should consider imposing a new regulatory obligation on retailers to regularly notify their customers if they have a better offer and ask customers to call them for information. This new regulatory obligation should be implemented with a new regulatory obligation establishing a Clear Advice Entitlement to help ensure that consumers have information they need to make an informed decision.

1 Introduction

1.1 Background to the investigation

The Independent Competition and Regulatory Commission (ICRC or the Commission) is a statutory body set up to regulate prices, access to infrastructure services and other matters in relation to regulated industries and to investigate competitive neutrality complaints and government-regulated activities. The Commission also has responsibility for licensing utility services and ensuring compliance with license conditions. The Commission is responsible for setting regulated retail prices for the supply of electricity to small customers[3] on ActewAGL's regulated tariffs.

The Commission undertakes price investigations in accordance with Part 3 of the *Independent Competition and Regulatory Commission Act 1997* (ICRC Act or the Act), and issues price directions under Part 4 of the Act.

On 28 May 2019, the Treasurer gave the Commission terms of reference (see Appendix 1) under the ICRC Act to make a price direction for the supply of electricity by ActewAGL to customers on its regulated retail tariffs for the four-year regulatory period commencing 1 July 2020. The current price direction sets the maximum weighted average increase that ActewAGL can apply to its regulated retail tariffs from 1 July 2017 to 30 June 2020.

The terms of reference also required the Commission to investigate whether changes are needed in the Territory to improve the transparency and comparability of electricity offers (including standing offers and market offers). This was in the context of the Australian Energy Regulator (AER) implementing a Default Market Offer (DMO) in jurisdictions where retail electricity prices are not regulated, and the Victorian Government implementing a Victorian Default Offer (VDO). An important objective of both the DMO and VDO is to make it easier for consumers in these jurisdictions to compare electricity offers and choose the best offer for their circumstances.

As part of this price investigation, the Commission has implemented the updated methodology from its 2018–19 electricity model and methodology review (methodology review).[4] The review found that the Commission's model was methodologically sound and simple to implement. The review also identified some areas for improvement and the Commission decided to change how some cost categories are estimated. The Commission has used the updated methodology in this price investigation. During this

[3] Small customers are defined as customers who consume less than 100MWh of electricity over any period of 12 consecutive months.

[4] The Commission's methodology review is available at https://www.icrc.act.gov.au/energy/electricity/electricity-model-and-methodology-review-2018-19.

price investigation, the Commission has determined the inputs to the model, using its updated methodology.

The Commission released an issues paper on 2 September 2019 as the first step in the consultation process for this investigation. The publication of the draft report and proposed price direction was the second step. The Commission received five submissions on the draft report, which are available on the Commission's website (together with the submissions on the issues paper).[5] A summary of the submissions on the issues paper and the draft report is available in Appendix 3. The Commission has discussed issues raised in the submissions in the relevant chapters of this report.

The publication of the final report and price direction is the final step in the Commission's process for this investigation.

1.2 The Commission's role and objectives

In carrying out its functions under the ICRC Act, the Commission has the following objectives set out in sections 7 and 19L (Box 1.1).

Box 1.1 Sections 7 and 19L: Commission objectives

Section 7:

- to promote effective competition in the interests of consumers;
- to facilitate an appropriate balance between efficiency and environmental and social considerations;
- to ensure non-discriminatory access to monopoly and near-monopoly infrastructure.

Section 19L:

- To promote the efficient investment in, and efficient operation and use of regulated services for the long-term interests of consumers in relation to the price, quality, safety, reliability and security of the service.

When making a price direction, in addition to the terms of reference and legislative objectives, the Commission is also required to have regard to the provisions set out in section 20(2) of the ICRC Act (Box 1.2).

Box 1.2 Section 20(2): Commission's considerations

(a) the protection of consumers from abuses of monopoly power in terms of prices, pricing policies (including policies relating to the level or structure of prices for services) and standard of regulated services; and

(b) standards of quality, reliability and safety of the regulated services; and

[5] www.icrc.act.gov.au.

(c) the need for greater efficiency in the provision of regulated services to reduce costs to consumers and taxpayers; and

(d) an appropriate rate of return on any investment in the regulated industry; and

(e) the cost of providing the regulated services; and

(f) the principles of ecologically sustainable development mentioned in subsection (5); and

(g) the social impacts of the decision; and

(h) considerations of demand management and least cost planning; and

(i) the borrowing, capital and cash flow requirements of people providing regulated services and the need to renew or increase relevant assets in the regulated industry; and

(j) the effect on general price inflation over the medium term; and

(k) any arrangements that a person providing regulated services has entered into for the exercise of its functions by some other person.

1.3 What do the terms of reference ask the Commission to consider?

The terms of reference required the Commission to consider the following matters in this investigation (Box 1.3). The terms of reference are similar to those received by the Commission for the 2017–20 electricity price investigation. The key difference is that the terms of reference for this investigation include an additional clause —clause 4(4)— which required the Commission to consider whether changes are needed in the Territory to improve the transparency and comparability of electricity offers.

Box 1.3 Scope of the terms of reference

4(1) The Commission must consider:

a. The direct impact on electricity costs of government policies and pass through of costs and savings to regulated prices including, but not restricted to:

   i. the ACT retailer obligations under the Energy Efficiency Improvement Scheme;

   ii. the Commonwealth Government's Large-scale Renewable Energy Target and Small-scale Renewable Energy Scheme;

   iii. any other schemes implemented to address climate change relevant to electricity pricing; and

   iv. any other policies or schemes that may directly impact on pricing in the retail or wholesale electricity market.

b. The efficient and prudent cost of managing risk in the cost of purchasing electricity for the period of the price direction.

4(2) The Commission must identify and report on the efficient costs of complying with the Energy Efficiency (Cost of Living) Improvement Act 2012 for the period that the determination is being made.

4(3) The Commission must identify and report on the cost allowance of the ACT Feed-in Tariffs (small and large scale) for the period that the determination is being made.

4(4) The Commission must consider whether changes could be made in the Territory to promote improved transparency and comparability of both regulated pricing offers for small customers who consume less than 100MWh of electricity, and unregulated market offers.

a. In considering this matter, the Commission should consider relevant findings and recommendations outlined in the Australian Competition and Consumer Commission's 2018 *Retail Electricity Pricing Inquiry – Final Report.*

4(5) The Commission must release its final report within the period of 1 March 2020 to 5 June 2020, to provide sufficient time for ActewAGL Retail to make any necessary changes to its billing system, and to provide information on the new tariff to customers in time for implementation on 1 July 2020.

1.4 Structure of the report

The remainder of this report is structured as follows:

- Chapter 2 discusses the Commission's form of price control for the regulatory period.
- Chapter 3 discusses the Commission's pricing model and model inputs.
- Chapter 4 provides an estimate of the efficient costs of supplying electricity to customers on regulated tariffs in 2020–21.
- Chapter 5 analyses customer impacts from the final decision.
- Chapter 6 describes the procedure for annual recalibrations.
- Chapter 7 discusses the transparency and comparability of electricity offers in the ACT retail electricity market.
- Appendix 1 reproduces the terms of reference.
- Appendix 2 outlines the compliance of the investigation with the terms of reference and the ICRC Act.
- Appendix 3 contains a summary of submissions to the issues paper and the draft report.
- Appendix 4 summarises the recent developments in the wholesale electricity market.

2 Commission's regulatory approach

2.1 Overview

This chapter sets out the Commission's final decision on the regulatory approach. The main elements of the Commission's approach comprise a price control mechanism, a pricing model and pass-through arrangements.

The price control mechanism sets out how and when a price change can be applied to ActewAGL's regulated retail electricity tariffs. The pricing model is used to determine the maximum allowable price increase across the basket of regulated tariffs from one year to the next. The pass-through arrangements set out the approach to certain unexpected events, beyond the control of ActewAGL, that occur after the price direction has been made.

2.2 Length of the regulatory period

The price direction will be for the four-year period from1 July 2020 to 30 June 2024, as specified in the terms of reference.

2.3 Form of price control

During the regulatory period 1 July 2017 to 30 June 2020, the Commission's price control mechanism involved determining the maximum allowable percentage price change that ActewAGL can apply across its basket of regulated tariffs from one year to another. The formula used by the Commission to control the annual price change is presented in Box 2.1.

The weighted average price for a given year is determined using prices for each standing offer and weights. The weights are the electricity consumption and customer numbers for the 12 months to 31 March.

This approach allowed ActewAGL to adjust individual prices for its different standing offers, as long as the total adjustment did not exceed the maximum allowable percentage change determined by the Commission. This approach did not set the maximum prices that ActewAGL can charge for any of its different regulated tariffs. It only controlled the average change across a basket of tariffs.

Box 2.1 Price control formula used by the Commission during the 2017-20 regulatory period

In the 2017-20 regulatory period ActewAGL was required to ensure that its regulated retail tariffs comply with the following formula:

$$1 + Y^t \geq \frac{\sum_{i=1}^{n}\sum_{j=1}^{m} P_{ij}^{t} Q_{ij}^{t-1}}{\sum_{i=1}^{n}\sum_{j=1}^{m} P_{ij}^{t-1} Q_{ij}^{t-1}}$$

where:

- ActewAGL has n regulated retail tariffs that each have up to m components;
- t denotes a financial year;
- i denotes a regulated tariff and j denotes a component of tariff i;
- Y^t is the maximum average percentage increase in regulated retail tariffs determined in accordance with the Commission's pricing model;
- P_{ij}^{t} is the price that ActewAGL proposes to charge for component j of regulated tariff i for year t;
- P_{ij}^{t-1} is the price that ActewAGL charges for component j of regulated tariff i in the year t-1;
- Q_{ij}^{t-1} is the reference quantity for component j of the regulated tariff i defined as the actual quantity (in both customer numbers or megawatt hours) as reported by ActewAGL for the 12-month period ending 31 March in year t–1.

Draft decision

In the draft report the Commission considered that a weighted average price increase approach is the most appropriate form of price control in the ACT for customers on regulated retail tariffs. The Commission considered that ActewAGL should retain discretion to set individual tariffs in the regulated tariff basket. However, the Commission also considered that there would be benefits to consumers by limiting how much ActewAGL can change individual charges in any single year.

Recent tariff changes by ActewAGL

As explained in the draft report, the Commission analysed ActewAGL's standing offer tariff changes in 2019–20 and 2018–19 and compared them to the Commission's regulated weighted average price change. The analysis showed that changes in some individual tariffs were substantially different from the regulated weighted average price change. In some cases the change in individual tariffs was larger than the weighted average price change and led to larger electricity bills for some consumers.

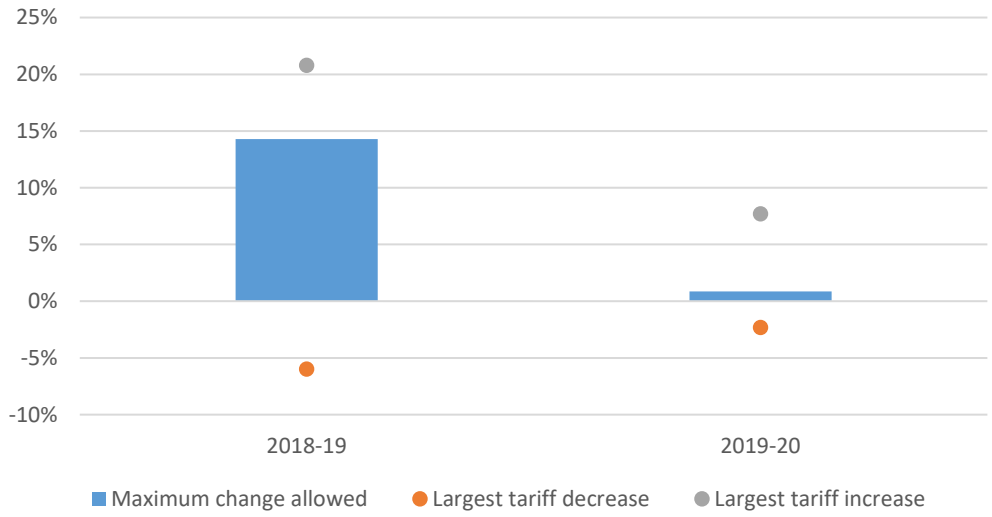
In 2019–20, ActewAGL increased 28 individual charges (that is, usage and supply charges for standing offer tariffs) above the 0.85 per cent weighted average price change. For these 28 charges, the average increase was 1.51 per cent and the largest increase was 7.69 per cent (Figure 2.1). For some customers, this would have led to higher electricity bills than if all tariffs had increased by the weighted average price change. For example, annual bills under the HomeSaver and HomeSaver+ plans increased by more than the

regulated average price change (assuming consumption levels were unchanged from the previous year).[6]

In the same year, 19 individual charges increased less than the regulated average price change. For these charges, the average increase was 0.26 per cent and the largest decrease was 2.34 per cent.

In 2018–19, 16 of the 47 individual tariffs increased by more than the weighted average price change of 14.28 per cent. The average increase was 17.15 per cent and the highest individual tariff increase was 20.77 per cent (Figure 2.1). Conversely, 31 individual tariffs increased by less than the weighted average price change; the largest change being a 5.99 per cent decrease in price.

Figure 2.1 Changes in ActewAGL's tariffs 2018–19 and 2019–20



Source: Commission's calculations based on ActewAGL's prices for various electricity standing offers.

The Commission's draft decision therefore was to continue applying a weighted average price increase form of control but to restrict how much ActewAGL can change individual charges compared to the weighted average price change determined by the Commission.

Side constraint

In the draft report, the Commission proposed to introduce a restriction (also known as a 'side constraint') whereby an increase in any individual charge for a regulated standing offer tariff must not exceed 2.0 percentage points above the regulated weighted average price change. As an example, if the weighted average price change is -2.56 per cent, the side constraint will mean that ActewAGL must decrease all individual charges for a regulated standing offer tariff by at least 0.56 per cent. The constraint does not limit price reductions, in the sense that ActewAGL is able to reduce charges by any amount that is

[6] Analysis by the Commission using average household consumption of 6,500 kWh per annum.

larger than the weighted average price decrease determined by the Commission. This restriction is known as an "upper bound side constraint".

In 2019–20, ActewAGL changed three charges by greater than the proposed 2.0 per cent side constraint, while in 2018-19, ActewAGL changed nine tariffs by more than the 2.0 per cent side constraint. The Commission stated in its draft report that the introduction of a side constraint in the form of price control would reduce the magnitude of individual price changes that may apply to a customer.

The Commission noted that other regulators apply a similar form of control and that there is regulatory precedent for applying a 2.0 per cent side constraint. For example, the AER's form of control for electricity network businesses uses a weighted average price cap approach with a 2.0 per cent side constraint.[7] The Essential Services Commission in Victoria (ESC) also applies a side constraint as part of its regulation of water and sewerage businesses.[8]

The Commission considered that a 2.0 per cent side constraint would provide price stability for consumers and give ActewAGL flexibility in setting tariffs, because it would still be able to adjust prices to meet market conditions and ensure that tariffs are cost reflective. For example, ActewAGL could ensure tariffs are cost reflective by adjusting individual tariffs over several years; the side constraint would slow down, but not prevent, relative price changes to reflect changes in relative costs.

Draft report submissions

ActewAGL supported the Commission's proposed weighted average price increase form of control.

However, ActewAGL suggested an alternative approach to the application of the side constraint. ActewAGL's suggestion was to impose a two per cent side constraint at the customer segment level (residential customers and business customers), not on the individual components of regulated tariffs. ActewAGL stated that a side constraint at individual tariff level would prevent it from offering cost-reflective tariffs. ActewAGL stated that underlying network costs and energy purchase costs can vary by tariff type and it may not be able to set prices that reflect these underlying costs under the Commission's proposed side constraint. ActewAGL considered that its alternative side constraint would still achieve the Commission's objective of restricting price movements while providing ActewAGL the flexibility to set cost reflective tariffs.

The ACAT and the ACT Energised Consumers Project Partners (ACT Council of Social Service, Care Financial Counselling Service, and Better Renting) supported the Commission's proposed side constraint. The ACAT stated that it would "help protect particular groups of customers from unfair price increases." [9] ACT Energised Consumers

[7] AER 2019a, p. 5.

[8] ESC 2018a, p. 89.

[9] ACAT 2020, p.5.

Project Partners stated that "this restriction is welcome in providing price stability for consumers, avoiding sharp increases in favour of allowing any cost-reflective tariff increases to be spread over a number of years." [10]

In regard to the form of control, the ACAT expressed concern that the Commission does not approve miscellaneous fees and charges within the regulatory framework:

> The ACAT is concerned that some current fees and charges in the ACT are possibly higher than the general range of fees charges by energy utilities elsewhere in Australia and might be considered harsh in effect (on vulnerable customers). Consideration should be given by the Commission to approving the proposed AAR [ActewAGL Retail] schedule of fees and charges as well as the proposed regulated tariffs.[11]

Commission's consideration and final decision

The Commission maintains its draft decision that a weighted average price increase approach is the most appropriate form of price control in the ACT for customers on regulated retail tariffs. No information has been presented to the Commission that suggests an alternative form of control is more appropriate.

The Commission also maintains its view that there would be benefits to consumers by limiting how much ActewAGL can change individual charges in any single year.

The Commission considered the alternative side constraint suggested by ActewAGL in its submission to the draft report. The Commission considers that applying a side constraint at the customer segment level could still result in tariff increases that are significantly higher than the weighted average price change.

The Commission recognises that underlying cost drivers for each tariff type can be different. For example, underlying network costs for each tariff type can change by different amounts, sometimes significantly different. The Commission notes that the network charges for Home Saver increased by 8.2 per cent in 2019-20 compared to 2018-19 whereas the network charges for Home Saver Plus decreased by 2.2 per cent.

Nevertheless, the Commission considers that retailers are not required to mimic the underlying network tariffs when determining retail tariffs. Instead, retailers set tariffs, taking into account the needs and characteristics of the retail market and their own customers. The Commission reiterates that retailers could still implement adjustments to its tariffs over several years to ensure they reflect underlying costs, while avoiding some consumers experiencing price changes that are significantly above the average price change.

Noting ActewAGL's submission, the Commission considered an alternative side constraint that would give ActewAGL more flexibility to adjust relative tariffs while limiting the magnitude of relative changes in individual tariffs. The Commission has decided to apply the side constraint at the tariff level, not at the individual charge level

[10] ACT Energised Project Partners 2020, p.4.

[11] ACAT 2020, p.2.

as originally proposed in the draft report. This means the weighted average price change of each individual regulated tariff will be within two percentage points above the weighted average price change determined by the Commission. The weighted average price, for example, for flat rate tariff is calculated by weighting the supply charge and usage charge by the number of customers on that tariff and energy used by those customers, respectively. The Commission considers that a side constraint at tariff level ensures the bill increments for an average electricity customer will be close to the weighted average price change determined by the Commission and hence provide greater price stability to consumers. The Commission also considers that a side constraint at tariff level gives ActewAGL with sufficient flexibility in setting individual charges, including adjusting them for changes in underlying costs.

The Commission's final decision is to continue applying a weighted average price increase form of control and to introduce a 2 per cent side constraint at the tariff class level. The price control formula to be used during the regulatory period 1 July 2020 to 30 June 2024 is shown in Box 2.2.

Box 2.2 The Commission's price control formula

The Commission proposes that ActewAGL's regulated retail tariffs comply with the following formula:

$$1 + Y^t \geq \frac{\sum_{i=1}^{n}\sum_{j=1}^{m} P_{ij}^{t} Q_{ij}^{t-1}}{\sum_{i=1}^{n}\sum_{j=1}^{m} P_{ij}^{t-1} Q_{ij}^{t-1}}, \quad \text{for all i and j,}$$

$$\text{subject to } 1.02 + Y^t \geq \frac{\sum_{j=1}^{m} P_{ij}^{t} Q_{ij}^{t-1}}{\sum_{j=1}^{m} P_{ij}^{t-1} Q_{ij}^{t-1}} \text{, for each i.}$$

where:

- ActewAGL has n regulated retail tariffs that each have up to m components;
- t denotes a financial year;
- i denotes a regulated tariff and j denotes a component of tariff i;
- Y^t is the maximum average percentage increase in regulated retail tariffs determined in accordance with the Commission's pricing model;
- P_{ij}^{t} is the price that ActewAGL proposes to charge for component j of regulated tariff i for year t;
- P_{ij}^{t-1} is the price that ActewAGL charges for component j of regulated tariff i in the year t-1;
- Q_{ij}^{t-1} is the reference quantity for component j of the regulated tariff i defined as the actual quantity (in both customer numbers or megawatt hours) as reported by ActewAGL for the 12-month period ending 31 March in year t–1.

The Commission considered the ACAT's submission about the level of fees and charges in the ACT. ActewAGL has a number of miscellaneous fees and charges that largely relate to non-standard requests to the network operator (such as special meter reads) and

for account issues and payments (such as a late payment fee, dishonoured cheque fee and credit card reversal fee, direct debit fees and a payment processing fee).[12]

The Commission has found that ActewAGL's fees and charges for non-standard network issues (e.g. special meter reads) are the same as those imposed by Evoenergy.[13] That is, ActewAGL passes these costs onto consumers at cost and does not apply a mark-up. The miscellaneous fees and charges imposed by the network operator, Evoenergy, are regulated by the AER.

The Commission found that fees and charges for payment processing are already regulated by the ACCC. In particular, the *Competition and Consumer Amendment (Payment Surcharges) Act 2016* bans excessive payment surcharges.[14]

The Commission also notes that the AEMC requires that from 1 July 2020, the fees and charges imposed by retailers must be based on reasonable costs.[15]

The Commission considers that further investigation of the miscellaneous fees and charges is outside the scope of the terms of reference. The Commission's preliminary analysis of miscellaneous fees and charges suggests that many are already regulated or will become regulated from 1 July 2020.

2.4 Annual recalibrations

The terms of reference require the Commission to undertake three annual recalibrations for the regulatory period commencing 1 July 2020. These will set regulated retail electricity prices for 2021–22, 2022–23 and 2023–24.

The annual recalibration process involves updating certain parameters of the retail electricity pricing model to determine regulated retail prices. This process ensures that prices over the regulatory period will reflect changes in certain costs over the period. The recalibration process can also allow ActewAGL to recover allowable costs from a pass-through event (see section 2.5 below). The annual recalibration process is described in detail in Chapter 6.

[12] The miscellaneous fees and charges are available at: https://www.actewagl.com.au/-/media/files/pricing/act-electricity-schedule-of-charges-2018-19.pdf?rev=d105f4cbe6ea4da0a0e5ba9fb43131f0&hash=A5413EA6D46CE70D10C9EDC4F03F5C17.

[13] Miscellaneous fees and charges imposed by Evoenergy are available at: https://www.evoenergy.com.au/-/media/evoenergy/documents/electricity/evoenergy-electricity-schedule-of-charges-2019-20.pdf?la=en&hash=8F8E9DB3B26CB44EA1C371733D0E7A10EE1AA9C5.

[14] Details are available at: https://www.accc.gov.au/consumers/prices-surcharges-receipts/credit-debit-prepaid-card-surcharges.

[15] Details are available at: https://www.aemc.gov.au/rule-changes/regulating-conditional-discounting.

Draft report submissions

Submissions received by the Commission did not raise any issues with the annual recalibration process. ActewAGL supported the proposed process.

Commission's consideration and final decision

The Commission's final decision is to continue its current practice of annually adjusting the maximum allowed change in electricity prices for changes in wholesale energy purchase, network and retail costs. Chapter 6 of this report sets out the details of the annual recalibration process.

2.5 Cost pass-through arrangements

Pass-through arrangements typically apply to events that are unexpected, or whose extent was uncertain, and that are beyond the control of the regulated entity. The Commission currently allows for pass-through arrangements for a range of regulatory change and tax change events.[16] Pass-through reviews for these regulatory and tax change events are undertaken as part of the annual recalibration process. The details are provided in Chapter 6.

Draft report submissions

Submissions received by the Commission did not raise any issues with the cost pass-through arrangements. ActewAGL supported the arrangements.

Commission's consideration and final decision

The Commission's final decision is to maintain the current approach for cost pass-through arrangements as part of its annual recalibration process. The details are provided in Chapter 6.

2.6 Summary of final decision on the regulatory approach

The Commission's final decision on the form of regulation for the next regulatory period is summarised in Table 2..

[16] The details of the current pass-through provisions are contained in ICRC 2017.

Table 2.1 Commission's final decision on the form of regulation

Component	Final decision
Length of regulatory period	Four years (specified in the terms of reference).
Form of price control	The Commission will use a weighted average price change form of control with a 2.0 percentage point upper bound side constraint applied at the tariff level. This means that the change in the weighted average price across all regulated offers cannot be greater than the maximum allowed change determined by the Commission, and that the weighted average change for any individual tariff in ActewAGLs's suite of regulated tariffs cannot increase by more than 2.0 percentage points above the weighted average price change determined by the Commission.
Annual recalibrations	As specified in the terms of reference, the Commission will undertake an annual recalibration of the parameters of the retail electricity cost-index model to determine regulated retail prices for 2021–22, 2022–23 and 2023–24.
Cost pass-through arrangements	The Commission will maintain its current pass-through criteria.

3 Pricing model for the regulatory period 2020-24

The Commission's pricing model is used to calculate the maximum average percentage increase that ActewAGL can apply to its suite of regulated tariffs each year. It does so by estimating the individual cost components that would be incurred by an efficient retailer in a similar position as ActewAGL when providing electricity supply services to small customers on regulated tariffs.

The Commission reviewed the electricity pricing model as part of its 2018–19 methodology review. The review found that the Commission's model was methodologically sound and simple to implement. The review also identified some areas for improvement and the Commission decided to change how some cost categories are estimated.[17] The Commission has determined the inputs to the model based on stakeholders' feedback on these inputs and has used the updated methodology in this price investigation.

The Commission's pricing model contains three main cost categories:

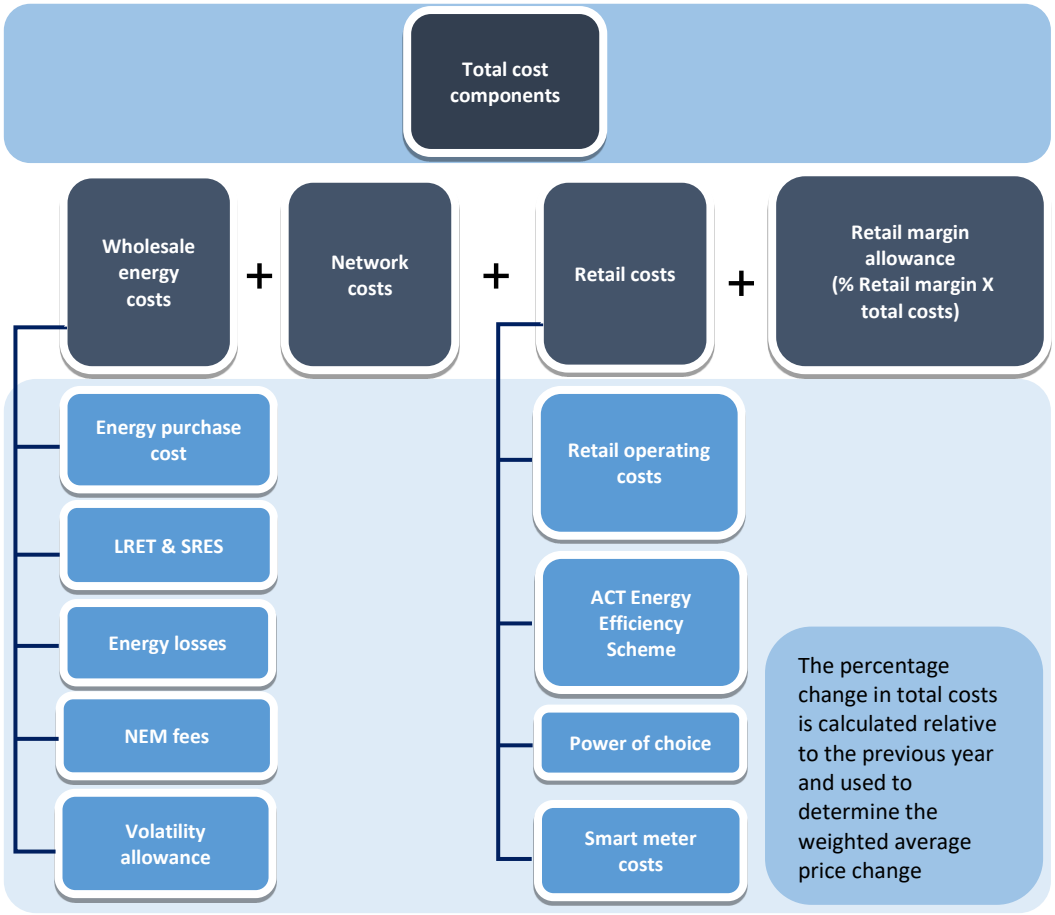
- wholesale electricity costs, which comprise energy purchase costs, Large-scale Renewable Energy Target (LRET) and Small-scale Renewable Energy Scheme (SRES) costs, energy losses, and National Electricity Market (NEM) fees;
- network costs, which include transmission and distribution costs and jurisdictional scheme costs (which include the feed-in-tariff schemes); and
- retail costs, which comprise retail operating costs, smart meter costs and Energy Efficiency Incentive Scheme (EEIS) compliance costs.

Once these three cost categories are estimated, they are added together and multiplied by a retail margin (to provide a profit allowance) to produce total costs to be recovered in dollars per megawatt hour ($/MWh). The total costs are then compared to the total costs calculated for the previous year. This produces a maximum allowable percentage increase that ActewAGL can apply to its regulated retail tariffs. The cost categories are shown in Figure 3.1.

The remainder of this chapter outlines the Commission's final decisions on the model inputs and approach to setting retail electricity prices for the next regulatory period.

[17] ICRC 2019a.

Figure 3.1 The Commission's pricing model



3.1 Energy purchase cost

Energy purchase costs are the costs incurred by retailers in purchasing electricity from the wholesale market to meet the demand of their customers. Purchases of energy through the wholesale energy market account for around 34 per cent of the total cost of providing retail electricity services to customers on regulated retail tariffs in the ACT.

Due to the high volatility inherent in the wholesale electricity market, retailers hedge their exposure to risk by purchasing electricity in the contract market or by taking positions in the futures market. Forward contracts specify fixed prices for the supply of electricity to the retailer. Hedging greatly reduces the risk of price volatility for the retailer, contributing to financial stability. The main risk is that wholesale market prices could spike to high levels. Hedging to reduce price volatility and avoid price spikes entails costs that need to be allowed for in setting retail electricity prices.

The Commission's energy purchase cost model assumes an efficient retailer would hedge its exposure to spot prices using a mix of financial derivatives, known as base

swap contracts, peak swap contracts and base cap contracts. The Commission's approach to estimating energy purchase cost involves four steps: determining the appropriate contract position; determining contract prices; developing a half-hourly profile of load and spot prices; and calculating settlement payments and difference payments.

Contract position

The contract position is the number of base swap, peak swap and base cap contracts an efficient electricity retailer is assumed to use to hedge against wholesale spot price risk.

In the draft report, the Commission proposed to determine the contract position for its pricing model using a heuristic linked to electricity demand. The heuristic is a rule of thumb that specifies the mix of derivatives an efficient retailer would use.

The Commission considered available heuristics as part of the methodology review and did not find one that was based on the ACT's load profile. As such, the Commission proposed to use a modelling approach to develop an ACT specific heuristic, consistent with the final decision in the methodology review. The Commission proposed to use five years of historic input data to inform the development of the heuristic.

To inform the draft decision, the Commission engaged Frontier Economics to provide advice on a suitable heuristic. The report by Frontier Economics is available on the Commission's website. Frontier Economics used a proprietary model known as STRIKE to determine an efficient heuristic across a wide range of potential load[18] and price outcomes. This approach is similar to the approach used by Frontier Economics when advising the ESC in Victoria on wholesale electricity costs as part of the development of the VDO.

Data for the analysis was based on load and price data over the past five calendar years (the latest data available at the time). Frontier Economics considered that the past five years of data capture the most relevant trends in the wholesale electricity market, including trends in installations of roof top solar panels. The load data was adjusted to account for the future trends in electricity demand resulting from solar photovoltaic (rooftop solar panels) take up. Frontier Economics used Monte Carlo simulations to generate load and prices based on this adjusted historic data.[19] These simulated data are used as input in the STRIKE model. Simulated data were used rather than actual data as actual data for any particular year may be subject to unique market conditions in that year and are unlikely to be repeated again.

The procedure used by Frontier Economics to determine the efficient heuristic has two key steps. First, the STRIKE model estimates an efficient set of contract positions, each with its own risk level and cost. The efficient positions are identified by STRIKE by

[18] Load is the amount of electricity demanded by consumers from the grid at any given time.

[19] Monte Carlo simulation is a statistical technique that repeatedly generates random samples of demand and spot prices based on historical data. A Monte Carlo simulation derives a 'representative year' of demand and associated spot prices while retaining the volatility seen in the adjusted historic data.

considering all possible contract positions and assessing, for each one, whether it can be modified to reduce cost for a given level of risk or reduce risk for a given cost. Second, Frontier Economics uses a Minimum Variance Portfolio approach to select a contract position. The Minimum Variance Portfolio approach involves:

1. identifying the contract positions that minimise risk (i.e. a subset of the efficient set of contracts identified by the STRIKE model); and
2. selecting the least cost of those contract positions that minimise risk (as identified in the previous step).

The approach reflects the Commission's final decision to adopt a conservative hedging strategy. This approach ensures that the Commission's final decision does not increase ActewAGL's exposure to financial failure.

The Commission's draft decision was to use the heuristic developed by Frontier Economics. The Commission considered that the heuristic results in an efficient and conservative contract position. The heuristic is described in the following dot points:

- The base contract volume is set to equal a percentile of the entire half hourly demand for a quarter (see column 2 of Table 3.1 for the percentile).
- The peak period contract volume is set to equal a percentile of the peak period half hourly demand, less the base contract volume for the corresponding quarter (see column 3 of Table 3.1 for the percentile).
- The base cap contract volume is set to equal the quarterly peak demand for the quarter less the base and peak contract volumes.

Table 3.1 Contract level percentiles

Quarter	Base swap contracts, percentile of total load	Peak swap contracts, percentile of peak load
September	70	65
December	65	80
March	80	85
June	70	65

Source: Frontier Economics.

The heuristic for base and peak contracts changes between quarters due to the differing shapes in load and price correlation. As an example, in the September quarter:

- The base contract volume is set to equal the 70th percentile of the entire half hourly demand for the September quarter.
- The peak period contract volume is set to equal the 65th percentile of the peak period half hourly demand, less the base contract volume for the September quarter.

- The base cap contract volume is set to equal the quarterly peak demand for the quarter less the base and peak contract volumes.

The demand data used in determining the contract position for any given year is the actual half hourly demand data over the past five calendar years as reported by AEMO. For example, to determine the contract position for 2020–21, the Commission used the above-mentioned heuristic on demand data from 1 January 2015 to 31 December 2019.

Draft report submissions

ActewAGL and the ACAT supported the Commission's proposed contract position approach and using the ACT specific heuristic to determine the contract position.

Commission's consideration and final decision

The Commission's final decision is to maintain its draft decision.

Contract prices

Contract prices refer to the forward prices of hedging instruments used by an efficient retailer. In the Commission's pricing model, these instruments are base swap, peak swap and base cap contracts.

As part of its 2019 methodology review, the Commission decided to use a 23-month averaging period and Australian Stock Exchange (ASX) market data to calculate the forward prices for each instrument. This averaging period reflects the fact that retailers typically hedge in advance of the year in which they supply electricity to customers. It also smooths out fluctuations in forward prices and hence provides consumers with price stability. This method is consistent with balancing economic efficiency and environmental and social considerations as required under the ICRC Act.

The Commission's draft decision was to use the 23-month averaging period from 1 June to 30 April to determine contract prices. This averaging period is one month earlier than the 23-month period used in previous price investigations. The Commission proposed to move the averaging period forward to assist in finalising the model outputs ahead of the Commission's final decision in June each year.

Draft report submissions

ActewAGL supported the Commission's proposed approach to determining contract prices.

Commission's consideration and final decision

The Commission's final decision is to maintain its draft decision. The Commission will use the 23-month average of forward prices from the ASX Energy from 1 June to 30 April as contract prices for each hedging instrument.

Half-hourly profile of load and spot prices

To determine the energy purchase cost, the Commission's pricing model requires a half-hourly profile of spot prices and load. Spot prices and load data are used to calculate the settlement and difference payments for each half hour for a hypothetical efficient retailer in a similar position as ActewAGL that uses a hedging strategy.

The Commission's draft decision was to use the half-hourly profile of load and spot price data of the past five calendar years as it is transparent and easy to implement. The five-year period will be updated annually as part of the annual price recalibration.

To ensure that spot prices are in line with future expectations, the Commission's model scales the half-hourly spot prices in each quarter to the average base swap forward price for that quarter less the forward price margin.[20] The Commission uses a forward price margin of five per cent, consistent with that used by the ESC in Victoria and the Commission's decision in its methodology review. The Commission's draft decision was to use the 23-month period from 1 June to 30 April as the averaging period for scaling purposes. This averaging period is consistent with the period used to average contract prices.

Draft report submissions

ActewAGL supported using the half-hourly profile of load and spot prices.

The ACAT asked if the Commission intends to move to a shorter interval when AEMO implements the proposed reduction from 30-minute intervals in the NEM.

Commission's consideration and final decision

The Commission maintains its draft decision.

In regard to ACAT's query about the introduction of five-minute settlement periods, the Commission considers that the existing energy purchase cost model is capable of handling this settlement data. The Commission intends to use this data from AEMO when this arrangement comes into effect. The Commission notes that the five-minute settlement arrangement was planned to commence on 1 July 2021, however, in April 2020, AEMO submitted a rule change request to AEMC proposing to delay the five-minute settlement commencement date by one year.[21] The Commission considers that the commencement of five-minute settlement will be relevant for the 2022–23 and 2023–24 price resets if it is implemented in 2021; or the 2023–24 price reset if it is implemented in 2022.

[20] The forward price margin captures the observation that forward prices generally exceed average spot prices.

[21] AEMO 2020, p. 10.

3.2 Volatility allowance

A typical hedging strategy adopted by the hypothetical efficient retailer leaves some residual level of exposure to volatile spot prices because buying contracts to cover all possible spot price and demand scenarios can be very expensive. The residual risk can be accounted for by holding some working capital (i.e. cash) to fund spot market purchases in the event that electricity demand is larger than accounted for by the hedging strategy. The cost of holding this working capital is known as a volatility allowance.

The Commission's draft decision was to use the volatility allowance determined by the ESC in its final decision on the VDO to apply from 1 January 2020 as an input for calculating the volatility allowance for this price investigation. The Commission proposed to adopt a two-step approach to calculating the volatility allowance:

- Step 1: take the simple average of the ESC's volatility allowance across the five Victorian distribution zones, separately for residential and business customers.
- Step 2: take the weighted average volatility allowance between residential and business customers (weighted by ActewAGL's residential versus business electricity demand).

This results in a volatility allowance of $0.30/MWh. Both the ESC and the Commission adopt a conservative hedging strategy which reduces the need for a large volatility allowance.

In the draft report the Commission considered that the volatility allowance is a small part of the total cost stack (around 0.1 per cent in the 2020–21 cost stack) and does not warrant annual updating.

Draft report submissions

ActewAGL and the ACAT supported the Commission's volatility allowance approach.

Commission's consideration and final decision

The Commission maintains its draft decision and will set the volatility allowance at $0.30/MWh for the regulatory period.

3.3 National green scheme costs

National green scheme costs are the costs incurred by retailers in relation to the Large-scale Renewable Energy Target (LRET) and the Small-scale Renewable Energy Scheme (SRES), two federal government green schemes that create incentives for investment in renewable energy sources. The LRET applies to the establishment and growth of centralised renewable-energy power stations, such as wind, solar or hydro. The SRES applies to dispersed installations, such as solar panel systems and solar water heaters. Under these schemes, retailers have a legal obligation to purchase Small-scale

Technology Certificates (STCs) and Large-scale Generation Certificates (LGCs) and surrender them to the Australian Government's Clean Energy Regulator in percentages set by regulation each year (the renewable power percentage or RPP).[22] The cost of meeting these obligations accounts for 7.6 per cent of the total cost of providing retail electricity services to customers on regulated retail tariffs in the ACT.

The Commission applies a market-based approach for determining efficient LRET and SRES costs. The model determines LGC and STC prices based on publicly available spot price data averaged over an 11-month period. The Commission sources LGC and STC forward price data from ICAP, a financial brokerage firm and data provider.

The Commission recognises that there are legitimate costs associated with holding these certificates prior to their surrender. This is because retailers typically buy certificates in advance to manage price volatility and to avoid being unable to purchase enough certificates to meet their obligations. The Commission decided in its methodology review to include a green scheme certificate holding cost allowance in the pricing model.

The Commission decided to provide an allowance for green scheme certificate holding costs that reflects the cost of debt for a half year period. This is because, in the Commission's view, a prudent retailer would, on average, buy these certificates evenly throughout the year.

In the draft report, the Commission considered that it would be appropriate to use a cost of debt for businesses with a credit rating of Baa2. This was the credit rating held by AGL and Origin Energy in 2019.[23] The Commission calculated the cost of debt as the 7-month average of non-financial corporate BBB rated (equivalent to Baa2 rating) 3-year bond yields to 31 December 2019. The Commission stated that it would update this for the final report using an 11-month average to 30 April 2020.

LRET and SRES obligations accrue in calendar year terms while the Commission's pricing model is configured in financial year terms. Therefore, LRET and SRES costs for a financial year are derived by apportioning calendar year costs based on the half-yearly load weights provided by ActewAGL.

The Commission uses the actual RPP for the first calendar year in question and the estimated RPP for the second year. Both figures are published by the Clean Energy Regulator. The Commission's approach provides for a cost adjustment each financial year. This is to account for the difference between the estimated RPP at the time of the price determination and the actual RPP that is subsequently published by the Clean Energy Regulator.

[22] More information on the LRET and the SRES schemes can be found on the Clean Energy Regulator's website: www.cleanenergyregulator.gov.au/Renewable-Energy-Target/Pages/default.aspx.

[23] Detail at:
https://www.agl.com.au/-/media/aglmedia/documents/about-agl/investors/annual-reports/agl_annual_report_090819.pdf?la=en&hash=2890C67A39531E9197467BBC1F87B463 and
https://www.originenergy.com.au/about/investors-media/media centre/moodys_credit_rating_upgrade_for_origin.html

The equations describing the Commission's proposed approach to calculating the costs associated with LRET and SRES are presented in Box 3.1 and Box 3.2, respectively.

Box 3.1 Equation to calculate the LRET costs

The LRET cost (including a holding allowance) for financial year 2020–21 is calculated using the below formula.

$$\begin{aligned}\text{LRET cost}_{2020-21} &= \text{LW}_{2020} \times \text{RPP}_{2020} \times [\text{LGCspot}_{2020} \times (1 + \text{HC})] \\ &+ \text{LW}_{2021} \times \text{RPP}_{2021} \times [\text{LGCspot}_{2021} \times (1 + \text{HC})] + \text{CA}_{2019-20}\end{aligned}$$

where the following are defined for each year:

- LW is the half-yearly load weight for the calendar year
- RPP is the renewable power percentage for the calendar year
- LGCspot is the average LGC spot price for the calendar year (dollars per LGC), calculated as the 11-month average ending 31 May in the prior year
- HC is the holding cost percentage based on half of the cost of debt parameter
- CA is the LRET cost adjustment from the previous financial year.

Box 3.2 Equation to calculate the SRES costs

The SRES cost (including a holding allowance) for financial year 2020–21 is calculated using the below formula.

$$\begin{aligned}\text{SRES cost}_{2020-21} &= \text{LW}_{2020} \times STP_{2020} \times [\text{STCspot}_{2020} \times (1 + \text{HC})] \\ &+ \text{LW}_{2021} \times STP_{2021} \times [\text{STCspot}_{2021} \times (1 + \text{HC})] + \text{CA}_{2019-20}\end{aligned}$$

where the following are defined for each year:

- LW is the half-yearly load weight for the calendar year
- STP is the small-scale technology percentage for the calendar year
- STCspot is the average STC spot price for the calendar year (dollars per STC), calculated as the 11-month average ending 31 May in the prior year
- HC is the holding cost percentage based on half of the cost of debt parameter
- CA is the SRES cost adjustment from the previous financial year.

Draft report submissions

ActewAGL did not support the Commission's methodology to calculate national green scheme holding costs. In ActewAGL's view, the holding cost of certificates used to calculate national green scheme costs should be based on the efficient retailer's weighted average cost of capital (WACC) rather than the cost of debt. ActewAGL suggested that the Commission use the WACC parameters from its water and sewerage decision, except for the equity beta.

Commission's consideration and final decision

The Commission's final decision is to maintain its draft decision and its current market-based approach for calculating the LRET and SRES cost components.

The Commission's final decision on the holding cost is to maintain its draft decision and provide an allowance based on the cost of debt. This decision is consistent with the Commission's decision in its 2019 methodology review.

The Commission maintains its draft decision to calculate the cost of debt as the average of non-financial corporate BBB rated 3-year bond yields, based on data from the Reserve Bank of Australia. The Commission has revised its draft decision on the averaging period because the Reserve Bank of Australia has temporarily stopped publishing this data because of the COVID-19 pandemic. As such, it is no longer possible to use the 11-month average to 30 April 2020 proposed in the draft report. The Commission has therefore made a final decision to use the 11-month averaging period ending in March 2020 (the latest data available). Accordingly, the Commission's final decision is to use cost of debt of 2.0 per cent for 2020–21.

The Commission considers that it is appropriate to leave the holding cost unchanged during the regulatory period given that it accounts for a small portion of the total cost.

3.4 Energy losses

Some electricity is lost in transport from generators to customers via transmission and distribution networks.[24] Retailers purchase additional electricity to allow for these losses. The loss factors are calculated by AEMO and are used by all regulators to determine the energy loss allowances where regulated tariffs apply. AEMO reports marginal and distribution loss factors for the forthcoming financial year. Marginal loss factors reflect the amount of electricity lost along the transmission network. Distribution loss factors reflect the electricity lost along the distribution network. The Commission calculates an adjustment factor combining the marginal and distribution loss factors applicable to the ACT.

[24] Transmission networks allow the bulk transport of electricity at high voltages from generators to major demand centres. Distribution networks in turn transport electricity at lower voltages to end-use customers.

The Commission determines the energy losses component by applying AEMO's transmission and distribution loss factors to the energy purchase cost component, LRET and SRES costs and the NEM fees using the formula in Box 3.3. The Commission has been applying this approach since 2014.

Box 3.3 Energy loss equation

The current energy loss component of the wholesale energy cost category is calculated as follows in dollars per MWh:

$$\text{Energy loss } = \text{EPC}^t \times (\text{MLF}^t \times \text{DLF}^t - 1)$$

$$+(\text{LRET and SRES}^t + \text{NEM fees}^t) \times (\text{DLF}^t - 1)$$

where the following are defined for each year t:

- EPC is the energy purchase cost (dollars per MWh)
- LRET and SRES is the total calculated costs to meet LRET and SRES requirements (dollars per MWh)
- NEM fees is the National Electricity Market fees (dollars per MWh)
- DLF is the distribution loss factor applicable to the ACT
- MLF is the marginal loss factor applicable to the ACT.

Draft report submissions

ActewAGL and the ACAT supported the Commission's approach to calculating the cost of energy losses.

Commission's consideration and final decision

The Commission's final decision is to maintain its current approach to calculating the cost of energy losses using the formula in Box 3.3. The cost allowance is updated annually during the regulatory period.

The Commission notes that the Australian Energy Market Commission (AEMC) has proposed to introduce dynamic energy loss factors from July 2022.[25] If introduced, the AEMC would publish loss factors for every five minutes. Currently, the loss factors are static and are reported once a year at the beginning of the year for which they apply.

If dynamic loss factors are introduced during the regulatory period, the Commission intends to use the latest reported annual loss factors by AEMO and allow for a true-up to occur at the end of the financial year when actual loss factors are known.

[25] AEMC 2019a, p. vii.

The Commission also notes that on 5 February 2019 the AEMC received a rule change request from Adani Renewables to revise the existing methodology to calculate loss factors. The AEMC made its final determination on 27 February 2020 to reject the proposed change by Adani Renewables.[26]

3.5 NEM fees

The NEM is managed by AEMO, which recovers its costs from market participants. AEMO's costs relate to running market institutions and procuring ancillary services to fulfil its obligations under the National Electricity Rules, which are recovered through NEM fees and ancillary services fees, respectively.

The cost components of total NEM fees include general participant fees, Full Retail Competition (FRC) fees, National Transmission Planner fees (NTP), Energy Consumer Australia fees (ECA), and ancillary services fees.

The Commission recognises that NEM fees are reasonable costs faced by an efficient retailer and should be appropriately passed through in retail electricity prices.

As set out in the draft report, and consistent with the Commission's decision in its 2019 methodology review, the Commission will calculate ancillary fees for the first year of the regulatory period using AEMO's ancillary service payments data averaged over a 52-week period ending 30 April 2020. The Commission will determine NEM fees for the first year of the regulatory period using cost estimates reported by AEMO in the Final Budget and Fees 2019–20 publication.[27] For subsequent years of the regulatory period, these costs will be indexed to the Consumer Price Index (CPI).

In the draft report, the Commission noted that AEMO does not develop 2020–21 cost estimates for ECA fees. The Commission therefore made a draft decision to apply CPI indexation to the 2019–20 ECA fee reported by AEMO.[28]

Draft report submissions

ActewAGL and the ACAT supported the Commission's proposed approach.

Commission's consideration and final decision

The Commission's final decision is to maintain its draft decision.

[26] AEMC 2020a, p. iii.

[27] AEMO 2019. The Commission notes that AEMO cost estimates for FRC and ECA fees are reported in dollars per connection point per week. The Commission intends to convert these to $/MWh terms using the average number of connection points and energy usage for standing offer customers in the 12 months to 31 March 2020. The other cost components (NEM management fees and NTP fees) are reported by AEMO in $/MWh terms. The estimated fees for 2020–21 are available from AEMO 2019.

[28] This fee is available from AEMO 2019.

3.6 Network costs

Network costs are the sum of transmission, distribution and jurisdictional charges as well as costs related to basic meters.[29] Network prices are determined by the AER and released each year in May. The Commission allows ActewAGL to pass on the network costs associated with regulated tariffs to standing offer customers.

Network costs include the costs related to ACT Government schemes. These costs comprise of Feed-in-Tariff scheme costs (small, medium and large scale), the energy industry levy and the utilities network facilities tax.

Draft report submissions

ActewAGL and the ACAT supported the Commission's approach to using network costs as determined by the AER.

Commission's consideration and final decision

As network costs are unavoidable for all retail businesses, the Commission's final decision is to maintain its current approach and pass through the network costs determined by the AER.

3.7 Retail operating costs

Retail operating costs are the costs incurred by an efficient retailer in a similar position to ActewAGL in providing retail services to its customers.

In the draft decision, the Commission considered Frontier Economics' advice to the ESC on retail operating costs, the ESC's final decision for the VDO to apply from 1 January 2020, and the ACCC's November 2019 report on the Inquiry into the National Electricity Market.

ACCC Inquiry into the National Electricity Market

The ACCC's November 2019 report for the Inquiry into the National Electricity Market presents average cost to serve and CARC for each jurisdiction for 2018-19. The ACCC found that retailers generally categorised retail operating costs as either cost to serve or CARC as shown in Table 3.2.

[29] Under the Power of Choice arrangements, smart meter costs are a responsibility of retailers and are categorised as retail costs.

Table 3.2 Retail operating cost categories identified by the ACCC

Cost to serve	CARC
Hardship	Advertising and marketing
Debt collection	Customer loyalty programs
Billing	Onboarding
Customer service and IT	Customer research
Related labour	Churn prevention
Other	Third party sales
	Related labour
	Other

Source: ACCC 2019a, p. 107 and p. 110.

The report shows that the cost to serve ranged from $74 per customer per year in NSW and South Australia to $85 per customer per year in Victoria. It averaged $81 across the NEM. In part reflecting economies of scale, the NEM average was lower for tier 1 retailers ($69 per customer per year) than for other retailers ($114 per customer per year).[30] However, the ACCC noted that economies of scale alone may not be the main driver of this cost difference. It stated that:

> There is significant variation within the costs of the three tier 1 retailers and within the 'other retailers' category. For example, some smaller retailers have much lower CTS [cost to serve] per customer than some tier 1 retailers. Accordingly, in determining what measures would be effective to reduce CTS, it is important to consider the drivers of CTS.[31]

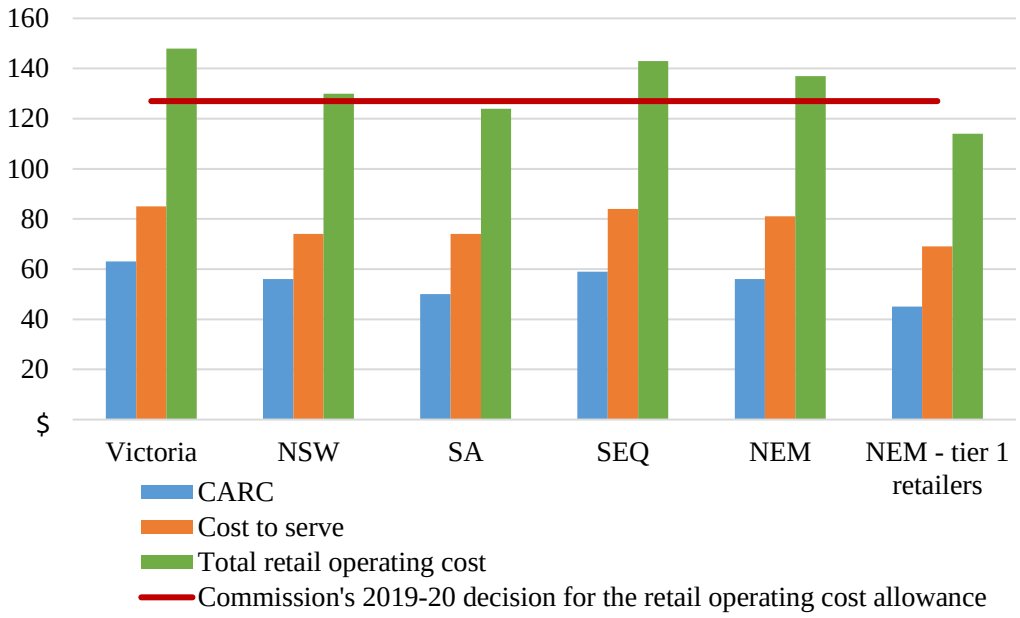
The ACCC reported that CARC ranged from $50 per customer per year in South Australia and $63 per customer per year in Victoria. It averaged $56 per customer per year across the NEM. As with cost to serve, with NEM average was lower for tier 1 retailers ($45 per customer per year) than for others ($87 per customer per year).[32]

[30] ACCC 2019a, p 73.

[31] Ibid.

[32] Ibid, p 77.

Figure 3.2 ACCC benchmarks for 2018–19 and the Commission's 2019–20 decision (dollars per customer per year)



Source: ACCC 2019a, p 72-73.

The total retail operating costs (that is, the cost to serve and CARC combined) ranged from lows of $124 per customer per year in South Australia and $130 per customer per year in NSW to a high of $148 per customer per year in Victoria. It averaged $137 per customer per year across the NEM.

The retail operating cost allowance used by the Commission in 2019–20 was $126 per customer per year. This amount is within the range of retail operating costs (that is, cost to serve and CARC combined) identified by the ACCC. It is well above the highest cost to serve identified by the ACCC of $85 per customer per year in Victoria. This is because the Commission's retail operating cost allowance includes the cost to serve as well as the reasonable costs of customer acquisition and retention. Specifically, the Commission's retail operating cost allowance consists of the following components:

- Customer care and all call centre operations;
- Billing and charging;
- Sales and marketing, being primarily the costs of communicating the transitional regulated tariff arrangements;
- Collection and default;
- Administration (business overheads such as finance, human resource management, energy contracting and regulatory administration); and
- Retail competition activities, such as churn management and advertising for new customers.

Frontier Economics advice to the ESC

Frontier Economics used a benchmarking approach to advise the ESC on the retail operating costs for the VDO. The benchmarking approach was based on:

- regulatory allowances for retail operating costs made by the Essential Services Commission of South Australia (ESCOSA), ICRC, Independent Pricing and Regulatory Tribunal (IPART), Office of the Tasmanian Economic Regulator (OTTER), the QCA and Office of Energy in Western Australia, and
- relevant public information on retail operating costs, including data in the annual reports of retailers and the ACCC's findings (discussed above).

Frontier found that recent regulatory decisions since 2013 (which include decisions from IPART, ICRC, QCA and OTTER) had an allowance for retail operating costs of between $122 per customer per year and $129 per customer per year.[33] It noted that since 2013 only the QCA had included a separate allowance for CARC[34] and this was $48 per customer per year in its decision for the regulatory period commencing in 2015.

Frontier noted that most of the recent regulatory determinations for retail operating costs have been based on IPART's determination of $110 per customer per year in 2013 and adjusted for inflation in each subsequent year.[35]

In terms of annual report data, Frontier found that the most recent retail operating cost data for 2017–18 varied substantially between AGL and Origin Energy, as shown in Table 3.3. The differences reflect inconsistencies in how these costs are reported. As a result, Frontier had reservations about drawing strong conclusions from this data. Frontier stated that the inconsistencies likely reflect:

- the way that costs are allocated between retail operating costs and CARC;
- the group of customers for which retail operating costs is reported; and
- differences in the categories of costs that are classed as cost to serve or cost to maintain.

Table 3.3 Retail operating cost per customer as reported in annual reports

Task	Cost to serve	CARC	Total
AGL	$84	$62	$146
Origin	$126	$47	$173

Source: Frontier Economics, 2018

Based on its benchmarking assessment, Frontier recommended a range of $90 to $114 per customer per year for the retail operating cost allowance. It recommended a range of

[33] Frontier Economics 2019, p 7.

[34] The Victorian ESC now includes a separate CARC allowance in the VDO.

[35] Frontier Economics 2019, p 14.

$38 to $62 per customer per year for the CARC allowance. This is equivalent to a total retail operating cost range of between $128 and $176 per customer per year.

As noted above, the Commission's retail operating cost allowance for 2019–20 was $126 per customer per year. This puts it substantially above the recommended range of Frontier (excluding CARC) and $2 per customer per year below the range recommended by Frontier that includes CARC. As described above, the Commission includes only the reasonable costs of CARC in its allowance.

The Victorian ESC, in determining the VDO to apply from 1 January 2020, used a retail operating cost of $136.21 per customer per year. This was based on the ICRC's 2017 regulatory decision (adjusted for inflation) and includes a $10 per year adjustment for additional regulatory costs that are specific to Victoria. The ESC also included a CARC allowance of $38.20 per customer per year.[36]

Draft decision

The Commission's draft decision was to maintain the current approach of adjusting the retail operating cost allowance each year by the change in the consumer price index. This will increase the retail cost allowance in 2020–21 to $127.83 per customer per year.

This allowance is consistent with those recently identified by the ACCC and Frontier Economics. For example, the allowance is:

- well above the cost to serve range identified by the ACCC's December 2019 report on the Inquiry into the National Electricity Market;
- well above the Frontier Economics' recommended range for cost to serve;
- at the lower end of retail operating cost range that includes CARC identified by the ACCC's December 2019 report; and
- consistent with Frontier Economics' recommended range for retail operating costs that includes CARC.

As described above, the Commission includes only the reasonable costs of CARC in its retail operating cost allowance. These reasonable costs may be lower in the ACT compared to other jurisdictions, such as Victoria, because of lower switching rates in the ACT. The ACCC's August 2019 report on the Inquiry into the National Electricity Market states that the level of CARC is closely correlated to the level of switching in the market. Specifically, it stated that the level of CARC is lower in jurisdictions with low switching rates compared to those with high switching rates.

In the draft report the Commission maintained that a separate allowance for CARC in the ACT is not warranted, as stated in its final decision on the methodology review. The Commission considered that the current retail operating cost allowance recovers

[36] Details at: https://www.esc.vic.gov.au/sites/default/files/documents/Victorian%20Default%20Offer%20to%20apply%20from%201%20January%202020%20-%20For%20web%20publishing.pdf

reasonable costs relating to retail competition activities that recognise the circumstances in the ACT. This sentiment is shared by the ACCC, which stated that:

> In NEM regions where there is little competition (that is, in Tasmania, regional Queensland and the ACT, and most consumers are on the standing offer) it is appropriate for the regulated price to include little or no CARC. In contrast, in NEM regions where the majority of consumers are on competitive market offers, the default offer price should be set at a higher level.[37]

Draft report submissions

ActewAGL did not support the Commission's approach to determining the retail operating cost allowance nor the exclusion of a customer acquisition and retention costs allowance. ActewAGL mentioned that retail operating cost and CARC should reflect the increased competition in the ACT electricity market. ActewAGL asked the Commission to quantify the proportion of CARC in the retail operating cost allowance. ActewAGL considers the retail operating cost allowance is below that in other jurisdictions.

ActewAGL further stated that retail operating cost should include fixed and variable components. ActewAGL stated that the retail operating cost is not linearly related to the number of customers. When customers switch to market offers or to another retailer, ActewAGL will still incur the fixed costs. This is not captured in the Commission's model. ActewAGL proposed to split the retail operating cost into fixed and variable components and index them to the CPI every year.

The ACAT noted that the Commission's proposed benchmarking approach includes a CARC amount. The ACAT opposed the inclusion of a separate CARC allowance.

Commission's final decision

The Commission's final decision is to maintain its current approach of adjusting the retail operating cost allowance each year by the change in the consumer price index.

As discussed in the draft decision, the resulting retail operating cost allowance is consistent with those identified by the ACCC and Frontier Economics and includes only the reasonable costs of CARC. The Commission considers that the current retail operating cost allowance recovers reasonable costs relating to retail competition in the ACT.

The Commission does not separately estimate retail operating costs and a CARC. Instead, when estimating retail operating costs as a whole, the Commission has used a benchmarking approach that considers both cost to serve and reasonable customer acquisition and retention costs.

The Commission considered ActewAGL's request to include a fixed and variable component in the retail operating cost allowance. The Commission notes that most cost

[37] AER 2019b, p 15.

components, such as energy purchase costs and network costs, are variable with respect to electricity usage. The Commission also considers that ActewAGL is able to recover fixed costs from market tariffs if customers move to a market offer. Further, the retail operating cost component is a relatively small component of the cost stack (around six per cent). Therefore, the Commission considers that allowing for a fixed component in this cost category is unlikely to make a material difference to the Commission's estimation of efficient costs.

3.8 Energy Efficiency Improvement Scheme (EEIS)

The ACT Government's EEIS places a mandatory obligation on all active retailers in the ACT to promote energy efficiency measures in households and small businesses. The scheme was introduced by the ACT Government in 2013 and has been extended until 2030.[38] The details of the scheme from 2021 are not currently available; once details are available the Commission will take these into account when determining the EEIS allowance as part of the price resets to occur during the regulatory period. The scheme information described below is in relation to the scheme up to the end of 2020.

Currently, the Scheme applies to both tier 1 and tier 2 retailers operating in the ACT.[39] ActewAGL is the only current tier 1 retailer in the ACT.

The EEIS sets Territory-wide energy savings targets (Box 3.4) and establishes energy saving obligations for individual electricity suppliers (Box 3.5).

Box 3.4 Territory-wide energy saving targets

The energy savings target is the overall reduction in greenhouse gas emissions to be achieved by retailers. Retailers apply this target to their electricity sales to determine their obligations under the scheme. It is expressed as a percentage of their total sales in the ACT. The target is currently set as 8.6 per cent of total electricity sales each calendar year from 2016 until 2021.

Source: Energy Efficiency (Cost of living) Improvement (Energy Savings Target) Determination 2015 (No 1) (DI2015-268)[40]

[38] Detail at: https://www.environment.act.gov.au/energy/smarter-use-of-energy/energy-efficiency-improvement-scheme/news-and-events

[39] Tier 1 retailers are the electricity retailers with more than 500,000 MWh of electricity sales in the ACT per year and at least 5,000 ACT customers. Tier 2 retailers are those with less than 500,000 MWh of sales in the ACT per year and/or less than 5,000 ACT customers.

[40] Details at: https://www.environment.act.gov.au/energy/smarter-use-of-energy/energy-efficiency-improvement-scheme.

Box 3.5 Energy savings obligation

A retailer's energy savings obligation until 2020 is calculated as:

$$SESO_t = EST_t \times Sales_t \times EF_t$$

where

- $SESO_t$ is the supplier energy savings obligation for calendar year t (t CO_2-e);
- EST_t is the energy savings target for calendar year t (percentage);
- $Sales_t$ is the electricity sales by the retailer for calendar year t (MWh); and
- EF_t is the emissions factor, which is the tonnes of CO_2 equivalent greenhouse gas emissions attributed to the consumption in the ACT of 1 MWh of electricity (t CO_2-e).

Source: Energy Efficiency (Cost of living) Improvement (Energy Savings Target) Determination 2015 (No 1) (DI2015-268)

In order to meet these obligations, retailers are required to implement eligible activities such as:

- replace low-efficiency lamps with high-efficiency lamps;
- dispose old refrigerator or freezer; and
- install ceiling insulation.

Tier 1 retailers can meet their energy savings obligations by undertaking eligible activities or by acquiring approved abatement factors (the number of tonnes of carbon dioxide equivalent emissions that an eligible activity is taken to save) from other retailers who undertake eligible activities.

Tier 2 retailers can meet their energy savings obligations by undertaking eligible activities, acquiring approved abatement factors from other retailers who undertake eligible activities, or by paying an Energy Savings Contribution. The Energy Savings Contribution is determined by the Territory Government based on the estimated cost of compliance for a tier 1 retailer and is currently set at $116 per t CO_2-e.[41] The estimated cost of compliance after 2020 is not yet available. The Commission proposes to use new data as relevant in its annual price recalibrations during the regulatory period.

Retailers can incur financial penalties if they do not meet their savings targets. A retailer not meeting its energy saving obligation currently faces a penalty of $300 per tonne of carbon dioxide equivalent gas emitted per megawatt hour (t CO_2-e per MWh). The penalty rate for 2020 onwards is not yet available. The Commission proposes to use new data when they become available.

[41] Details at: https://www.environment.act.gov.au/energy/smarter-use-of-energy/energy-efficiency-improvement-scheme/legislation.

The Commission determines the EEIS allowance using the Commission's methodology and using cost estimates provided by ActewAGL, subject to a prudency and efficiency assessment. As the EEIS cost allowance is determined before the actual cost is known, a provision is made for an ex-post adjustment.

The Commission currently estimates EEIS costs using the methodology set out in Box 3.6. The methodology determines the cost per MWh for a particular financial year using the EEIS costs for calendar years.

Box 3.6 ACT Energy Efficiency Improvement Scheme cost estimation formula

The Commission estimates the EEIS cost for a financial year (for example for 2020–21) using the following equation:

$$\text{EEIS cost}_{2020-21} = (\text{CM}_{2020} \times \text{LW}_{2020}) + (\text{CM}_{2021} \times \text{LW}_{2021}) + \text{CA}_{2019-20}$$

where the following are defined for each year:

- CM is the cost per MWh for each calendar year (dollars per MWh);
- LW is the half-yearly load weight for each calendar year provide by ActewAGL (percentage); and
- CA is the cost adjustment from the previous financial year (dollars per MWh).

The determination of the cost per MWh for each calendar year is calculated as:

- $\text{CM}_{2020} = \text{CT}_{2020} \times \text{EF}_{2020} \times \text{EST}_{2020}$
- $\text{CM}_{2021} = \text{CT}_{2021} \times \text{EF}_{2021} \times \text{EST}_{2021}$

where the following are defined for each year:

- CT is the abatement cost per tonne for the calendar year based on ActewAGL's costs (dollars per tonne);
- EF is the emissions factor for each calendar year determined under the Energy Efficiency Act (percentage); and
- EST is the energy savings target for the calendar year determined under the Energy Efficiency Act (percentage).

Prudency and efficiency assessment

The Commission currently assesses the prudency and efficiency of ActewAGL's EEIS costs as follows.

ActewAGL's forecast expenditure on the scheme is deemed prudent if ActewAGL can demonstrate that it is reasonably necessary to meet its legislative requirements under the *Energy Efficiency Improvement Act 2012*.

The Commission undertakes a two-part efficiency assessment. First, the Commission assesses the robustness of the processes and practices that ActewAGL undertook when delivering EEIS related activities. This includes an assessment of tender processes. Second, the Commission assesses whether expenditure exceeds a cost ceiling, above which it would be deemed inefficient. The cost ceiling is described below.

Cost ceiling

Should a tier 1 retailer not meet its energy savings obligation, it is required to pay a penalty of $300 per tonne of CO_2 emissions. This amount reflects the opportunity cost of ActewAGL not meeting its obligations and may be considered as the ceiling for efficient costs of implementing energy efficiency activities under the scheme.

In assessing the efficiency of ActewAGL's expenditure on the EEIS, the Commission uses this penalty rate as a ceiling above which costs will be deemed inefficient. That is, it is not efficient for ActewAGL to spend more on complying with the scheme than the costs associated with non-compliance.

Draft report submissions

ActewAGL agreed with the Commission's draft decision on the approach to estimating EEIS compliance costs for the next regulatory period.

The ACAT supported the EEIS program and stated that the program has delivered considerable energy efficiency benefits to ACT consumers, including vulnerable consumers. The ACAT stated that it relies on the Commission in relation to the methodology for determining the cost of the EEIS and to ensure that ActewAGL's fees for the EEIS are prudent and efficient.

Harvest Hot Water submitted that ActewAGL's tender processes failed to establish a competitive third-party abatement market for the installation of EEIS-supported heat pump hot water heaters (HPWH). In Harvest Hot Water's view, the tender process was flawed for a number of reasons, including ActewAGL setting a market-restricting shopfront requirement sharply limiting the potential field of HPWH abatement providers and arbitrarily applying or choosing not to apply a '5 years' minimum experience' requirement. Harvest Hot Water also stated that ActewAGL failed to observe its own HPWH product eligibility criteria in its tender decisions and in one tender failed to set a requirement in relation to price and value for money.

Commission's consideration and final decision

The Commission's final decision is to maintain the draft decision on the approach to estimating EEIS compliance costs for the next regulatory period. In summary, this involves the Commission:

- determining the EEIS allowance using cost estimates provided by ActewAGL, subject to a prudence and efficiency assessment (described above); and
- making an ex-post adjustment in each year of the regulatory period to reflect the difference between forecast and actual EEIS costs.

The Commission considered Harvest Hot Water's concerns about the tender processes that ActewAGL undertook in 2019 to engage third-party abatement providers to replace old hot water systems with HPWHs as part of the EEIS. The Commission reviewed information provided by ActewAGL (in confidence) in relation to the tender processes.

The Commission considers that ActewAGL's costs of delivering the HPWH EEIS activity satisfy the prudency and efficiency requirements. The Commission found that ActewAGL followed a competitive tender process to find providers to replace old hot water systems with HPWHs. The Commission found that some of the tender requirements were strict but did not find evidence of uncompetitive behaviour. The Commission found that ActewAGL applies similar strict requirements when undertaking procurement for other EEIS activities and has engaged several businesses to deliver EEIS activities in recent years.

The EEIS activities are carried out in accordance with codes of practice approved by the ACT Government's EEIS Administrator. Concerns about the design and operation of the EEIS scheme can be raised with the EEIS Administrator.

3.9 Power of Choice pass-through costs

The Power of Choice reforms are a set of regulatory changes introduced by the AEMC in December 2017 to enhance competition in the energy sector and help consumers to better manage their electricity usage. The reforms mean that retailers are now responsible for managing metering for small customers, instead of the network operator. The reforms also require that all new electricity meters for residential and small business customers be smart meters.[42]

As part of the 2018–19 price reset, the Commission received a confidential submission from ActewAGL for a pass-through event for the costs arising from implementing the Power of Choice regulatory changes (such as costs associated with administration and IT system upgrades). The Commission considered that these costs for regulated customers should be included in the cost stack as they relate to a change that affects all

[42] Details at:
https://www.accesscanberra.act.gov.au/app/answers/detail/a_id/4426#!tabs-1

standing offer customers. As such, the Commission determined an amount of $5.02 million as total pass-through costs, which should be recovered over five years.

For 2018–19 and 2019–20, the Commission approved the Power of Choice costs in the price resets for those two years. In each year from 2020–21 to 2022–23, ActewAGL will be required to make an application for the Commission's consideration for the remaining pass-through amounts.

3.10 Smart meter costs

A smart meter (also known as an advanced meter or 'type 4' meter) measures electricity usage in 30-minute intervals and sends this information electronically to an electricity retailer. Smart meters differ from basic meters (also known as accumulation meters) because they do not require a manual meter read and they provide real time information about electricity usage.

As described above, the Power of Choice reforms introduced in December 2017 by the AER require all new electricity meters for residential and small business customers to be smart meters.

The Commission does not currently include the costs of smart meters in its electricity pricing model, except for the costs of implementing the Power of Choice reform (discussed above). This means that the regulated standing offer tariffs are based on basic meter costs only and exclude the cost of providing smart meters to individual customers. Consequently, ActewAGL recovers the costs of smart meters for standing offer customers by applying a higher supply charge to customers who have a smart meter. In other words, ActewAGL does not spread (or 'smear') smart meter costs (for standing offer customers) across the regulated customer base because this cost is not in the Commission's cost stack. For this reason, ActewAGL applies two sets of supply charges; one set for smart meter customers and another for basic meter customers.

ActewAGL is the only retailer in the ACT that does not smear smart meter costs across its customer base. As described above, ActewAGL recovers its smart meter costs only from customers who have smart meters. In contrast, Origin Energy and Energy Australia smear smart meter costs across all customers.

Draft decision

The Commission's draft decision was not to include smart meter costs in the cost stack. The Commission considered the advantages and disadvantages of smearing smart meter costs and was of the view that the disadvantages outweighed the advantages at this time.

The Commission considered that the inclusion of smart meter costs in the cost stack could improve the transparency and comparability of electricity offers in the ACT. First, it would reduce the number of charges imposed by ActewAGL. As described above, ActewAGL currently has a set of supply charges for smart meter customers and a

separate set of supply charges for non-smart meter customers. ActewAGL would be able to have one set of a supply charges if it could smear smart meter costs. Second, it would enable customers to compare like with like across retailers, as other retailers smear smart meter costs as described above.

However, the Commission highlighted in the draft report concerns about the equity and fairness issues arising from smearing smart meter costs. This is because basic meter customers would have to pay for smart meter services for which they do not receive a direct benefit. The Commission considered that this cross subsidisation could have adverse effects on low-income and vulnerable consumers in the ACT, who are less likely to have a smart meter than other customers.

The Commission also noted that the smearing of smart meter costs would lead to regulated standing offer rates that may not be cost reflective, in the sense that they do not represent the actual cost of supplying electricity. This is because it would result in customers with basic meters having to pay higher prices than their supply costs warrant.

Submissions to the draft report

In its submission to the draft report, ActewAGL did not support excluding smart meter costs from the cost stack for four main reasons.

First, ActewAGL stated that smart meter costs are an essential cost incurred in providing electricity services. Under the Power of Choice reforms, the responsibility for metering is with the retailers, which must incur metering costs. ActewAGL noted that basic meter costs will be depreciated by 2030-31. If smart meters are not included in the cost stack, then the pricing model will not include any metering costs eventually.

Second, ActewAGL noted that there is an established regulatory precedent to include smart meters as a regulatory cost. For example, OTTER smears smart meter charges across all regulatory customers and the AER allows distributors to smear charges for different basic meter types across customers.

Third, ActewAGL stated that smart meter costs must be included in the pricing model for effective operation of a reference bill. More information about the reference bill is provided in chapter 7.

Fourth, ActewAGL stated that the inclusion of smart meters in the pricing model would promote fairness and equity. If smart meter cost is not smeared, ActewAGL noted that low-income households will receive a price shock when they get a smart meter as a replacement meter, when their old meter fails. ActewAGL noted that the price shock will be larger if the Commission were to include smart meter costs at a later date because the number of ACT consumers on smart meters will have grown.

The ACAT supported the Commission's approach of excluding smart meter costs. However, it suggested the Commission should revisit this issue in two years. The ACAT

mentioned that further time is needed to properly understand how the Power of Choice arrangements work in practice.

ACT Energised Consumers Project Partners mentioned that smearing of smart meters could potentially be equitable when a growing number of low-income households are required to install smart meters as part of the public housing renewal program. They also proposed that the Commission reconsider this issue during the regulatory period.

Commission's consideration and final decision

The Commission's final decision is to include the costs of smart meters in the cost stack. When making the final decision, the Commission considered the stakeholder views on the draft decision.

As discussed above, the Power of Choice arrangements mean that all new and replacement meters must be smart meters. As such, all electricity consumers in the ACT will be required to use a smart meter in the future, when their basic meter reaches the end of its life.

As part of the draft decision the Commission considered whether it was appropriate to add smart meters to the cost stack for the 2020-24 regulatory period. As discussed above, the Commission considered that including smart meter costs in the cost stack at this stage may be unfair given that the majority of customers have basic meters and would be required to pay for a service that they do not receive.

However, the Commission also considers there would be equity and fairness issues from not smearing smart meter costs. For example, low-income households are required to install smart meters as replacement meters; this includes new public housing constructed as part of the ACT Government's housing renewal program.[43] In addition, smart meter costs are likely to increase over time reflecting an increase in the number of smart meters. As such, delaying the inclusion of smart meters in the cost stack is likely to result in a larger increase (or 'bill shock') when they are included.

The Commission also notes that the inclusion of smart meters in the cost stack would help consumers in comparing electricity plans against a reference bill, as the number of offers would be reduced (see chapter 7 for details). Furthermore, the Commission considers that there is regulatory precedent to smear metering costs, including for smart meters. For example, OTTER allows Aurora Energy (a Tasmanian retailer) to pass-through smart meter costs to all regulated customers.[44]

[43] Details at: https://www.act.gov.au/homes-housing/growing-and-renewing-public-housing.

[44] Based on discussions with OTTER.

Given the above factors, the Commission considers that adding smart meters to the cost stack at this stage is appropriate. The Commission has therefore made a final decision to include these costs in the cost stack.

The Commission's final decision on estimating the smart meter costs for each year of the regulatory period is to use an annual cost forecast provided by ActewAGL. To estimate annual forecast costs, ActewAGL will first calculate a weighted average cost per smart meter (weighted by metering coordinator[45] and meter configuration type). The total forecast cost is determined by multiplying the weighted average cost by the forecast number of smart meters. ActewAGL uses regression analysis to estimate the forecast number of smart meters. The Commission will apply a true-up each year for the difference between the estimated and actual annual cost when the actual cost is available.

ActewAGL has provided the Commission with annual smart meter cost estimates on a confidential basis. The Commission verified that these estimates fall within the range of smart meter costs used by other regulators such as the QCA and OTTER. ACIL Allen estimated annual smart meter costs for the QCA based on information provided by retailers. ACIL Allen's estimates for a single phase smart meter (the most common meter type) ranged from $117.52 per year to $123.40 per year depending on the distribution zone.[46] Based on Aurora Energy's forecast daily metering charge for 2019–20, OTTER estimated the cost per single phase smart meter at around $110 per meter per year. [47]

3.11 Retail margin

The retail margin is a profit margin that provides a return on the investment made by an efficient retailer in providing retail electricity services. Once all cost categories in the Commission's pricing model are estimated, they are added together and multiplied by the retail margin to produce the retail margin allowance.

Draft decision

The Commission's draft decision was to maintain a retail margin of 5.3 per cent. The Commission adopted a benchmarking approach when determining the draft retail margin. The Commission considered the retail margins discussed in Frontier Economics' advice to the ESC for its final decision for the VDO to apply from 1 January 2020, and the ACCC's November 2019 Inquiry into the National Electricity Market.

[45] The Metering Coordinator role is a newly created role under AEMO's Power of Choice Implementation Program. The Metering Coordinator has the overall responsibility for metering services at a customer's connection point within a distribution or transmission system. The role was established to encourage metering competition by creating a party who is independent from retailers and distributors.

[46] ACIL Allen, 2019, p 16

[47] ICRC Communication with the OTTER.

Frontier Economics advice to the ESC

Frontier Economics used a benchmarking approach to advise the ESC on the retail margin for the VDO. The benchmarks used by Frontier Economics were based on the regulatory allowances used by the QCA (in 2015), the ICRC (in 2014), OTTER (in 2016), and IPART (in 2013). Frontier Economics noted that the retail margin adopted by these regulators was 5.7 per cent of total revenue (equivalent to 6.04 per cent of the cost of goods sold). Frontier Economics also noted that the retail margins were based on IPART's 2013 decision, which was chosen from within a reasonable range for the margin of 5.3 per cent to 6.1 per cent of total revenue in NSW at the time (equivalent to a range of 5.6 per cent to 6.5 per cent of cost of goods sold), recommended by SFG Consulting.[48]

In the draft decision, the Commission noted that it had reduced the retail margin from 6.04 per cent to 5.3 per cent in its 2017 final decision on regulated retail electricity prices for the 2017-20 regulatory period, in response to large increases in energy purchase costs. This decision ensured that the dollar value of the retail margin would not increase at a rate that exceeded what was necessary for a reasonable profit margin. The Commission considered that this decision satisfied its obligations under the ICRC Act to protect customers from the abuse of monopoly power and to consider the social impacts of its decisions.

The Commission noted that energy purchase costs are still higher than they were at the time of the Commission's 2014 decision (when it had adopted a margin of 6.04 per cent) and IPART's 2013 decision. The Commission considered that its reasons for adopting a lower retail margin in the 2017 electricity price investigation remain relevant for this current price investigation.

The Commission also considered Frontier Economics' advice to the ESC which used an 'expected returns' approach to estimate a reasonable retail margin. The expected returns approach involves calculating the cost of compensation for the systematic risk[49] associated with a business, which is the risk faced by an efficient retailer.[50] Using this method, Frontier Economics found an acceptable range for the retail margin of 4.8 per cent to 6.1 per cent of total revenue (equivalent to a range of 5.0 per cent to 6.5 per cent of cost of goods sold). The Commission's current retail margin of 5.3 per cent falls within this range.

ACCC Inquiry into the National Electricity Market

The ACCC's November 2019 report for the Inquiry into the National Electricity Market presents margins achieved by electricity retailers in each jurisdiction for 2018-19. The report shows that margins ranged from 0.96 per cent in South East Queensland to 6.2 per

[48] SFG Consulting 2013, p 30.

[49] Systematic risk refers to the risk affecting the entire economy, not just a company or industry.

[50] Frontier Economics 2019, p 23.

cent in Victoria (equivalent to a range of 0.97 per cent to 6.7 per cent of cost of goods sold, which is how the Commission reports the margin).[51] The average margin for NEM retailers was 4 per cent (equivalent to 4.2 per cent of cost of goods sold).

In the draft report, the Commission considered that these margins did not necessarily represent the margin of an efficient standalone retailer for several reasons. First, the retail margins achieved by retailers may not be efficient because the retail electricity market in the NEM may not operating efficiently. The ACCC's final report from the Retail Electricity Pricing Inquiry[52] highlighted some features that may indicate the market was not operating efficiently such as high electricity prices and poor consumer outcomes.

Similar concerns about inefficiencies in the NEM were shared by Frontier Economics in its advice to the ESC, which stated that:

> Another issue with benchmarking against available market data for electricity retailers and against data in the ACCC's report is that these benchmarks may reflect margins that are systematically higher than the 'efficient' margin required in order to attract the capital needed to provide a retailing service. This would be the case, for instance, if there were evidence that the market was not operating efficiently.[53]

Second, the Commission considered that ACCC benchmarks for the retail margin were not transparent. For example, many large retailers in the NEM are vertically integrated companies that operate generation and retail businesses. The ACCC's report states that the retail margin for a vertically integrated retailer is likely to be largely dependent on the price at which it buys wholesale electricity from its wholesale division and that this will affect the margin reported by the retail arm of the business.[54]

Other considerations

In the draft report, the Commission considered that the efficient retail margin in the ACT may be lower than in other NEM jurisdictions, such as Victoria, given the lower level of customer related risks in the ACT. The ACCC's final report from the Retail Electricity Pricing Inquiry showed that customer related risks, such as bad debts, were a significant source of variability in retail costs incurred by retailers. [55] As shown in Table 3.4, the ACT has relatively low levels of consumer debt, hardship and disconnection rates, and the highest median weekly household income across NEM jurisdictions. The ACAT provided information about its hardship program which was consistent with the information shown in Table 3.4. These factors suggest that the probable incidence of bad and doubtful debts in the ACT may be lower than that in other NEM jurisdictions.

[51] The margin on the cost of goods sold is equal to (1/(1–Margin as a per cent of revenue))–1.

[52] ACCC 2018, p iv

[53] Frontier Economics 2019, p 21.

[54] ACCC 2019a, p 103.

[55] ACCC 2018, p 225.

Table 3.4 Customer risk metrics, June quarter 2018

Metric	ACT	NSW	VIC	QLD	SA
Median household income ($ per week)	2,212	1,803	1,734	1,584	1,442
Disconnection rate (% per annum)	0.3	1.0	2.0	1.4	1.4
Hardship (% of all customers)	0.5	0.5	1.0	0.6	1.3
Debt ($ average)	885	990	1,377	730	1,525

Source: AER 2017-18 Report on Compliance and Performance of Retail Energy Market; Victorian data from ESC 2017-18 Energy Market Report.

Further, the draft report noted that market indicators suggest that retailers in the ACT can recover a reasonable margin under the current regulatory settings. For example, ActewAGL offers market contracts that are priced at substantial discounts to the regulated standing offer rate; the discounts ranged from 12 per cent (unconditional) to 25 per cent (conditional) off usage charges compared to standing offer contracts. Similarly, Origin Energy offered between 10 per cent and 25 per cent off standing offer usage charges. Origin Energy also offered standing offer contracts that were priced below the regulated standing offer rates used by ActewAGL.

The ability of retailers to offer large discounts to standing offer rates suggested that the current retail margin provides sufficient allowance for retailers to recover costs and a reasonable profit margin. If the retail margin was 'too low', retailers would be unlikely to offer large discounts in market contracts. There has also been an increase in the number of electricity retailers entering the ACT market over recent years which also suggested that the retailers can recover a reasonable profit under the current regulatory settings.

Draft report submissions

ActewAGL's submission proposed to return the retail margin to 6.04 per cent as in the 2014-17 regulatory period. ActewAGL noted that a 5.3 per cent retail margin is below the Frontier Economics' base case (based on the expected returns approach) and does not reflect a benchmarking approach. ActewAGL also noted that the retail margin was lowered from 6.04 per cent due to a rapid escalation of wholesale energy purchase costs and this argument is no longer valid.

The ACAT supported the Commission's draft decision of 5.3 per cent retail margin.

Commission's consideration and final decision

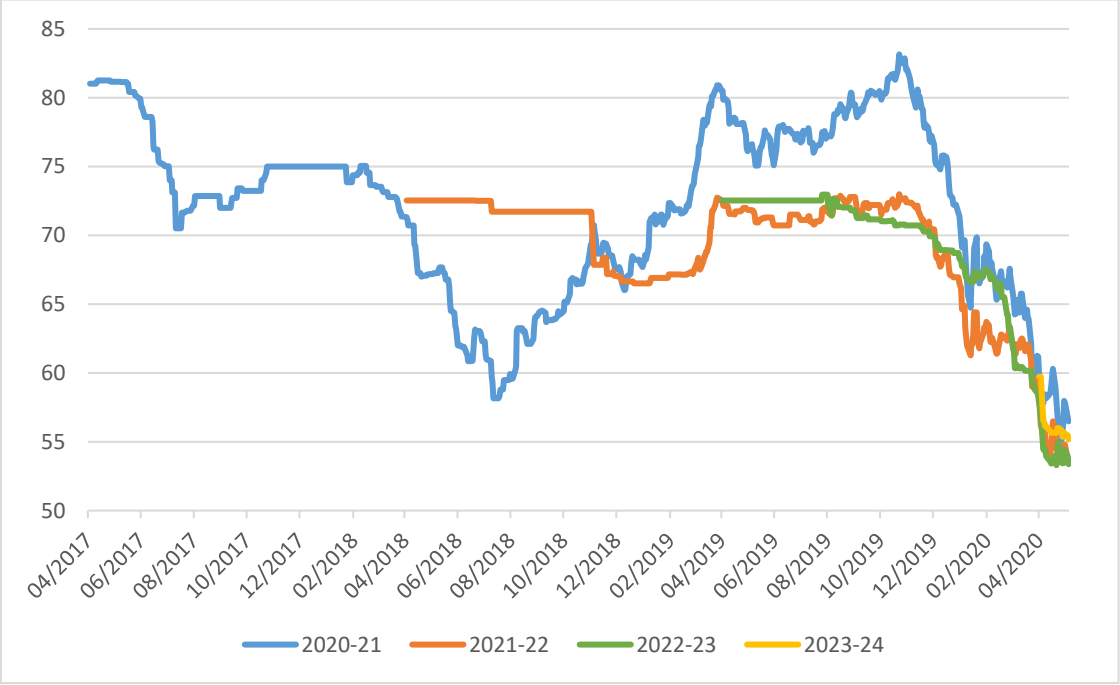
The Commission has re-considered the arguments for and against increasing the retail margin.

The Commission confirms its view in the draft report that the current margin of 5.3 per cent is consistent with, but at the low end of, the industry benchmarks and bad debt risks in the ACT market are likely to be lower than in other Australian state markets.

However, the Commission considers that the current declining trend in the wholesale energy prices, which has declined further since the draft report, warrants an increase in the retail margin. When the Commission reduced the retail margin from 6.04 per cent to 5.3 per cent in 2017, there had been a rapid increase in wholesale energy purchase costs, from around $50/MWh in 2016-17 to $75/MWh in 2017-18 (a 50 per cent increase). Energy purchase costs have been trending downward since late 2019 due to an increase in electricity generation from renewable sources. Recent falls in the forward price may also be exacerbated by concerns about a sustained slowdown in economic activity caused by the COVID-19 pandemic.

ASX electricity forward prices now suggest that wholesale prices during the 2020-24 regulatory period could reach levels around $55/MWh (Figure 3.3). This price is similar to wholesale prices in 2016-17 of around $50/MWh. Considering only the trend in the wholesale energy price, there is an argument in favour of increasing the retail margin back to around 6 per cent (an increase of around 0.7 percentage points). However, other important factors have also changed since 2014 which also need to be taken into account.

Figure 3.3 Daily forward prices, 2020-21 to 2023-24 ($/MWh)



Source: ASX Energy

As noted above, a retail margin of 6.04 per cent was set in 2014 based on evidence developed for the conditions at the time. For example, SFG Consulting estimated a recommended retail margin range of 5.6 per cent to 6.5 per cent in 2013.

Since 2013, there have been significant changes to interest rates, which was a key input into the SFG analysis. For example, in May 2020 the cash rate set by the RBA was 250 basis points below the average level in 2013. The Commission re-estimated the

recommended retail margin range using an interest rate that was 250 basis points below that used by SFG.[56] The Commission's analysis suggests that the lower interest rate would reduce SFG's recommended retail margins by 0.4 percentage points (Table 3.5).[57]

Table 3.5 Estimating retail margin using today's interest rates

	Original range	Updated range
Range estimated by SFG model	4.1 to 7.5 per cent	3.7 to 7.1 per cent
Range recommended by SFG model	5.6 to 6.5 per cent	5.2 to 6.2 per cent

Source: SFG Consulting 2013 and Commission's own analysis

The Commission considers that it would therefore be appropriate to increase the retail margin by 0.3 percentage points, to reflect the net effect of changes in the wholesale costs and interest rates. The Commission's final decision is to increase the retail margin to 5.6 per cent (equivalent to 5.3 per cent of the total cost stack).

3.12 Summary of final decision on the cost components

The Commission's final decision on the inputs to the Commission's pricing model to be applied for the regulatory period commencing 1 July 2020 is summarised in Table 3.6.

[56] In particular, the Commission used a risk-free rate of 1.7 per cent, versus 4.2 per cent used by SFG in 2013. The SFG analysis is available at SFG Consulting 2013, p 10.

[57] SFG's model utilised three approaches to determine an appropriate range; expected returns, bottom-up and benchmarking. The lower risk-free rate was considered to primarily impact the expected returns analysis, given its use of the CAPM model to determine a required rate of return. The Commission's analysis involved reconstructing the CAPM model, maintaining SFG's original assumptions except for the risk-free rate. The Commission's analysis did not involve altering any of the other original approaches used by SFG in determining its recommended range.

Table 3.6 Final decision on the retail electricity pricing model

Component	Method
Wholesale energy costs	
Energy purchase cost	Estimate energy purchase cost assuming an efficient retailer would hedge its exposure to spot prices using a mix of financial derivatives (base swap, peak swap and base cap contracts). Contract position for the financial derivatives will be decided using a heuristic that reflects the ACT load profile. Contract prices will be based on the 23-month average of forward prices from the ASX. The most recent five calendar years of observed data from the AEMO will be used as the half hourly half hourly profile of load and spot prices.
Volatility allowance	Adopt a volatility allowance based on the volatility allowances estimated by the ESC for the VDO prices.
LRET and SRES costs	Use publicly available LGC and STC spot prices averaged over an 11-month period and include an allowance for holding costs based on half the annual cost of debt.
Energy losses	Maintain the current approach as set out in Box 3.3.
NEM fees	Calculate NEM fees using data available in AEMO's annual Final Budget and Fees report.
Retail costs	
Retail operating costs	Continue the current approach of adjusting retail operating costs by the annual change in the consumer price index and converting this to a per MWh allowance at each annual price recalibration exercise.
ACT Energy Efficiency Improvement Scheme costs	Maintain the current methodology for estimation and prudency and efficiency assessment.
Smart meters	Include smart meter costs in the cost stack. Include estimates from ActewAGL for the 2021–22, 2022–23 or 2023–24 year as relevant, with relevant adjustment to account for the difference between forecast and actual costs in the previous year.
Network costs	Maintain the current approach of passing through the network costs determined by the AER.
Retail margin	Apply a retail margin of 5.6 per cent to cost components (equivalent to 5.3 per cent of the total cost stack).

4 Estimate of efficient costs for 2020–21

This chapter sets out the Commission's estimates of the efficient costs of supplying electricity in 2020–21 to customers on standard retail contracts. The estimates are based on the latest available data and the method outlined in Chapter 3.

4.1 Energy purchase cost

As explained in Chapter 3, the Commission's method of estimating energy purchase costs requires estimates of a contract position and forward prices (also known as contract prices). As described in Chapter 3, the contract position refers to the number of base swap, peak swap and base cap contracts used in the hedging strategy.

Contract position

The Commission determined the contract position based on the heuristic specified in section 3.2. For the final report, the Commission has applied the heuristic to the half-hourly ACT load data from 1 January 2015 to 31 December 2019. The resulting contract positions are shown in Table 4.1.

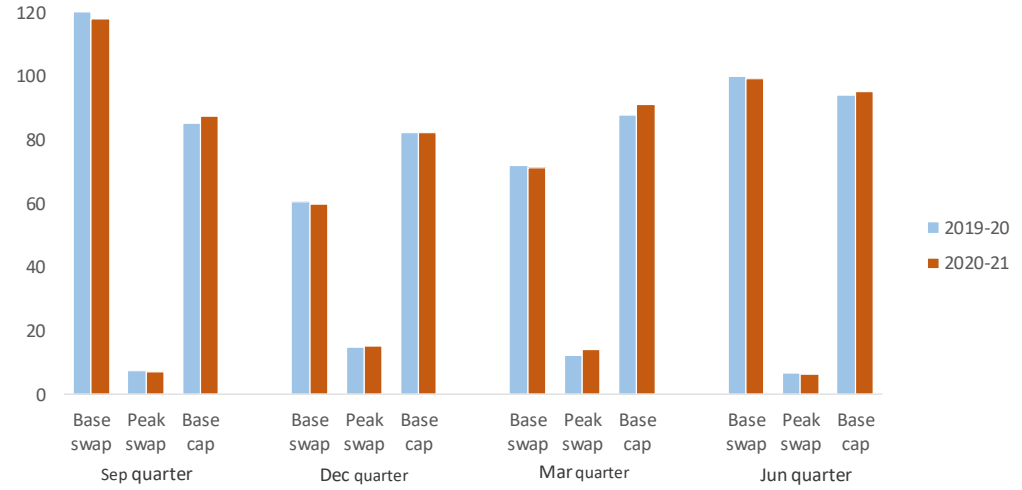
Table 4.1 Quarterly contract positions (MW per half-hour), 2019–20 and 2020–21

Contract type	2019–20				2020–21			
	Sep quarter	Dec quarter	Mar quarter	Jun quarter	Sep quarter	Dec quarter	Mar quarter	Jun quarter
Base swap	120.12	60.51	71.80	100.04	118.25	59.76	71.35	99.22
Peak swap	7.40	14.65	12.32	6.69	7.12	15.18	13.91	6.26
Base cap	85.13	82.14	87.94	94.06	87.28	82.36	91.32	95.30

Source: Commission's estimates based on AEMO data.

The contract position for 2020–21 is similar to the contract position for 2019–20 (Figure 4.1).

Figure 4.1 Quarterly contract positions (MW per half-hour), 2019–20 and 2020–21



Source: Commission's estimates based on AEMO data.

Contract prices

The Commission's approach to determining the contract prices for 2020–21 is to use the 23-month average of forward prices from 1 June 2018 to 30 April 2020 from the ASX Energy. The contract prices used in the Commission's final decision are summarised in Table 4.2 .

Table 4.2 Quarterly contract prices ($ per MWh), 2019–20 and 2020–21

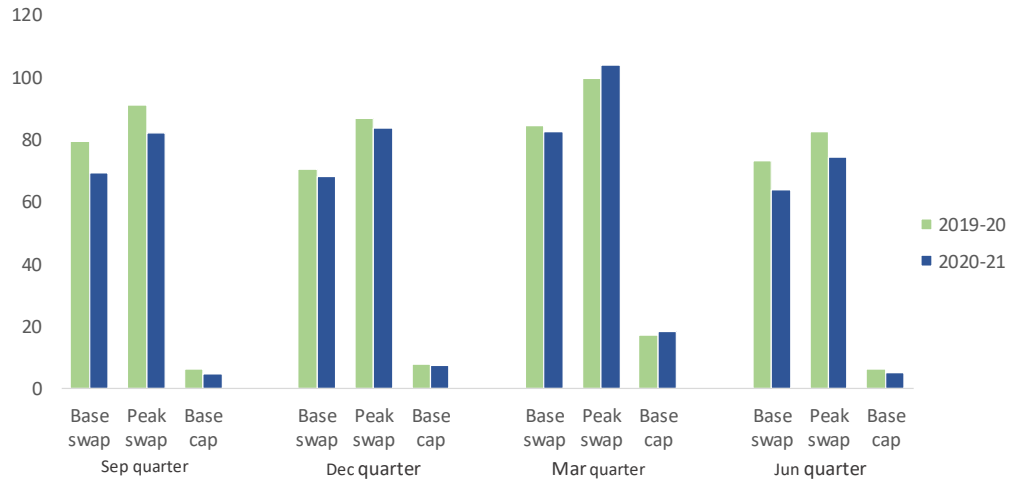
Contract price	2019–20				2020–21			
	Sep quarter	Dec quarter	Mar quarter	Jun quarter	Sep quarter	Dec quarter	Mar quarter	Dec quarter
Base swap	79.43	70.48	84.68	73.17	69.44	68.11	82.43	64.06
Peak swap	91.26	87.05	99.91	82.58	82.07	83.81	104.06	74.47
Base cap	6.24	7.71	17.17	6.34	4.64	7.47	18.45	5.15

Source: ASX Energy and the Commission's calculations.

The contract prices for 2020–21 are generally lower than for the previous year (Figure 4.2). This is consistent with the decreasing trend of daily forward price of base swap contracts (Figure 4.3). The main reason for lower contract prices during 2020–21 is new generation capacity entering the grid, mainly from renewable sources.[58] This trend leads to a lower energy purchase cost in 2020–21 than 2019–20. Appendix 4 provides further details on recent developments in the wholesale electricity market.

[58] AEMC 2019b, p 4.

Figure 4.2 Quarterly contract prices ($ per MWh) 2019–20 and 2020–21



Source: ASX Energy and the Commission's calculations.

Figure 4.3 Daily forward price of base swap contracts ($ per MWh), July 2018 to June 2020

Source: Commission's Estimates using ASX data.

Estimate of the energy purchase cost

The Commission estimated the energy purchase cost using the contract prices and the contract position described above. This resulted in an energy purchase cost of $85.97 per MWh for 2020–21. This is 7.5 per cent lower than the cost for 2019–20 of $92.93 per MWh. The decrease in energy purchase costs mainly reflects lower forward electricity prices that have resulted from the increased generation capacity noted above.

4.2 Volatility allowance

The Commission calculated the volatility allowance using the method described in section 3.2 of the report. This approach involved estimating the volatility allowance based on the allowances used by the ESC for the VDO. This approach resulted in a volatility allowance of $0.302/MWh.

4.3 National green scheme costs

The Commission calculates the costs of complying with the national green scheme requirements using publicly available data and the equations in Box 3.1 and Box 3.2. Key data inputs used in the calculations are presented in Table 4.3.

Table 4.3 LRET and SRES data inputs, 2020 and 2021

	2020	2021
Parameters common for LRET and SRES		
Half-yearly load weights	0.528	0.472
Cost of debt for half year (%)	1.00%	1.00%
LRET data		
Renewable power percentage (RPP) (%)	19.31%	18.83%
Average LGC spot price ($/certificate)	55.34	40.25
SRES data		
Small-scale technology percentage (STP) (%)	24.40%	19.40%
Average STC spot price ($/certificate)	36.23	37.92

Sources: Clean Energy Regulator (2019); ICAP; ActewAGL load data; Frontier Economics (2019).

LRET

The LRET cost for 2020–21 is calculated using the renewable power percentages for 2020 and 2021 and the estimated average LGC prices in those two years, as described in section 3.3. Half-hourly load weights provided by ActewAGL were used to convert calendar year values to financial years.

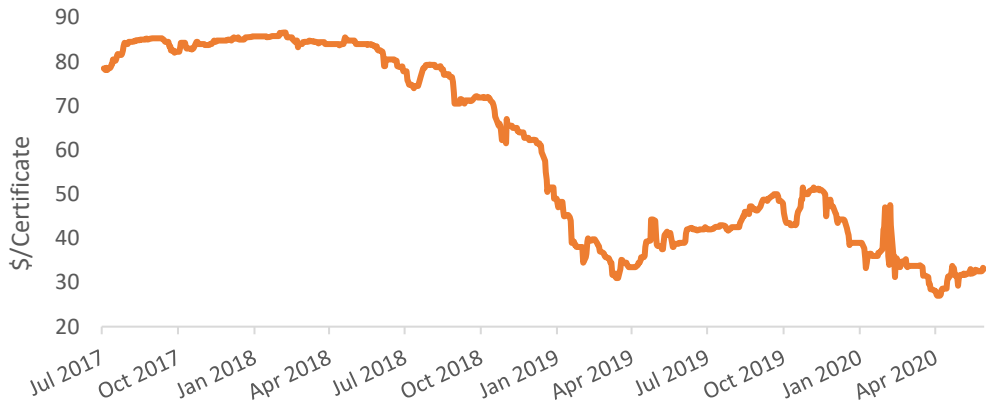
Renewable power percentages for each calendar year are published by the Clean Energy Regulator. The Commission estimated the renewable power percentages for both years using the Clean Energy Regulator's default formula and the data for energy savings target.[59] The estimated renewable power percentages for 2020 and 2021 are 19.31 per cent and 18.83 per cent, respectively.

[59] The Clean Energy Regulator's default formula and data for energy savings target are available on its website: http://www.cleanenergyregulator.gov.au/RET/Scheme-participants-and-industry/the-renewable-power-percentage.

The LGC price for 2020 is $55.34 per certificate, which is the 11-month average price to 31 May 2019. This increases to $55.89 per certificate when holding costs are applied. The estimated LGC price for 2021 is $40.25, which has been calculated as the 11-month average of LGC prices from 1 July 2019 to 31 May 2020. This increases to $40.65 per certificate when holding costs are applied.

The estimated average LGC price for 2021 is around $15 per certificate lower than the estimated price for 2020. This is because LGC prices have been declining since mid-2018 (Figure 4.4) as the expected number of renewable energy projects grew above what was required to meet the 2020 renewable energy target.[60]

Figure 4.4 LGC spot prices, July 2017 to May 2020



Source: ICAP data.

SRES

The small-scale technology percentages are the estimates published by the Clean Energy Regulator. The Commission uses these estimates for both years. The estimated small-scale technology percentages for 2020 and 2021 are 24.40 per cent and 19.40 per cent, respectively.

The STC price for 2020 is $36.23 per certificate, which is the 11-month average price until 31 May 2019. This increases to $36.59 per certificate when holding costs are applied. The estimated STC price for 2021 is $37.92, which is calculated as the 11-month average of LGC prices from 1 July 2019 to 31 May 2020. This increases to $38.30 per certificate when holding costs are applied.

Cost adjustment

As described in Chapter 3, the Commission makes a cost adjustment to account for any differences between the actual and estimated values for the renewable power percentage

[60] For further details see CER 2020.

and small-scale technology percentage. This cost adjustment for 2020–21 is $1.69 per MWh.

Estimated green scheme cost

The Commission's final estimate of the total green scheme cost allowance for 2020–21 is $19.22 per MWh, based on the data described above (Table 4.4). This is 25.3 per cent lower than the allowance provided in 2019–20. The decline mainly reflects lower LGC prices. These costs were updated based on data released by the Clean Energy Regulator in March 2020 and publicly available price data on green scheme certificates. This update reduced the price decrease from the draft decision by 1.55 percentage points. This is because the small-scale technology percentage for the 2021 calendar year increased due to continuing high take-up of solar panels across Australia.

Table 4.4 LRET and SRES allowance, 2019–20 and 2020–21 ($ per MWh)

	2019–20	2020–21
LRET	$15.63	$9.31
SRES	$7.70	$8.22
Cost adjustment from previous year	$2.40	$1.69
Total cost	**25.73**	**$19.22**

Source: Commission's estimates.

4.4 Energy losses

The Commission determines the energy losses component by applying AEMO's energy loss factors to the energy purchase cost component, green scheme costs and NEM fees as discussed in section 3.4. This generates an energy loss cost component of $3.13 per MWh for 2020–21. This allowance is $0.7 per MWh lower than in 2019–20.

The decrease in the cost of energy losses to consumers results from an increase in energy losses in the ACT compared to the regional reference node. An increase in energy losses means that generators are paid less for their electricity. The AEMO did not specifically report on the reason for the increase in energy losses in the ACT. However, AEMO has previously stated that recent increases in energy losses have been due to an increase in renewable technology.[61] The electricity generated by renewable technology causes additional 'congestion' (i.e. heat) along powerlines and increases the amount of energy that is lost.

[61] Details at: https://aemo.com.au/-/media/files/electricity/nem/security_and_reliability/loss_factors_and_regional_boundaries/2020-21/marginal-loss-factors-for-the-2020-21-financial-year.pdf?la=en.

4.5 NEM fees

The Commission calculated the cost allowance for NEM fees using AEMO's cost data. The final NEM fee cost allowance for 2020–21 is $1.26 per MWh (Table 4.5). This is $0.3 per MWh higher than that in 2019–20 mostly due to increase in NEM management fees and ancillary services fees in 2020–21.

Table 4.5 NEM fees

Component ($/MWh)	2020–21
NEM management fees	0.56
Full retail contestability (FRC) fees	0.15
National Transmission Planner (NTP) fees	0.04
Energy Consumers Australia (ECA) fees	0.06
Ancillary services fees (NSW region)	0.44
Total NEM fees ($/MWh)	**1.26**

Source: AEMO and the Commission's calculations.

Notes: The Commission calculated ancillary services fees by averaging weekly ancillary fees for the period of 6 May 2019 to 5 May 2020.

4.6 Retail operating costs

The 2020–21 retail operating costs are calculated by adjusting the 2019–20 per customer allowance of $125.55 by the change in the CPI of 1.83 per cent. This adjustment takes the allowance per customer to $127.84 for 2020–21.

This value is then converted into an allowance per MWh for retail operating costs using customer numbers and energy usage information provided by ActewAGL for the year to 31 March 2020. This converts to an allowance of $14.30 per MWh for 2020–21, representing a 0.8 per cent decrease from the 2019–20 cost allowance of $14.41 per MWh. The decrease reflects changes in the number of standing offer customers (which determines the total retail operating cost allowance) and energy usage (which determines the allowance on a dollar per MWh basis). Specifically, the decrease in dollars per MWh terms has been caused by customer numbers falling at a faster rate than the fall in standing offer energy usage.

4.7 Energy Efficiency Improvement Scheme (EEIS)

The Commission received EEIS cost data from ActewAGL for the final decision. The Commission's final EEIS allowance for 2020–21 is $3.86 per MWh (Table 4.6). The values for Jan-Jun 2021 are forecasts because details of the scheme from January 2021 are not yet available. Specifically, the cost for Jul-Dec 2020 has been used for Jan-Jun 2021.

Table 4.6 Forecast EEIS cost, 2020–21 ($ per MWh)

Year	Cost allowance per tonne	Emissions factor	Energy savings target (%)	Cost per MWh	Half-yearly load weights (%)
Jul–Dec 2020	$113.82	0.4	8.6%	$3.92	52.80
Jan–Jun 2021	$113.82	0.4	8.6%	$3.92	47.20
Adjustment for 2019–20				0.06	
2020–21 EEIS ($ per MWh)				**$3.86**	

Source: Commission's calculations using ActewAGL data.

Prudence and efficiency

As discussed in Chapter 3 in detail, the Commission determined that the decision to incur the EEIS expenditure was necessary as ActewAGL is legally obliged to implement the scheme. As for efficiency, the Commission concluded that it is satisfied that ActewAGL has undertaken a robust expenditure decision making process to meet its EEIS compliance requirements and that its proposed costs are below the cost ceiling determined by the Commission based on the scheme's penalty rate for non-compliance.

4.8 Network costs

Network costs in the Commission's pricing model include the costs of transmission, distribution, basic metering and ACT Government schemes. These costs are charged by Evoenergy, the owner and operator of the ACT electricity network, and are regulated by the AER. The Commission allows ActewAGL to pass through the network costs determined by the AER.

On 8 May 2020, the AER released the approved network charges for the ACT for 2020-21. Based on the approved network charges, ActewAGL proposed a network cost allowance of $107.79 per MWh for standing offer customers for 2020–21. The Commission examined this proposal and determined the $107.79 per MWh as the network cost allowance associated with standing offer customers for 2020–21. This allowance is 5.4 per cent higher than the allowance in 2019–20 (Table 4.7).

Table 4.7 Network costs for standing offer customers ($ per MWh)

	2019–20 (estimate)	2020–21 (forecast)	% change
Distribution use of system	$53.69	$60.89	13.41%
Transmission use of system	$14.20	$17.21	21.20%
ACT Government schemes	$28.28	$23.63	-16.44%
FiT small, medium and large scale	$23.39	$20.26	-13.38%
Other ACT Government schemes	$4.89	$3.37	-31.01%
Metering costs	$6.07	$6.06	-0.16%
Total Network costs	**$102.24**	**$107.79**	**5.43%**

Source: Commission calculations using approved Evoenergy network prices and ActewAGL data.

The increase in network costs was driven by transmission and distribution costs. The cost of ACT Government schemes declined and the cost of basic metering was largely unchanged.

The increase in transmission costs was caused by an under-recovery last financial year.[62] The increase in distribution costs reflects pass-throughs for vegetation management ($1.6m), ring-fencing ($1m), Power of Choice ($2m) and incentive scheme payments ($5.5m).[63]

ACT Government jurisdictional scheme costs declined because a fall in FiT support payments. The FiT support payments recovered by Evoenergy depend on forecasts of the payments; the forecast payments for 2020-21 declined relative to the forecast payments for 2019-20.[64]

Network costs were affected by a change in the standing offer customer mix

The increase of 5.43 per cent in the network cost allowance reflects an increase in network prices (contributing 1.9 percentage points) and a change in customer mix (contributing the remaining 3.5 percentage points).

[62] Evoenergy 2020, p 8.

[63] Evoenergy 2020, p 4.

[64] Based on discussions with the Environment, Planning and Sustainable Development Directorate.

The change in the customer mix has resulted from an increase in customers, especially residential customers, changing retailers or moving from a standing offer to a market offer. This has caused the proportion of customers on tariffs with relatively low network costs (i.e. residential tariffs) to fall and the proportion of customers with high network costs (i.e. business tariffs) to rise.[65]

Evoenergy charges different prices for different customer types (i.e. residential versus business customers) and tariff types (i.e. demand tariff versus flat rate tariffs) because it wants pricing to be cost reflective and provide an incentive to ensure efficient use of the network.[66]

In addition to the changing residential versus small business customer mix described above, the network cost increase reflects a change in the mix of business customers. The weighted average network cost for business customers increased by 8.1% despite network prices rising by 1.9%. This is because there is a higher proportion of standing offer small business customers on more expensive network tariffs.

For example, the number of standing offer customers on the small business demand tariff (a tariff with a relatively high weighted average network cost) has increased as smart meters are taken up. In contrast, the number of customers on all other small business tariffs has decreased. This may change in the future as ActewAGL will change its default assignment policy for smart meter customers to a time of use tariff, rather than the current demand tariff, from 1 July 2020.[67]

The Commission considers that the way in which network costs are allocated may become increasingly important as the number of standing offer customers continues to change. The Commission will therefore examine the form of price control during the 2020-24 regulatory period. As part of the review, the Commission will consider current and expected regulatory and market developments that may have implications for the effectiveness of the form of control to apply in the regulatory period from 1 July 2024. Further details are available in section 6.3.

4.9 Power of Choice pass-through costs

The Commission's final decision is to allow ActewAGL to recover $1.0 million as power of choice pass-through costs for 2020–21. This represents a cost of $1.32 per MWh in 2020–21, which is an increase of 30.1 per cent compared to 2019–20. The increase mainly reflects a decrease in the number of standing offer customers, which means that the cost is spread across a smaller amount of energy. The cost in dollar terms (as opposed

[65] Residential tariffs generally have lower network costs compared to business tariffs. For example, in 2019–20 the network cost for residential tariffs averaged $94.82/MWh compared to $128.32/MWh for business tariffs.

[66] Evoenergy 2018, p 7.

[67] Based on discussions with ActewAGL.

to $/MWh terms) increased by inflation. The Commission's final decision is based on electricity usage for the year to 31 March 2020.

The power of choice pass-through adjustment accounts for the costs that ActewAGL incurs to comply with power of choice regulatory changes. These changes which came into force by the AEMC on 1 December 2017, require retailers to make a number of changes to their existing systems and procedures to facilitate the provision of smart metering services.[68]

4.10 Smart meter costs

As described in Chapter 3, the Commission's final decision is to add smart meter costs to the cost stack. For the 2020–21 price investigation, the Commission's final decision is to implement the annual smart meter costs provided by ActewAGL for the 12 months to 31 March 2020. The smart meter cost allowance for 2020–21 is $1.24 per MWh.

4.11 Retail margin

For the reasons set out in section 3.11, the Commission's final decision is for a retail margin of 5.6 per cent (equivalent to a 5.3 per cent of the total cost stack) over the regulatory period. Applying this margin to all the cost categories in the retail electricity cost index model generates a retail margin allowance of $13.33 per MWh for 2020–21.

4.12 Summary of final decision on cost elements

Table 4.8 sets out the cost components used to determine the maximum allowed average change in the regulated retail electricity price for 2020–21. The Commission's final decision provides for an average nominal decrease of 2.56 per cent in ActewAGL's basket of regulated tariffs. This is equivalent to a real (adjusted for inflation) decrease in the average regulated retail price of 4.31 per cent.

[68] ICRC Report 3 of 2018.

Table 4.8 Final decision on cost elements, 2020–21

Cost	2019–20 ($/MWh)	2019–20 ($/MWh) (new methodology)[(a)]	2020–21 ($/MWh)	% change
Wholesale energy purchase cost	92.93	92.54	85.97	-7.49%
National green scheme costs	25.73	22.93	19.22	-25.30%
Energy losses	3.81	3.69	3.13	-17.90%
NEM fees	0.92	1.13	1.26	36.85%
Total energy purchase cost	**123.39**	**120.29**	**109.58**	**-11.19%**
Network costs (excluding ACT Government scheme costs)	73.96	73.96	84.16	13.79%
ACT Government schemes	28.28	28.28	23.63	-16.44%
Total network costs	**102.24**	**102.24**	**107.79**	**5.43%**
Retail operating costs	14.41	14.41	14.30	-0.76%
Energy efficiency scheme costs	4.00	4.00	3.86	-3.39%
AEMC Power of Choice costs	1.02	1.02	1.32	30.08%
Smart meter costs	NA	NA	1.24	NA
Total retail costs	**19.43**	**19.43**	**20.73**	**6.68%**
Total energy + retail + network costs	**245.06**	**241.96**	**238.10**	**-2.84%**
Retail margin	12.99	12.82	13.33	2.66%
Total costs	**258.05**	**254.78**	**251.43**	**-2.56%**

Source: Commission's calculations.
Note: (a) The 2019–20 (new methodology) cost components were calculated using the method outlined in Chapter 3.

Table 4.9 shows the contribution of the various cost components to the total percentage change in prices from 2019–20 to 2020–21. Wholesale electricity purchase cost and national green scheme costs are significant contributors to the price decrease in 2020-21; they declined by 7.5 per cent and 25 per cent from 2019-20 respectively. As described earlier, the decline in national green scheme costs are driven by reductions in the cost of large-scale generation certificates.[69] Wholesale costs decreased due to the increase in generation capacity.

Changes to the Commission's pricing model made as a result of its 2019 methodology review have also contributed to the draft price fall. The pricing methodology was improved to ensure that the Commission's cost estimates are based on more up-to-date and efficient retailer practices, including a more efficient wholesale market hedging strategy and a more cost-effective approach to complying with green scheme requirements. Table 4.8 shows the 2019–20 costs using the new methodology and the former methodology. The changes to the Commission's pricing methodology have contributed around 1.3 percentage points to the final price decrease.

[69] AEMO 2019, p 5.

Table 4.9 Percentage point contributions to the total cost change from 2019–20 to 2020–21

Cost components	Percentage point
Wholesale energy purchase cost	-2.70%
National green scheme costs	-2.52%
ACT Government scheme costs	-1.80%
Energy losses	-0.26%
Energy Efficiency Scheme costs	-0.05%
Retail operating costs	-0.04%
Power of Choice costs	0.12%
NEM fees	0.13%
Retail margin	0.13%
Smart meter costs	0.48%
Network costs (excluding ACT Govt schemes)	3.95%
Total cost	**-2.56%**

Source: Commission's calculations.

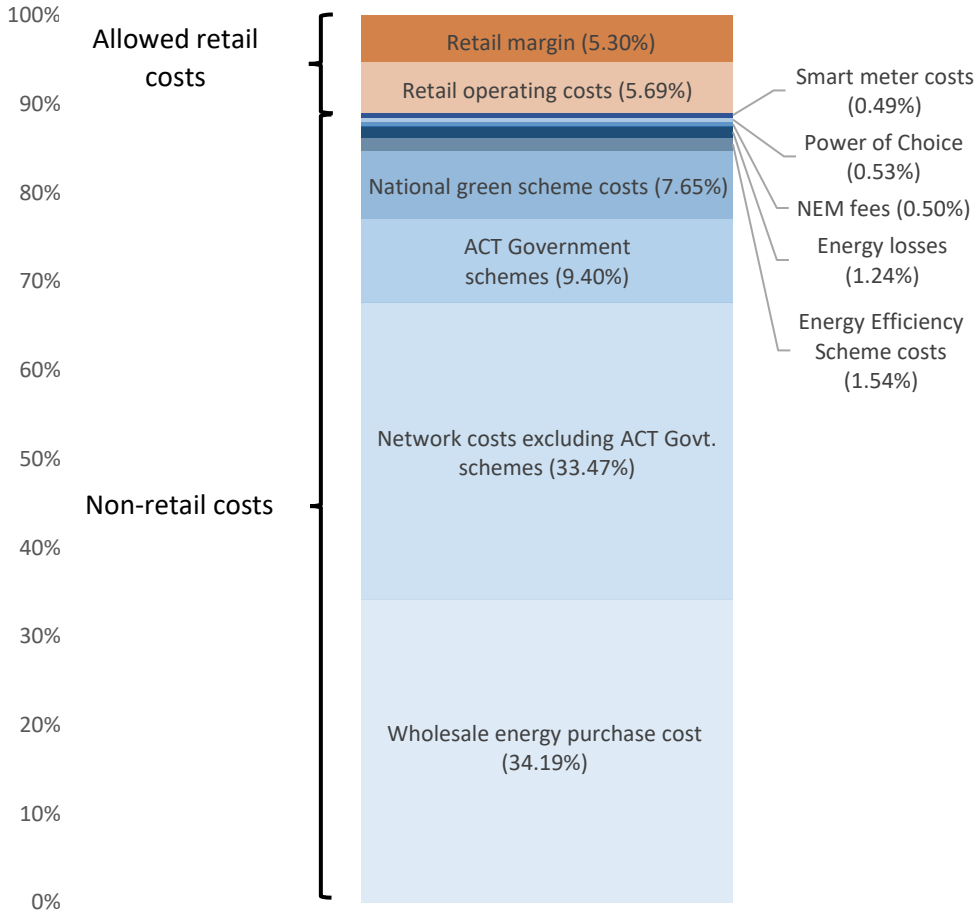
Figure 4.5 shows the share of each cost component in total costs. An analysis of these cost components shows that most costs are outside the control of the retailer. The costs that the retailer cannot control and that are not regulated by the Commission include:

- the cost of purchasing electricity from the NEM (except for the ability to implement different hedging strategies);
- the costs of complying with Commonwealth and Territory environmental obligations;
- costs associated with energy lost in transmission and distribution;
- NEM fees payable to AEMO for operating the wholesale market, and
- charges for the transport of electricity through the poles and wires.

The main costs that are within the control of the retailer are hedging, retail margin and retail operating costs. Retail operating costs account for about six per cent of total costs and hedging costs are a small but necessary component of energy purchase costs. The

retail margin accounts for 5.3 per cent of the total cost (equivalent to 5.6 per cent of all other cost components).

Figure 4.5 Cost components as a share total cost 2020–21



Source: Commission's calculations.

5 Customer impacts for 2020–21

This chapter estimates the impact of a price reduction of 2.56 per cent in 2020–21 for a range of typical customers.

5.1 Average residential electricity consumption in the ACT

When analysing the customer impacts of the 2020–21 average price reduction, the Commission has used 6,500 kWh as the benchmark average annual electricity consumption of an ACT household. This estimate is different to that used in the 2017–20 regulatory period of 8,000 kWh. The Commission considers that the 6,500 kWh of usage reflects a more appropriate average usage level in the ACT.

The benchmark of 6,500 kWh is consistent with the actual average electricity usage of an ACT household, as calculated by the Commission using Evoenergy's data for 2018–19. It is also consistent with the estimate used by the AER for the ACT (6,545 kWh).[70] In contrast, the 8,000 kWh figure may be representative of average usage for an all-electric household.[71]

The Commission notes that the AEMC uses a different benchmark (7,151 kWh) in its 2019 analysis of residential electricity price trends.[72] The AEMC's benchmark is based on electricity usage for a household with 2 people, no gas and controlled load.

5.2 Estimated annual bill change

The Commission estimates that the annual electricity bill for an average customer will fall by around $43 in 2020–21 compared to 2019–20 (Table 5.1). The Commission's estimate that an average customer in the ACT uses 6,500 kWh of electricity is representative of a household with 2 to 3 people, according to data available on the Energy Made Easy website.

For a large family with 4 to 5+ people that consumes around 7,500 kWh, the reduction is likely to be around $50 per year.

A customer using a lower than average amount of electricity, which may be representative of a single person household, is likely to experience a bill reduction of around $25 per year.

[70] AER 2019.

[71] St Vincent de Paul 2019.

[72] AEMC 2019b, p 20.

Table 5.1 Estimated annual bill changes for residential customers, 2019–20 and 2020–21

Customer consumption type	Annual usage (kWh)	Estimated annual bill 2019–20 ($)	Estimated annual bill 2020–21 ($)	Change ($)
Large	7,500	$1,935	1,886	-50
Average	6,500	$1,677	1,634	-43
Small	3,800	$981	955	-25

Source: Commission's calculations.

Note: Based on the information available in Energy Made Easy website, an ACT household with 1 person consumes around 3,800 kWh per year; a household with 2 to 3 people consumes around 6,500 kWh per year and a household with 4 to 5+ people consumes around 7,500 kWh.

The Commission also estimated the impact of the price reduction on non-residential customers. Table 5.2 presents estimates of annual electricity bills for a range of typical non-residential customers resulting from the electricity price decrease of 2.56 per cent. The impact on a typical bill ranges from a $66 saving for a small non-residential customer to a $265 saving for a large non-residential customer.

Table 5.2 Estimated annual bill changes for non-residential customers, 2019–20 and 2020–21

Customer consumption type	Annual usage (kWh)	Estimated annual bill 2019–20 ($)	Estimated annual bill 2020–21 ($)	Change ($)
Large	40,000	$10,322	10,057	-265
Average	25,000	$6,451	6,286	-165
Small	10,000	$2,580	2,514	-66

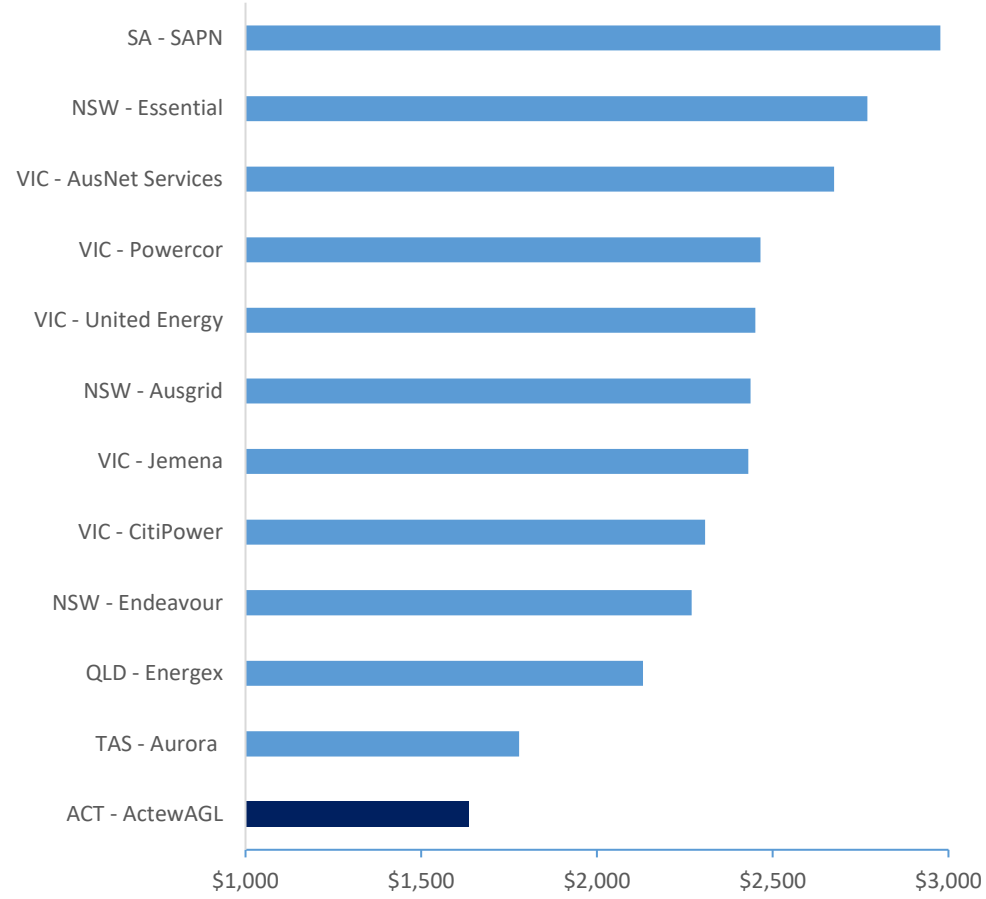
Source: Commission's calculations.

5.3 Comparison of residential electricity prices across jurisdictions

The final decision will mean that ACT consumers will continue to pay amongst the lowest standing offer electricity prices in Australia.

Figure 5.1 shows the estimated annual bill for customers on standing offer electricity contracts across the NEM as at 1 July 2019 (the latest available data), and the Commission's estimated annual bill for 2020–21. The bill estimates are based on an annual electricity consumption of 6,500 kWh (actual average usage differs across jurisdictions due to a number of reasons including different climates). The table shows that the average annual bill for standing offer customers in the ACT will remain amongst the lowest in the NEM.

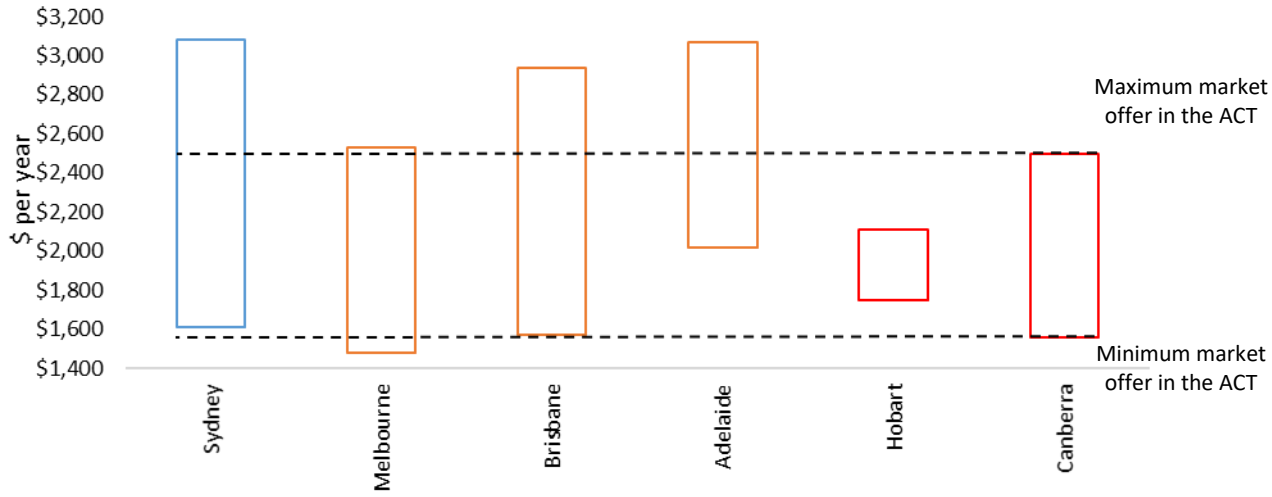
Figure 5.1 Maximum annual residential standing offer electricity bills and the Commission's estimated average standing offer electricity bill in the ACT from 1 July 2020 based on annual consumption of 6,500 kWh



Source: Commission's calculations based on AER 2020b, ESC 2019b and OTTER 2019.
Note: All statistics are based on annual consumption of 6,500 kWh. The standing offer prices in NSW, QLD and SA reflect the DMO as at 1 July 2020; prices in Victoria reflect the VDO as at 1 January 2020; and prices in Tasmania reflect standing offer prices for 2019–20. The average ActewAGL bill is based on the Commission's assumption that all retail prices in the regulated basket of tariffs are decreased by 2.56 per cent.

Figure 5.2 shows the range of annual residential market offer electricity bills across the NEM in June 2020. The dotted lines show the maximum and minimum market offer bills in the ACT. The range of market offers in the ACT is comparable to the larger jurisdictions but is generally not as high.

Figure 5.2 Maximum and minimum annual residential market offer electricity bills across NEM capital cities, June 2020

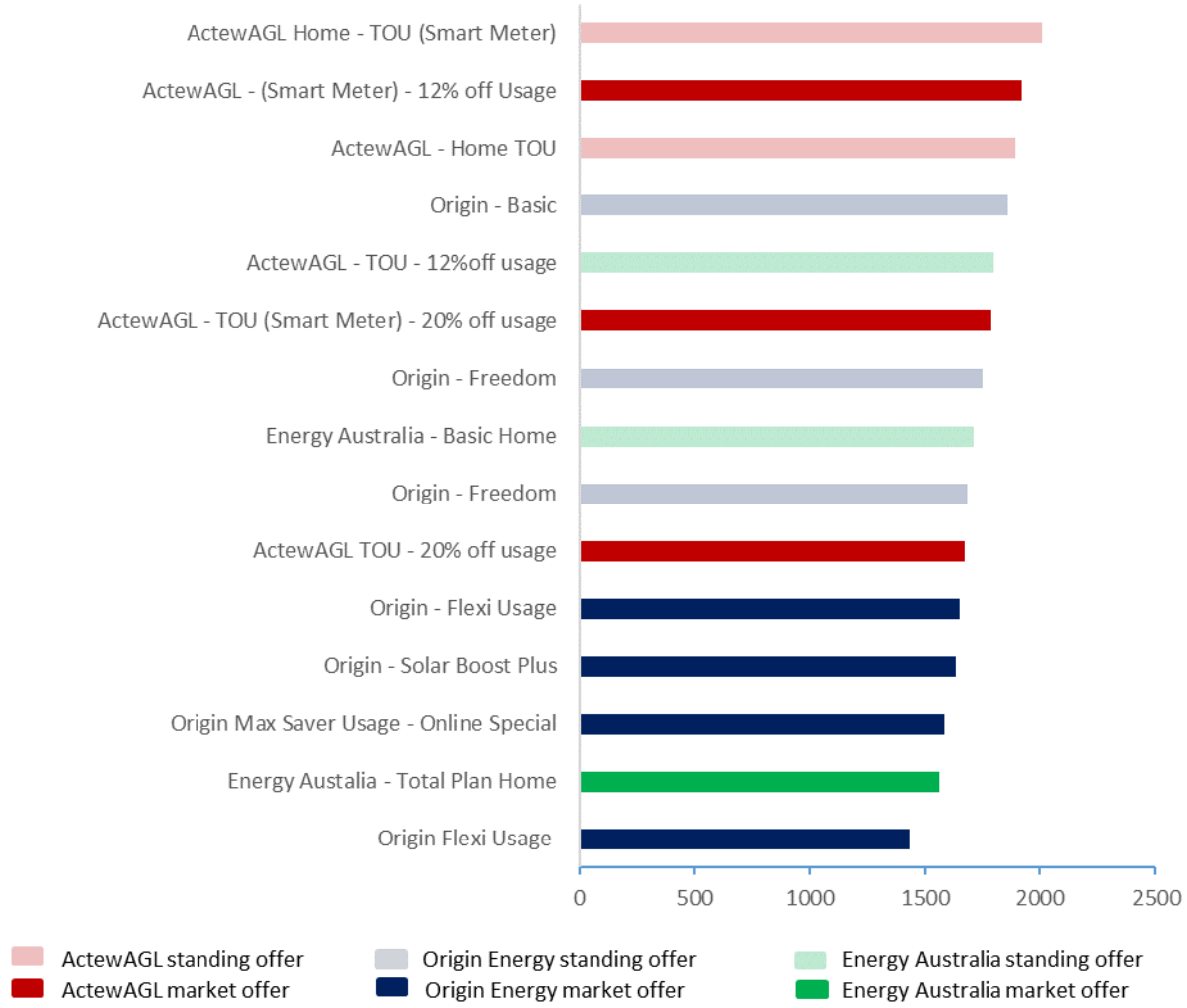


Source: Energy Made Easy and Victorian Energy Compare websites.
Note: All prices are based on annual electricity consumption of 6,500 kWh. All offers are including discounts.

5.4 Comparison of residential electricity bills within the ACT

Figures 5.3 and 5.4 show the estimated annual bills (including discounts) for the range of single rate and time-of-use plans offered by the three largest retailers in the ACT as at 27 April 2020. The figures show that there are a range of market offers available in the ACT and that consumers may benefit from shopping around for a more competitive electricity price offer that better suits their demand pattern.

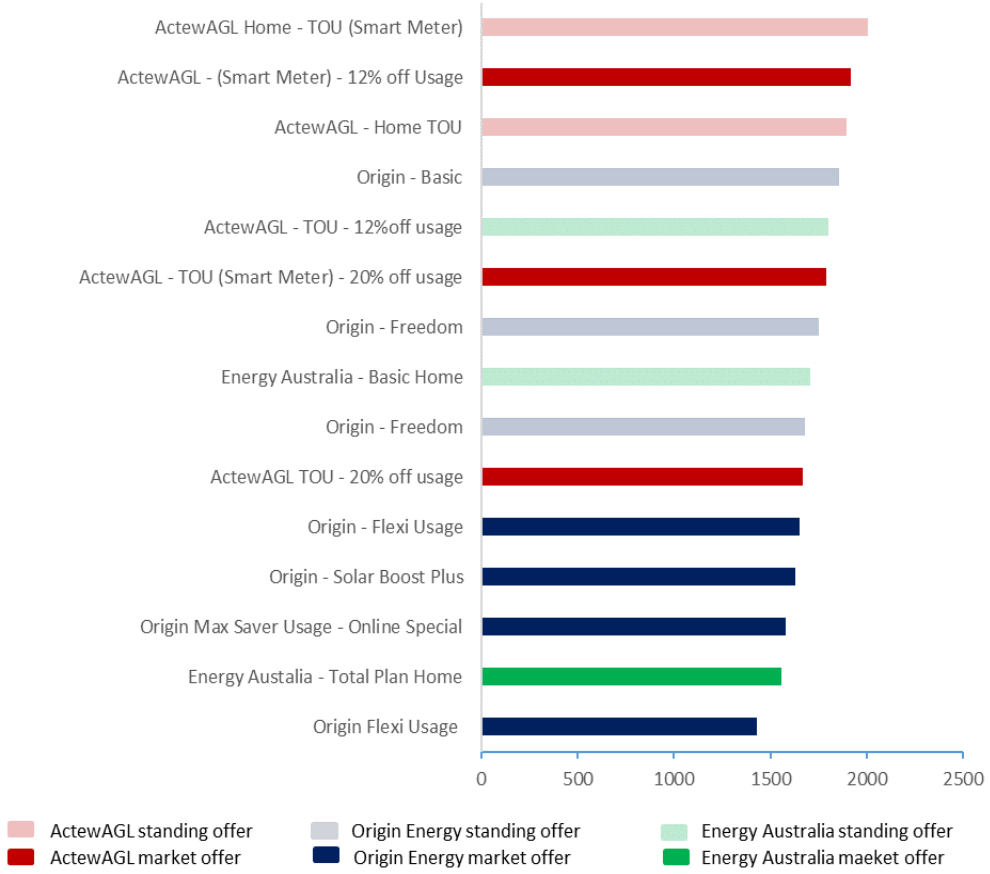
Figure 5.3 Single rate offers in the ACT as at 27 April 2020 and the indicative ActewAGL standing offers for 2020–21 (assuming ActewAGL decreases prices by 2.56 per cent)



Source: Commission's calculations using data provided by Energy Made Easy website.

Note: Based on an average annual household consumption of 6,500 kWh. Data as of 27 April 2020 for all plans except for ActewAGL's standing offer prices. ActewAGL's standing offer prices have been updated to reflect the price decrease of of -2.56%.

Figure 5.4 Time-of-use offers in the ACT as at 27 April 2020 and the indicative ActewAGL standing offers for 2020–21 (assuming ActewAGL decreases prices by 2.56 per cent)



Source: Commission's calculations using data provided by Energy Made Easy website.

Note: Based on an average annual household consumption of 6,500 kWh. Data as of 27 April 2020 for all plans except for ActewAGL's standing offer prices. ActewAGL's standing offer prices have been updated to reflect the price decrease of -2.56%.

6 Annual recalibration, pass-through arrangements and reset principles

This chapter describes the procedure for setting regulated prices in each year of the regulatory period and the arrangements to pass through the costs associated with regulatory and tax change events triggered during the regulatory period that are not currently allowed for in the Commission's pricing model. It also outlines any 'reset principles', which are reviews the Commission will undertake during the regulatory period to inform the next price investigation.

6.1 Annual recalibration method

The terms of reference require the Commission to undertake three annual price recalibrations during the next regulatory period. The recalibration process will determine regulated prices for 2021–22, 2022–23 and 2023–24, using a similar process to the Commission's current annual adjustment process.

The Commission will use the following process for each annual recalibration:

1. ActewAGL will submit to the Commission on or before 8 May prior to the regulatory year in question the following information:
    - calculation of costs associated with achieving environmental objectives for the year in question, including calculation of LRET, SRES and ACT energy efficiency improvement scheme costs, and any proposed adjustments;
    - calculation of costs associated with smart meters, both the forecast and the actual from the previous year; and
    - full accounting of all proposed pass-through costs.
2. ActewAGL will submit to the Commission for verification the updated network costs for the regulated customer load as soon as they are approved by the AER.
3. The Commission will determine the energy purchase cost component based on data available to 30 April prior to the regulatory year in question and energy losses based on the latest AEMO data as at 30 May.

Based on this information, the Commission will determine the allowed percentage by which the weighted average price change may be adjusted. The Commission will provide its direction to ActewAGL by 5 June prior to the regulatory year in question. ActewAGL will give the Commission its proposed schedule of regulated retail prices including (a) the associated weighted average price increase calculation and (b) evidence of compliance with the side constraint. The Commission will then, subject to an assessment

that the proposal is consistent with the price direction, approve the proposed prices within two working days of receipt of the proposed schedule.

Table 6.1 shows the approach to calculating the individual cost components for the price recalibrations for each year that will determine the allowed percentage increase. Approved pass-through amounts measured in dollars per MWh will be included as an additional component in the Commission's pricing model as required. The Commission will convert the dollar value of the pass-through amount into current dollars at the time of the recalibration using the Commission's standard CPI adjustment formula.

Table 6.1 Proposed annual recalibration of cost components

Component	Method
Energy purchase cost ($/MWh)	The Commission will determine these costs at the time of the recalibration using the energy purchase cost model. The Commission will update forward prices, spot prices, load and the contract position. The heuristic and forward price margin will not be updated during the regulatory period.
LRET and SRES costs ($/MWh)	The Commission will update spot prices and the scheme requirements as published by the Clean Energy Regulator. The cost of debt used to estimate holding costs will not be updated during the regulatory period. ActewAGL will provide estimates to the Commission of these costs for 2021–22, 2022–23 or 2023–24 as relevant and these estimates will be verified and applied using the Commission's methodology.
Energy losses ($/MWh)	Based on the AEMO's estimates for 2021–22, 2022–23 or 2023–24 as relevant.
NEM fees ($/MWh)	Previous year's value adjusted by the change in CPI.
Volatility allowance ($/MWh)	Maintain the allowance determined for 2020–21.
Network costs ($/MWh)	As determined and approved by the AER and applied by ActewAGL to the standard retail contract customer load and verified by the Commission.
Smart meter costs ($/MWh)	Estimates from ActewAGL for the 2021–22, 2022–23 or 2023–24 year as relevant, with relevant adjustment to account for the difference between forecast and actual costs in the previous year.
Retail operating costs ($/MWh)	Adjust previous year's value by the change in CPI and convert this to a per MWh allowance based on customer numbers and energy usage at each annual price recalibration exercise.
ACT Energy Efficiency Improvement Scheme ($/MWh)	Estimates from ActewAGL for the 2021–22, 2022–23 or 2023–24 year as relevant, subject to a prudency and efficiency assessment, with costs determined using the Commission's methodology.
Power of Choice (metering) cost ($/MWh)	Estimates from ActewAGL for 2021–22 and 2022–23, which are verified and applied using the Commission's methodology. There will be no allowance for 2023-24 as the cost recovery period ends in 2022-23.
Pass-through costs ($/MWh)	Pass-through costs verified by the Commission in current dollars as adjusted by the change in CPI if necessary.
Retail margin (%)	Apply a retail margin of 5.6 per cent to cost components (equivalent to 5.3 per cent of the total cost stack) throughout the regulatory period.

The Commission will use the price control formula set out in Box 2.2 to control prices. In addition, a two-percentage point upper bound side constraint applies. This means that the weighted average price change of each individual regulated tariff will be within two percentage points above the weighted average price change determined by the Commission in each financial year of the regulatory period.

6.2 Pass-through arrangement details

As discussed in Chapter 2, there are pass-through arrangements for the regulatory period. The details of the arrangements are set out below. For avoidance of doubt, pass-throughs can be positive or negative. A positive pass-through will increase regulated prices while a negative pass-through will decrease regulated prices.

Regulatory change and tax change events

Events description

Regulatory change events

A regulatory change event is a decision made on or after 31 May 2020 and before 30 June 2024 by any 'authority' (any government or any minister, agency or department, instrumentality or other authority of government and the Commission, the AEMC, the AER or AEMO) that has the effect of materially varying the nature, scope, standard or risk of providing services to regulated retail tariff customers, or the manner in which those services are provided. A regulatory change event includes obligations in respect of:

- any customer hardship program;
- retailer of last resort events;
- environmental schemes, including the LRET and SRES schemes and the EEIS; and
- changes in distribution or transmission charges.

The Commission considers that the costs associated with the AER's Statement of Expectations released in March 2020 in response to COVID-19 pandemic would be eligible to be considered as a regulatory change pass-through event.[73]

Tax change events

A tax change event means the imposition of a relevant tax, the removal of a relevant tax, or a change in the way a relevant tax is interpreted or calculated. A relevant tax is any tax, levy, impost, deduction, charge, rate, duty or withholding tax that is levied on

[73] For further details about the AER expectations of energy businesses due to pandemic, see: https://www.aer.gov.au/system/files/AER%20-%20Statement%20of%20Expectations%20-%209%20April%202020.pdf.

ActewAGL by any authority (as defined above) and is payable by ActewAGL, other than:

- income tax and capital gains tax;
- stamp duty;
- AEMO fees;
- fees payable by ActewAGL in respect of its retail licence;
- penalties, charges, fees and interest on late payments, or deficiencies in payments, relating to any tax; and
- any tax that replaces or is equivalent or similar to any of the taxes referred to above (including any state-equivalent tax).

Initiation and timing of review and price adjustment

ActewAGL or the Commission may initiate a regulatory change or tax change event review. ActewAGL may make an application to the Commission and the Commission may initiate a pass-through review when the Commission is undertaking the annual price recalibration process. A pass-through can only occur as part of an annual price recalibration process.

Materiality threshold

Consistent with the approach adopted in the 2017–20 price direction, the Commission proposes that there is no materiality consideration for regulatory change and tax change pass-through events.

Calculating the pass-through amount

The Commission will calculate the pass-through amount when considering a pass-through event as part of an annual recalibration process. The Commission will have regard to the following matters:

- the implications for the efficient costs of ActewAGL's actions, including whether ActewAGL has taken or omitted to take any action where such action or omission has increased the magnitude of the costs incurred;
- the need to ensure that ActewAGL does not recover costs to the extent that provisions have already been made or otherwise taken into account;
- the need to ensure that ActewAGL recovers only any actual or likely increment in efficient costs to the extent that such an actual or increment in efficient costs is solely a consequence of a pass-through event;
- in the case of a regulatory change event, any costs that ActewAGL has incurred prior to, but in preparation for, the occurrence of that regulatory change event; and
- in the case of a tax change event, any change in the way another tax is calculated, or the removal or imposition of another tax which in the Commission's opinion is complementary to the tax change event concerned.

In addition, in considering any pass-through event, the Commission may consult with affected stakeholders to the extent the Commission considers appropriate.

When determining the maximum average percentage increase in regulated retail tariffs (Y^t),[74] for a regulatory change, tax change or major unforeseen pass-through events, the Commission will include the value of the pass-through event, which can be either negative or positive, in the cost-index model.

6.3 Reset principles

The Commission has included three reset principles in the price direction. First, during the 2020-2024 regulatory period, the Commission will conduct a review of the form of price control used to regulate standing offer prices for the supply of electricity to small customers for the regulatory period from 1 July 2024. As part of the review, the Commission will consider current and expected regulatory and market developments that may have implications for the effectiveness of the form of control. The Commission must call for submissions from interested parties and post its final report on the Commission's website.

Second, 18 months prior to the expiry of the regulatory period the Commission will seek a reference from the relevant minister for the regulation of standing offer prices from 1 July 2024. Third, if the Commission receives an industry reference to investigate and regulate standing offer prices for the supply of electricity to small customers from 1 July 2024, the Commission will consider pass-through events that occur during 2023–24 as part of its investigation.

[74] For more information, see Box 2.1 in Chapter 2 of this report.

7 Transparency and comparability of electricity offers in the ACT

The terms of reference require the Commission to consider whether changes are needed in the ACT to improve the transparency and comparability of electricity offers.

This chapter sets out the Commission's findings and final recommendations relating to comparability and transparency of electricity offers in the ACT. A summary is provided in Box 7.1.

Box 7.1 Summary of Commission's final conclusions

The Commission has found that many ACT electricity consumers have difficulties finding the best offer for their circumstances, and that comparability and transparency of electricity offers could be improved.

Comparing offers is difficult for the following reasons:

- there are a large number of plans;
- there are many different terms and conditions on plans;
- it can be difficult to understand how discounts are calculated; and
- many consumers do not understand the different tariff types.

The ongoing regulation of the retail electricity market in the ACT has meant that retailers have not been able to charge inflated standing offer prices, as has happened in other jurisdictions. While standing offer price regulation in the ACT has contributed to the ACT having lower retail electricity prices than other capital cities, there are still differences between market offer and standing offer electricity prices and some consumers could save by shopping around. Improving consumers' ability to find a better offer could result in savings on electricity bills for consumers.

In other Australian jurisdictions, a range of measures have recently been introduced to improve the transparency and comparability of offers. These include:

- developing a reference bill amount which consumers can use as a common point of comparison for assessing electricity offers; and
- requiring retailers to regularly notify their customers if they have a better offer available, along with advice on how to access it.

While it is still early days, initial market outcomes from these jurisdictions suggest these measures may be helping consumers find the best offer for their circumstances.

The Commission's final recommendations are that:

1. A reference bill amount should be developed to provide ACT consumers with a common point of comparison for assessing electricity offers. The reference bill should be based on existing regulated standing offer prices.
2. The ACT Government should consider imposing a new regulatory obligation on retailers to regularly notify their customers if they have a better offer and ask customers to call

them for information. This new regulatory obligation should be implemented with a new regulatory obligation establishing a Clear Advice Entitlement to help ensure that consumers have information they need to make an informed decision.

The Commission has revised its draft recommendation on the best offer notification, which proposed that electricity retailers should notify customers of their best offer given a customer's circumstances. The Commission found that the costs of implementing a personalised best offer on the bill are likely to be high in the ACT relative to the benefits realised by customers. Due to the low number of smart meters in the ACT, there are difficulties in obtaining detailed data on individual customer's usage patterns, which is needed to identify the best plan for each customer. Recognising these data limitations, the Commission considers a more cost-effective approach is to require retailers to notify customers if they offer a plan that appears to better suit the customer's circumstances and ask those customers to call them for more information. The retailer's staff could then talk with the customer about their consumption pattern and their needs so they can work with the customer to identify the best offer for that customer.

The Commission is also encouraging retailers to regularly notify their customers that they can visit the Energy Made Easy website to check whether better offers are available from other retailers. This is because a 'better offer' notification would only apply to plans offered by the customer's current retailer. The customer could find an even better offer in the market by using the Energy Made Easy website.

7.1 Commission's approach

To inform itself on whether changes are needed in the ACT to improve the transparency and comparability of electricity offers, the Commission examined how offers and discounts are marketed in the ACT, both for standing offers and market offers. The Commission gathered information on offers from electricity retailers in the ACT, as well as from public sources including the Energy Made Easy website and analysis published by Energy Consumers Australia. The Commission focused on examining those aspects that have been identified as causing confusion amongst consumers in other jurisdictions based on recent investigations by the AEMC, the ACCC and the Victorian Government's review of the retail electricity market in Victoria (known as the Thwaites Review). The Commission examined:

- whether retailers use a consistent reference price when advertising offers and discounts;
- whether discounts are applied in a consistent way across retailers; that is, whether discounts apply to the total bill or only to electricity usage; and
- the extent to which headline prices and discounts are conditional.

In addition, the Commission gathered stakeholder views, including on consumer experiences in comparing offers and the types of changes that would improve comparability and transparency. The Commission:

- held a workshop with electricity retailers and consumers groups to discuss these issues on 25 September 2019;
- undertook targeted consultation with consumer groups and financial counsellors;
- surveyed ACT electricity consumers; and
- received feedback from consumers via the Commission's online feedback form.

The Commission also considered the advantages and limitations of various options and recent regulatory developments in other jurisdictions, as well as the specific market context in the ACT.

In its draft report, the Commission made the following recommendations for improving the transparency and comparability of electricity offers in the ACT:

1. A reference bill amount should be developed to provide ACT customers with a common point of comparison for assessing electricity offers. The reference bill should be based on existing regulated standing offer prices.
2. The ACT Government should consider imposing a new regulatory obligation on retailers to regularly notify their customers whether they are on the best offer and how much can be saved by switching, taking account of the customers' circumstances.

In the draft report, the Commission also encouraged electricity retailers to notify their customers that they can visit the Australian Government's energy comparison website, Energy Made Easy, to check whether there is a better offer available from another retailer.

Following the release of its draft report, the Commission sought feedback on its draft recommendations from stakeholders via public hearing, submissions and targeted consultation. This consultative process allowed the Commission to gather extensive feedback from stakeholders including retailers, consumer advocacy groups, small businesses and the general public. The Commission also received input from these stakeholders on various implementation issues relating to these recommendations and has taken into account this valuable feedback. Formal submissions, along with a transcript of the Commission's public hearing, are available on the Commission's website.

7.2 Existing measures in the ACT and other jurisdictions

This section describes recent regulatory developments in other jurisdictions to improve the transparency and comparability of offers, and the Commission's assessment of whether there could be benefits from adopting such approaches in the ACT.

7.2.1 Recent regulatory developments in other jurisdictions

In 2019, new regulations were introduced in retail electricity markets in Victoria, South Australia, New South Wales, and South East Queensland (SEQ). The new regulations are intended to reduce prices for 'standing' or 'default' electricity products and to make it easier for customers to understand and compare different offers. The two main regulations are:

- in April 2019, the AER introduced new DMO prices that will apply from 1 July 2019 to 30 June 2020 in NEM network distribution zones where there is no retail price regulation; and
- from 1 July 2019, the Victorian Government introduced a new VDO to replace standing offers throughout the state.

In both cases this involved abolishing standing offers and placing restrictions on the way that prices are marketed. However, the policies have been implemented in slightly different ways at the national level (in New South Wales, South Australia and SEQ) and in Victoria.

The AER's Default Market Offer

On 30 April 2019, the AER released its final determination on the DMO bills to apply from 1 July 2019 in NSW, South Australia and SEQ. In determining the level of its DMO bills, the AER sought to balance two potentially competing objectives. Specifically, it wanted to reduce the prevailing level of standing offer prices, but without discouraging customers from shopping around or disincentivising investment and innovation by retailers. The purpose of the default offer is to act as a more reasonable 'fall-back' option for disengaged consumers and is not intended to be the lowest, or close to the lowest, price in the market.[75] For this reason, the AER set the first DMO as the midpoint between the median market offer and median standing offer. This methodology was updated in the most recent DMO determination to indexation of the DMO based on forecast input costs.[76] This is because the median standing offer is currently around the DMO level and the original methodology would automatically result in a lower DMO price.

The DMO 'price' is specified for each network distribution zone as an annual bill in dollar amounts, based on an assumed annual electricity usage for that zone. In other words, the DMO 'prices' do not assume a pricing structure; that is, they do not specify fixed and variable components.

To make it easier for customers to compare competing offers on a 'like-with-like' basis, these DMO 'prices' must be used as a reference bill amount in each network distribution zone from which all advertised discounts must be calculated and presented to customers.

[75] ACCC 2018, p 249.

[76] ACCC 2020a, p 27.

Victorian Default Offer

On 3 May 2019, the ESC provided its final advice on the level of the VDO to apply from 1 July 2019, which was accepted by the Victorian Government. The VDO was introduced to replace standing offer prices and is also available on request to customers who do not automatically receive the VDO.[77] The aim of the VDO is to set a price for electricity to consumers in Victoria that reflects the efficient costs of running a retail business.[78] This makes the VDO among the lowest offers available to Victorian customers. As noted above, the purpose of the DMO is different; it is a 'safety net' for consumers and is not meant to be one of the lowest offers available.

Like the DMO bill, these yearly VDO tariffs must now be used as a reference point by retailers when advertising discounts for non-VDO market offer plans in Victoria. Specifically, all plans must show an annual yearly saving against the relevant VDO product, either as a dollar amount or a percentage discount. As with the DMO, this yearly saving is for a typical-usage customer in the relevant distribution area – the actual savings will vary from customer to customer depending on their usage.

The ESC has also imposed other obligations on retailers aimed to improve transparency. These do not feature in the AER's DMO framework. For example, retailers are required to regularly display their 'best offer' on customers' bills, along with advice on how to access it.[79]

Early insights on the outcomes of the VDO and DMO regimes

The VDO and DMO have been introduced recently. It remains to be seen whether, and by how much, the reforms have improved the transparency and comparability of electricity offers in the relevant jurisdictions on an ongoing basis.

In its April 2020 final determination for the 2020-21 DMO, the AER found that the DMO has met its initial objective in lowering unjustifiably high standing offer prices.[80] The AER made the following observations on the effects that the DMO has had on the retail electricity market so far:

- The DMO reduced residential standing offer prices by $118 to $181 per year, depending on the distribution zone. For small business consumers, the DMO reduced standing offer prices by up to $896 per year.
- The change in median market offers for residential customers across the regions ranged from a reduction of 4.5 per cent to a marginal increase of 0.5 per cent (that is, comparing December 2019 data to October 2018 data).

[77] ESC 2019d, p 8.

[78] ESC 2019d, p 12.

[79] ESC 2018b, p 3.

[80] AER 2020b, p 8.

- Most standing offers and high-priced market offers continue to be at or below the DMO price.
- Median market offers for small business customers reduced in all regions by between 2 and 3 per cent (that is, comparing March 2020 data to December 2019 data), with the exception of the Energex region, which had a 15 per cent reduction in the lowest market offer.
- While it may still be too early to reach definitive conclusions about the impact of the DMO on competition in the retail market, current evidence suggests the DMO has not had a detrimental impact on competition, given decreases in market offer prices.[81]

Other reports have also included observations on the initial market outcomes since the introduction of the DMO and VDO. These are the VDO Expert Panel's report on initial market outcomes in November 2019 and the ACCC's Inquiry into the National Electricity Market reports in August and November 2019; the findings from these inquiries are discussed below. The inquiries examined how the VDO and DMO affected the level of prices and range of electricity offers available to consumers. They did not directly examine consumer perceptions regarding experiences of whether the comparability and transparency of offers have improved.

An initial outcome from the introduction of the VDO is that it has led to a shift away from conditional discounting. The VDO Expert Panel stated that:

> A significant factor behind the shift away from conditional discounting is likely to have been the new requirement that retailers offering discounts must now disclose how their discounts are calculated against the benchmark of VDO tariffs. [82]

This finding is consistent with the ACCC's Inquiry into the National Electricity Market report from November 2019, which examined the effects of both the DMO and VDO. The ACCC stated that:

> retailers have continued to move away from advertising discounts off market offers where those discounts only apply if the customer meets certain conditions, thereby enabling customers to more easily understand the price they could be liable to pay. [83]

The ESC's Victorian Energy Market report released in March 2020 showed that the proportion of Victorian customers on discount offers had fallen from 74 per cent in January 2019 to 40 per cent in January 2020.[84]

[81] AER 2020b, pp 8,10 and 26.

[82] Energy Victoria 2019, p 12.

[83] ACCC 2019a, p 96.

[84] ESC 2020a, p 7.

The shift away from conditional discounting may improve the comparability of electricity offers. As described in section 7.3, many ACT consumers have found conditional discounting a source of confusion when comparing electricity offers.

The ACCC's August 2019 report for its Inquiry into the National Electricity Market found that offers are now presented in a way that should make it easier for customers to identify cheaper plans:

> The examples from after 1 July 2019 also show that retailers are still advertising offers in different ways, but the reforms ensure that the same basic information is provided to customers (a comparison to the reference price, the lowest possible price, and clear conditions of any conditional discounts). [85]

The ACCC report stated that customers are better able to identify cheaper plans because retailers are no longer advertising discounts based on inflated and inconsistent base rates.[86]

7.2.2 Potential implications for the ACT

The Commission's regulatory approach involves determining a maximum average percentage change that ActewAGL can apply to its regulated tariffs, as described in Chapter 2. ActewAGL offers a suite of regulated tariffs and, provided the weighted average change in those tariffs does not exceed the maximum allowable percentage change, it will have complied with the Commission's price direction. In other words, unlike the DMO and VDO regimes, which each determine directly the maximum reference tariffs that retailers may charge, the ACT arrangements do not place direct constraints on individual regulated prices. ActewAGL retains discretion to alter the levels of its various regulated tariffs, provided that it stays within the weighted average price change determined by the Commission.

In its draft report, the Commission recognised that some of the issues identified in deregulated markets in other jurisdictions that provided the motivation for the DMO and VDO may not be as significant in the ACT. In particular, the ongoing price regulation in the ACT has meant that retailers have had less ability to increase standing offer rates compared to those in other jurisdictions. It has also meant that retailers in the ACT have been unable to use inflated standing offer rates as a reference point for discounting, which contributed to consumer confusion in other jurisdictions. This is evidenced by the fact that electricity prices in the ACT are among the lowest in Australia.[87]

Nevertheless, the Commission has found that comparing offers and discounts in the ACT is still difficult for consumers because of how offers are marketed and the type of information that is provided to consumers. These issues are discussed in section 7.3.

[85] ACCC 2019c, p 66.

[86] ACCC 2019a, p 96.

[87] ICRC 2019b, p 22.

The Commission has considered whether features of the DMO and VDO could be appropriate for adoption in the ACT.

One of the features of the DMO and VDO arrangements is that each require retailers to advertise offers in comparison to a relevant reference bill amount set by the regulator (each in slightly different ways). This helps customers consider available offers and determine which offer is likely to lead to a lower electricity bill. The ACT does not currently have a consistent benchmark for assessing offers. However, the DMO and VDO prices – and the discounts referenced against them – each have their limitations.

A key limitation is that the DMO and VDO prices can only show what a representative or 'average' customer would pay under certain assumptions (that is, an average usage level and pattern). Accordingly, for a customer to work out the bill they would pay for a specific DMO or VDO price, they will need to account for their own usage characteristics. Specifically:

- The bill that an individual customer will pay using the VDO prices will depend upon how much they consume. Depending on their usage, the consumer might end up paying more or less than the indicative bill for an average customer.
- There are even more variables driving what a customer will pay under a DMO plan. The bill will vary not only based on how much electricity is consumed but how the retailer has set the fixed and variable charges for the particular offer chosen by the consumer.
- Some customers may need to account for when they consume electricity (that is, their pattern of usage), such as those on time-of-use or demand tariffs.

The size of any discount that a customer will receive relative to the DMO and VDO prices will also vary depending on these factors.

Accordingly, although the new arrangements should help to reduce some of the difficulties that have existed previously around comparability of retail offers, some customers might still find it difficult to work out what they will save and to choose the best offer for their circumstances.

The VDO arrangements may offer some advantages in this respect. The arrangements place additional obligations upon retailers to inform their customers if the customer's retailer has an offer that better suits their needs. Specifically, retailers must: periodically inform their own customers (at least once every three months) whether they are getting the best deal from that retailer given their circumstances; give advance notice of price increases; and disclose important contractual conditions like conditions on any discounts. However, these requirements will not guarantee that a customer will find the best deal since:

- there might be better deals available from other retailers that would only be discovered through additional searching by the customers themselves; and
- some consumers may have difficulty understanding the additional information (for example, if a customer speaks English as a second language).

In developing its final recommendations, the Commission has taken into account the advantages and disadvantages of these arrangements, and the initial findings on the outcomes of adopting these measures in other jurisdictions.

7.2.3 Other measures to improve transparency and comparability

There are a number of measures that aim to improve the transparency and comparability of electricity offers. The Commission has considered these as part of this investigation.

Consumer data right

On 26 November 2017, the Australian Government announced the introduction of a consumer data right in Australia. The consumer data right improves consumers' ability to compare and switch between products and services. It does this by requiring businesses to share consumer data with an accredited service provider, such as a comparison website, so that consumers can obtain more tailored and competitive services. Consumers need to consent and authorise their data to be shared under the consumer data right.[88]

In May 2018, the Australian Government announced its intention to include energy data in the consumer data right. This will allow consumers to require a company such as their energy retailer to share their data with an accredited service provider (such as another retailer). The Treasury Laws Amendment (Consumer Data Right) Bill 2019, the legislation to enact the consumer data right, was passed by Parliament on 1 August 2019 and commenced on 13 August 2019.[89] The Consumer data right in the energy sector is expected to commence during the first half of 2020.[90]

Australian Energy Regulator rules on how offers are presented

The AER has made rules about what information must be presented to consumers and how it has to be presented to improve transparency and comparability.[91] In states and territories that have implemented the National Energy Retail Law (which includes the ACT), energy retailers are required to have Basic Plan Information Documents for each of their offers. These factsheets help consumers compare offers by requiring all retailers to present information on their offers in the same way. They set out the prices, fees and charges, and contract details that apply to each offer.[92]

[88] ACCC 2020b.

[89] ACCC 2019a, p 31.

[90] COAG Energy Council, Meeting Communique, 19 December 2018, http://www.coagenergycouncil.gov.au/publications/21st-energy-council-ministerial-meeting.

[91] Details at: https://www.aer.gov.au/consumers/my-energy-bill/tariff-and-fees-explained.

[92] AER 2020a.

Advance notice of price changes

On 27 September 2018, the AEMC made a final rule requiring retailers to notify their electricity and gas customers at least five business days before their energy prices change. The rule requires retailers to provide information on existing and new tariffs and the date on which the change occurs. Retailers must also inform customers that they can request their historical billing and energy usage data to assist in assessing the impact of the price change.[93]

AEMC final decision to limit conditional discounts on energy offers

On 27 February 2020, the AEMC made a final rule that restricts the level of conditional discounts and fees on energy offers. It achieves this by restricting conditional discounts and conditional fees to the 'reasonable costs' the retailer is likely to incur when payment conditions are not met. The final rule aims to:

- remove excessive penalties for customers on conditional discounts who fail to meet a contract condition; and
- improve the comparability of offers by simplifying and reducing conditional discounts. [94]

The AEMC's final rule applies to new retail contracts signed from 1 July 2020.

Comparison websites

Electricity offer comparison websites aim to help consumers select the best offer for their circumstances. These sites can often tailor offers to a customer's usage level (provided the customer knows their usage level) or to an average usage level that depends on household size.

The federal government's comparison website, Energy Made Easy (which is administered by the AER), compares offers for customers in jurisdictions where the National Energy Retail Law is implemented, namely, includes Tasmania, the ACT, South Australia, NSW and Queensland.[95] There is also a range of for-profit comparison websites.

The ability of comparison websites to inform consumers depends, in part, on whether consumers know about the website and can find and use the website effectively. Comparison websites can compare offers based on a particular usage level. However, if usage data cannot be provided, comparison websites often assume an average usage. This may not be suitable for consumers whose electricity usage is significantly different from the average customer. The enhanced version on Energy Made Easy, launched in May 2020, makes comparing energy deals easier by enabling consumers to search for

[93] AEMC 2018, p ii.

[94] AEMC 2020b.

[95] ACCC 2020a, p 12.

energy plans using their energy meter data or by uploading a bill. While this capability improves the comparison process, the full comparison of all the relevant offers will only available for customers with smart meters installed.

Comparison websites generally do not show every available offer, although government-run comparison websites are generally more comprehensive. Comparison websites that operate on a for-profit basis may only show offers from retailers that pay to have their offers advertised. This means that a for-profit comparison website may only consider a small number of retailers and offers in suggesting options to a consumer and may not consider certain offers that would best suit the customer's circumstances.

Retailer websites

In the ACT some retailers provide additional information on their own websites, above what is required by the AER, to help customers understand the features of different electricity offers. This includes the provision of information sheets that include diagrams to help consumers understand each offer and whether it suits their circumstances.

The Commission does not have information on how many consumers access detailed information from retailers' websites or how helpful consumers find it.

7.3 ACT consumers' experiences of finding the best offer for their circumstances

This section outlines the Commission's findings in relation to comparability and transparency of electricity offers in the ACT. The Commission arrived at these findings by gathering the views of consumers and other relevant information in a variety of ways.

First, the Commission surveyed ACT electricity consumers to understand the difficulties consumers face when selecting an appropriate electricity plan. The survey sought feedback on potential options to improve the comparability and transparency of electricity offers. The survey was conducted by the ACT Government's Research and Insights Unit using the ACT Government's YourSay Community Panel. The online survey was opened on 27 November 2019 and closed on 4 December 2019. The YourSay survey received 1,057 responses. The detailed survey responses are available on the Commission's website.[96]

Second, the Commission gathered information on offers and pricing practices from the three largest retailers in the ACT (ActewAGL, Origin Energy and EnergyAustralia).

Third, to further inform its investigation, the Commission held a workshop in September 2019 with electricity retailers and consumer groups.

[96] Details at:
www.icrc.act.gov.au.

Fourth, the Commission analysed results from the Energy Consumer Sentiment Survey (December 2019) published by Energy Consumers Australia.

The information gathered suggests that many ACT electricity consumers have difficulties finding the best offer for their circumstances, and that comparability and transparency of electricity offers could be improved.

7.3.1 YourSay survey findings

The YourSay survey showed that 67 per cent of respondents found comparing electricity plans to be a difficult experience. Around 72 per cent of respondents said that there are too many different terms and conditions on plans and that it is too hard to work out how the discounts are calculated. Many respondents did not understand the different tariff types (54 per cent) and considered there to be no easy way to compare the plans on offer (52 per cent).

In addition, some free-text responses to the survey suggest that customers on ActewAGL's demand tariff do not understand how the demand tariff works and are unaware that they can ask to change to a different tariff type.

Overall, only 18 per cent of survey respondents indicated they were 'confident' that their current electricity plan is best for their circumstances.

These findings are consistent with a smaller survey of 202 ACT consumers conducted by the ECA, which found that 52 per cent of respondents believe that the available information is easily understandable, the lowest in Australia.[97]

Many consumers do not use electricity price comparison websites

The YourSay survey found that 48 per cent of respondents have never used a comparison website to compare electricity plans. Of those respondents who had used a comparison website, only 30 per cent considered it to be useful in helping them find a better electricity plan. This was similar to results from the ECA survey showing that only 33 per cent of respondents who considered switching had used a comparison website to assist their search.[98]

Responses to the YourSay survey conveyed a general sense of distrust in comparison websites, with 49 per cent of respondents believing that they only promote companies that pay the best commissions, 44 per cent believing that the best rates are not displayed, and 31 per cent not feeling comfortable providing the details required for comparison. Several comments submitted to the survey also expressed irritation at the number of phone calls from comparison agencies following use of private sector comparison websites.

[97] Energy Consumers Australia 2019a, p 137.

[98] Ibid, p 56.

The survey found that awareness of the Australian Government's electricity price comparison website, Energy Made Easy, is low. Only 17 per cent of respondents had used the website.

Feedback on options for improving comparability

Most respondents (73 per cent) considered that introducing a benchmark price that all electricity plans must be advertised against would assist with comparisons. As discussed in previous sections, the assessment of the early impacts of the DMO and VDO reforms suggests that customers are now better able to compare electricity offers. A number of free text responses to the YourSay survey indicated that referencing pricing would help consumers find the best offer for their circumstances.

Most respondents (70 per cent) considered that a comparison website would help them find a better electricity plan, despite the distrust of comparison websites described above. These results suggest that improving awareness of the Australian Government's Energy Made Easy website could go some way in helping consumers to find a suitable plan.

Many respondents (60 per cent) considered that it would help them find the best offer if retailers printed their best plan for the customer's consumption on their quarterly electricity bill. As described above, this requirement has recently been introduced in Victoria.

7.3.2 Analysis of ACT electricity market

Electricity offers and tariff types

As outlined above, the YourSay survey found that most respondents did not understand the different tariff types and found comparing electricity plans to be difficult and confusing.

The Commission's analysis found there are many different types of electricity offers in the ACT. For both standing offers and market offers, there are offers with:

- flat rate tariffs – these include a fixed supply charge and a usage charge;
- time-of-use tariffs – these include a fixed supply charge and different usage charges depending on the time of use;
- step tariffs – these include a fixed charge and different usage charges depending on the amount of electricity consumed; and
- demand tariffs – these include a fixed charge, a usage charge and a demand charge (based on the consumer's peak demand in a month).

For flat rate, time-of-use and step tariffs, there are also offers with controlled load and uncontrolled load. A controlled load is electricity supplied to specific appliances, such as electric hot water systems or slab or underfloor heating, which are separately metered.

For flat rate, time-of-use and step tariffs, there are further differences in supply charges depending on the type of meter installed at the premises (smart meter or basic meter).

Table 7.1 shows the number of single rate and time of use offers available to residential electricity consumers in major NEM cities, sourced from the Energy Made Easy and the Victorian Energy Compare websites.[99] These offers include standing offer and market contracts and offers with controlled and non-controlled loads.

The table indicates that while Canberra's residential electricity users have fewer offers compared with other major cities, there are enough to make the task of comparison quite complex. This is supported by the findings from the YourSay survey, in which 52 per cent of respondents believed there were too many plans and no easy way to compare them.

Table 7.1 Retail electricity offers as at 24 April 2020

	Single rate	Time of use	Total
Canberra	179	38	217
Sydney	335	440	775
Brisbane	283	203	486
Adelaide	188	1	189
Melbourne	580	274	854
Hobart	26	5	31

Source: Energy Made Easy and Victorian Energy Compare websites.

Advertising of discounts

Information gathered from ActewAGL, Origin Energy and EnergyAustralia by the Commission suggests the way offers and discounts are advertised may make it difficult for consumers to compare offers.

The Commission has found that most market offers in the ACT are advertised using discounts calculated off standing offer prices. The two exceptions are ActewAGL's Certain Saver plan and EnergyAustralia's No Frills plan, which are not advertised with a discount off a standing offer rate.

[99] Price comparisons on the Energy Made Easy website are only available for jurisdictions where the National Energy Retail Law applies, which is not the case in Victoria. In Victoria, customers can compare energy offers using Victorian Energy Compare website.

The discounted offers may be difficult to compare because:

- the standing offer rates, which are the benchmark for most market offer discounts, differ across retailers;
- retailers typically have more than one standing offer and discounts are calculated off different standing offers depending on the features of various market offers; and
- retailers apply discounts to different parts of the bill. For example, ActewAGL and Origin Energy advertise discounts which apply only to usage charges, while Energy Australia advertises discounts that apply to the total bill (that includes the fixed supply charge and usage charges).

Conditional discounts and product bundling

As in other jurisdictions, retailers in the ACT apply conditional discounts. For example, ActewAGL and Origin Energy have conditions attached to their discounts, such as pay on time, electronic bills, direct debit, and mandatory purchase of gas. EnergyAustralia's discounts are unconditional.

The terms and conditions vary by retailer and plan type. This can make it difficult for consumers to easily compare electricity plans. As described in section 7.2.3 the AEMC has made a final rule that limits conditional discounts on energy offers and this may affect the terms and conditions imposed by retailers in the future.

The Commission also found that some discounts are conditional on bundling electricity and gas. This may increase the complexity of making comparisons of offers because the comparison will involve two products.

Electricity usage assumptions

The Commission found that retailers do not use comparable electricity usage information when advertising their offers as annual bill amounts. This will make comparing offers across retailers, based on their annual bill amounts, difficult. For example:

- Origin Energy's advertisements are based on an annual consumption of 4,400kWh.
- EnergyAustralia allows customers to calculate the bill amount based on different daily usage levels (high - 20kWh, medium - 10kWh and low - 5kWh).
- ActewAGL does not advertise an annual bill amount but provides links on its website to the Energy Made Easy website, which shows an estimated annual bill.

7.3.3 Submissions

In its submission to the issues paper, ActewAGL stated that the following factors may make it difficult for consumers to find the best offer for their circumstances:

- retailers use inconsistent consumption figures for an 'average' customer when advertising offers;
- a customer's actual usage level will differ from the advertised consumption level, making it difficult to accurately compare offers;
- some retailers offer discounts off consumption charges whereas others have discounts off the total bill;
- some retailers apply conditions, and other benefits or bonuses to an offer, while others do not; and
- for certain offers it is not practical to make a comparison against a standing offer or another retailer's offer. [100]

The ACAT identified three distinct issues associated with electricity offers in its submission to the issues paper:

- difficulties in understanding different tariff structures available to customers with different meter types, including customers with roof-top solar panels;
- difficulties some customers may face in changing electricity retailers to access better offers due to existing debts; and
- difficulties in relation to customer understanding of and/or ability to access offers with conditional discounts. [101]

ActewAGL noted that the AER's Energy Made Easy website does not incorporate cost reflective tariffs, such as demand tariffs, for electricity offer comparison purposes.[102]

The Commission received a submission from an electricity consumer regarding ActewAGL's demand tariff. The submission provided a first-hand account of the difficulties experienced in obtaining information about the demand charge to understand how it applied.[103]

EnergyAustralia stated that existing regulations may be an important factor to consider in deciding whether to make changes to improve transparency and comparability. It stated that:

> ActewAGL's standing offers are already regulated in line with efficient costs. Furthermore, the maximum spread of market offers around the average (based on the Commission's data, around ±13%, compared to ±33% in Sydney for example) suggests the switching benefits available to the bulk of ACT customers is small. In turn, competitive pressure in the ACT retail market may be dulled. [104]

[100] ActewAGL 2019, p 32.

[101] ACAT 2019, p 5.

[102] ActewAGL 2019, p 32.

[103] Electricity Consumer, p 4.

[104] EnergyAustralia 2019, p 3.

7.4 There are potential savings for consumers from improving comparability and transparency in the retail electricity market

The Commission considers that improving consumers' ability to find the best offer for their circumstances could result in savings on electricity bills for some consumers. As noted in section 7.3.1 above, only 18 per cent of ACT electricity consumers are confident that they are on the best plan for their circumstances.

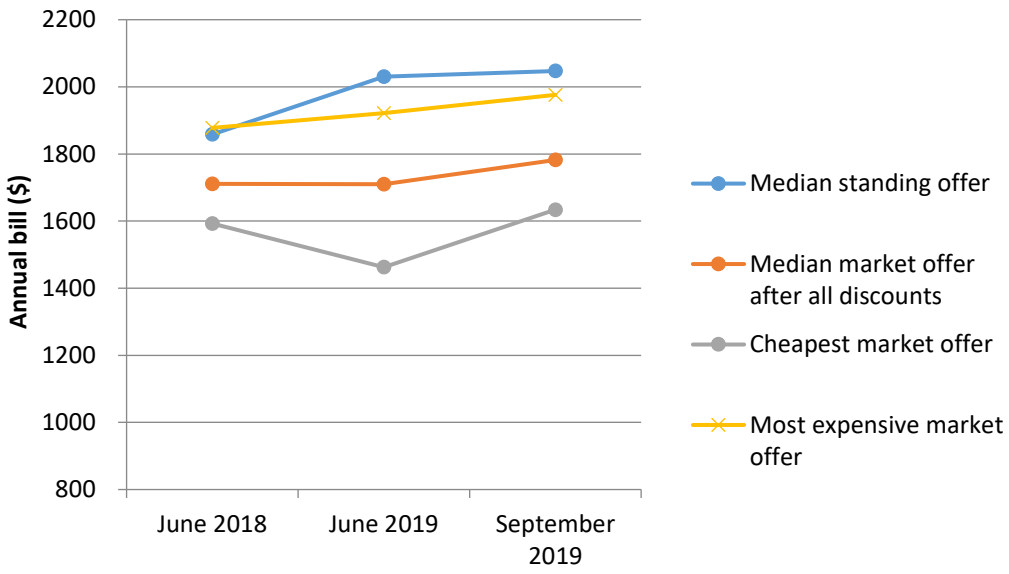
Figure 7.1 shows the annual bill amounts for a variety of electricity offers in the ACT. It shows that the annual bill for the median standing offer is higher than that for the median market offer, and that both of these are above the annual bill for the cheapest market offer. For instance, the difference between the cheapest market offer and the median standing offer is around $400 per year, while the difference between the highest market offer and the median standing offer is considerably smaller at around $70 per year.

It is important to note that these potential savings are based on a hypothetical residential consumer on the median standing offer rate, with consumption levels and patterns reflecting the average of the ACT population. Similar savings may not be achievable by consumers in different circumstances. Rather, this example serves to illustrate that significant savings may be available to consumers who are able to switch to an offer that is better suited to their circumstances than their current offer. Improving the comparability and transparency of offers will assist in helping consumers to determine whether their current offer is best suited to their needs, or if savings can be achieved through switching.

Around 50 per cent of ACT consumers are on standing offer contracts.[105] Figure 7.1 suggests that there may be benefits for many ACT consumers from switching to market offers, provided there is sufficient comparability and transparency to help consumers find the best offer for their circumstances.

[105] AER 2019, p 33.

Figure 7.1 Annual bills for offers in the ACT



Source: AER State of the Energy Market, data update from November 2019

Note: Data includes all generally available offers for residential customers using a flat rate tariff structure. Annual bills are based on average consumption of 6545 kWh.

7.5 Commission's consideration

In the draft report the Commission considered that practical options are available to improve the comparability and transparency of electricity offers in the ACT. In summary, the Commission's draft report concluded that comparability and transparency of offers could be improved if:

- there was a reference bill amount which consumers could use as a common point of comparison for assessing electricity offers; and
- electricity retailers notify customers of their best offer given a customer's circumstances, including how much they could save by switching.

The Commission made two draft recommendations to achieve this and sought stakeholder feedback on its draft recommendations. The Commission also suggested that electricity retailers should be encouraged to notify their customers that they can visit the Australian Government's energy comparison website, Energy Made Easy, to check whether there is a better offer available from another retailer.

In making its final recommendations, the Commission has had regard to the submissions received in response to the issues paper and draft report, as well as feedback provided at the public hearing held on 5 March 2020. The Commission's final findings and recommendations are discussed in the following subsections.

7.5.1 Reference bill

In the draft report, the Commission considered that a reference bill would provide ACT consumers with a consistent benchmark to help them compare offers. It would overcome the current issue of inconsistent discounting and advertising practices, which create confusion for many customers.

The draft report recognised that the key limitation of an annual reference bill is that it can only show what a representative or 'average' customer would pay under certain assumptions. Accordingly, for a customer to work out what they will pay, they will need to account for their own usage characteristics. For instance, customers with gas may need to account for their lower than average electricity usage, whereas customers with controlled load may need to account for their higher than average electricity usage. Similarly, for customers considering time of use tariffs, they will need to consider their pattern of usage in addition to total usage.

The Commission notes that this issue was also acknowledged by the ACCC when it recommended a reference bill:

> While consumers are still unlikely to be able to determine the best offer for them based on headline discount alone, as this would require a tailored calculation based on household consumption patterns, this approach will allow consumers to easily determine whether one offer is likely to lead to lower bills than another.[106]

In the draft report the Commission considered that this issue could be partially overcome by developing a range of reference bill amounts to reflect the average characteristics of several different types of consumers. For example, for residential customers in Victoria, the VDO regulations require retailers to display the annual cost for three standardised customer usage profiles (low, medium and high) on all marketing material. Similarly, there are two versions of the DMO, one for customers with a controlled load and one for customers without a controlled load. Both VDO and DMO arrangements include one reference bill for small business customers.

While this approach would partially address a limitation of a reference price, the range of reference prices would reflect an average customer from each different customer group. Customers who have much higher or lower usage patterns than the average would have to take this into account in making their comparisons. To avoid making the presentation of reference prices too complex, the Commission considered that it may be appropriate to restrict the number of different customer groups for which reference bill amounts are developed.

In its draft report, the Commission highlighted other practical questions that would need to be resolved should this measure be implemented and sought feedback on these questions from stakeholders. These are discussed further in this report and include:

[106] ACCC 2018, p 265.

- selecting an appropriate rate to base the reference bill on;
- developing an appropriate usage profile for the reference bill; and
- determining how retailers' electricity offers should be advertised against the reference bill.

In the draft report the Commission considered that ActewAGL's regulated standing offer rates should be used in developing the reference bill. This approach was supported by a number of stakeholders who made submissions to the Commission's issues paper, including ACAT, ActewAGL and Origin Energy.[107]

The Commission's draft report recognised that, given the limitations of a reference bill discussed above, some customers might still find it difficult to find the best offer for their circumstances. The Commission therefore made a draft recommendation for a requirement for retailers to notify customers if they think they have a better offer (discussed below) and encouraged retailers to improve awareness of the Energy Made Easy website.

Submissions

ActewAGL recommended a reference bill framework that is similar to the AER's approach to the DMO, in that it would be based on an annual bill amount and advertising requirements would apply to the same tariff types (that is, flat rate and time of use tariffs). ActewAGL also proposed that a reference bill be based on the following regulated standing offers:

- ActewAGL Home Plan;
- ActewAGL Home Plan (with controlled load);
- ActewAGL TOU Plan;
- ActewAGL TOU Plan (with controlled load); and
- ActewAGL Business Plan.[108]

ActewAGL submitted that if the Commission does not include smart meters in ActewAGL's regulated cost stack, then two sets of reference bills should be developed—one set for customers with smart meters, and another set for customers without smart meters.[109]

EnergyAustralia considered that while well intentioned, reference pricing could cause confusion for customers with consumption levels different from the average.[110] EnergyAustralia also stated that it is unclear whether customers understand the difference between comparing their market offer to a reference price and comparing their market offer to other retailers' market offers.[111] Subsequently, EnergyAustralia

[107] ACAT 2019, p 2; ActewAGL 2019, p 11; Origin Energy 2019, p 8.

[108] ActewAGL 2019, p 20.

[109] Ibid

[110] EnergyAustralia 2020, p 1.

[111] Ibid

recommended that the Commission explore whether the reference price is required with developments in the market such as the ACCC's Consumer Data Right provisions and the AEMC's rule change regarding conditional discounting. [112] EnergyAustralia considered that if the Commission were to implement a reference bill, that it should be a weighted average across three of ActewAGL's tariffs (Home, Home Saver, Home Saver +).

EnergyAustralia suggested that the reference bill regime should exclude energy plans that do not fit the standard energy plan model (usage + supply charge), such as EnergyAustralia's 'Easy Plan' which provides customers the capacity to pay a different monthly price depending on their usage band.[113]

EnergyAustralia stated that the advertising and marketing requirements of the reference pricing requirements should be aligned with the DMO and VDO.

ACT Energised Consumers Project Partners suggested that the implementation of a reference bill could be strengthened with the supplementary implementation of the Basic Service Offer framework that accompanies similar provisions in Victoria under the VDO.[114] As part of this framework, the Commission would determine the fair price for energy and require all retailers in the ACT to offer this tariff to everyone. ACT Energised Consumers Project Partners also suggested that a 'social tariff' be developed for low-income households to ensure these households have access to electricity at an affordable price relative to their level of income.[115]

The ACAT considered that the reference price should be developed using ActewAGL's regulated standing offer rates and that the Commission should use the flat rate tariff if it intends to only have one reference price. The ACAT believes this rate would be most suitable as it applies to analogue meter customers who form the majority of the current ACT customer base.[116]

Commission's final conclusions

The Commission has retained its draft finding that consumers will be better placed to identify a better offer for their circumstances if all advertised offers and discounts are compared against a relevant reference offer. The Commission recommends that this is done through the introduction of several reference bills targeted at specific customer groups, in order to provide ACT consumers with a consistent benchmark to help them compare offers. The Commission considers that this would overcome the current issue of inconsistent discounting and advertising practices, which creates confusion for many customers.

[112] EnergyAustralia 2020, p 2.

[113] EnergyAustralia 2020, p 3.

[114] ACT Energised Consumers Project Partners 2020, p 6.

[115] Ibid

[116] ACAT 2020, p 9.

Many stakeholders, including ACAT, ACT Energised Consumers Project Partners, Origin Energy and ActewAGL, supported introducing a reference bill in their submissions. As discussed in section 7.3.1, the majority of respondents to the YourSay survey stated that a reference bill would help them find the best offer for their circumstances, suggesting that customers generally would also support the introduction of a reference bill.

The Commission has considered ACT Energised Consumers Project Partners' proposal for introducing an additional 'Basic Service Offer' and a social tariff. The Commission recognises that the regulated standing offer rates only apply to ActewAGL customers. However, these regulated standing offer rates influence the prices of other market rates due to the dominance of ActewAGL's regulated tariffs in the retail electricity market. Further, the Commission's recommendations on improving the comparability and transparency of electricity offers would, if accepted by the ACT Government, apply to all retailers operating in the ACT, meaning that the benefits of the reference bill regime would be available to all customers regardless of their retailer.

The Commission notes that the ACT Government offers a range of schemes and concessions to help low income and vulnerable customers meet the costs of their electricity bills. For example, the ACT Government provides eligible, low-income ACT households with rebates of up to 60 per cent on costs for the supply and installation of rooftop solar systems, including necessary upgrades of associated switchboards and smart meter installations. Participants also have access to an interest free loan to pay back the remaining installation costs over a three-year period. The ACT Government estimates that households taking up this offer will save between $300 and $900 per annum on their electricity costs.[117] The ACT Government also provides a $700 rebate of annual electricity bills to eligible concession card holders.[118] There are also rebates on the electricity accounts for customers who depend on the life support equipment, which is electrically operated, or require medical heating and/or cooling.[119]

Implementation issues

In its draft report, the Commission discussed a number of implementation issues that would need to be worked through if the ACT Government decides that a reference bill should be implemented. The Commission has considered these issues further, taking into account feedback and suggestions from stakeholders. This is to provide stakeholders with clarity on scope of the Commission's final recommendation, as well as the possible design of the methodology for setting the reference bill.

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[117] Details at:
https://www.cmtedd.act.gov.au/open_government/inform/act_government_media_releases/rattenbury/2017/helping-low-income-households-lower-their-emissions-and-their-energy-costs.

[118] Details at:
https://www.revenue.act.gov.au/community-assistance/utilities-concession.

It is important to note that in the ACT the Utilities Concession covers electricity, gas water and sewerage and is passed on to eligible customers via their electricity account.

[119] Details at:
https://www.revenue.act.gov.au/community-assistance/life-support-rebate.

How many reference bills should there be?

The Commission considered the number and type of reference bills that may be appropriate. To do this the Commission considered the factors that affect electricity usage. For residential electricity consumption in the ACT, this included:

- whether the household has controlled load supply;
- whether the household has access to gas; and
- household size, e.g. small, medium and large.

The Commission received information from Evoenergy that indicated that controlled load consumption represents approximately 30 per cent of the total electricity consumption of residential customers using controlled load in the ACT (based on the data from February 2019 to January 2020).[120] In relation to gas, there is limited public information available on how a customer's energy mix affects their total electricity consumption. However, the AER's 2017 Energy Consumption Benchmark report suggested that in the ACT, the average electricity customer with no gas consumed 6,400 kWh of electricity a year, whereas the average customer with gas consumed 5,500 kWh of electricity a year. This represents 14 per cent lower electricity consumption for gas customers compared to non-gas customers. The Commission therefore considers that controlled load is a more important factor and it would be appropriate to have a separate reference price for controlled load customers.

The Commission found household size to be an important determinant of household electricity consumption but considered that it would be too complex to have a different reference bill for each household size (in addition to having separate reference bills for controlled load customers). The Commission considers that it is important for the reference price framework to be simple and easy to understand and that increasing the number of reference prices may lead to customer confusion.

Regarding small business customers, the Commission recognises that, as for residential households, usage patterns will differ between businesses (for example, because of different business sizes and the type of business). However, the Commission considers that there would still be value to small businesses from improving the comparability and transparency of commercial electricity offers. The Commission understands that only a small number of business customers use controlled load. Therefore, the Commission considers that there is no need to develop separate controlled load reference bills for small business customers.

Given the above, the Commission considers that it would be appropriate to have three reference bill amounts – two for residential customers (one with controlled load and one without), and one for small business customers. This approach would be consistent with the reference bill frameworks under the DMO and the VDO regimes.

[120] Evoenergy's response to the Commission's information request, provided to the Commission on a confidential basis.

How could retailers be required to compare their prices to a reference bill?

The Commission considers that while retailers should have some flexibility in advertising their offers, it is important that the same basic information is provided to customers. This information could include:

- an annual bill amount, which reflects how much the customer would be charged under a particular offer, if they consumed electricity in accordance with the benchmark annual usage; and
- the difference between that amount and the reference bill, expressed in percentage terms.

The Commission's analysis found that most customers in the ACT are on flat rate tariffs (67 per cent) and time of use tariffs (20 per cent).[121] As part of the reference bill regime, retailers could be required to compare all flat rate and time of use offers against the reference price. This approach would ensure that most ACT residential customers will receive the benefits of the reference bill regime. It is also consistent with how offers are advertised under the DMO and VDO rules.

The Commission considers that it may not be appropriate for the reference bill requirements to apply to certain electricity offers, such as those based on demand tariffs or multi-year offers. For demand tariffs, annual bill amounts are likely to be more variable, and differ more from average bills, compared to those on flat rate or time of use tariffs. Only a small number of customers (both residential and small business) are on demand tariffs. The Commissions considers that multi-year tariffs may be targeted at customers who place a high value on bill certainty compared to other consumers. The DMO and VDO regimes do not apply to these types of electricity offers.

Advertising conditional discounts

As in other jurisdictions, retailers in the ACT apply conditional discounts. In its draft report, the Commission observed that the terms and conditions vary by retailer and plan type, which can make it difficult for consumers to compare electricity plans.

As described in section 7.2.3, the AEMC has recently made a final rule determination that limits conditional discounts on energy offers to the 'reasonable costs' the retailer is likely to incur when payment conditions are not met. The rule will take effect on 1 July 2020 and retailers are expected to move away from offering large conditional discounts because they are likely to breach the final rule.

To ensure transparency and clarity around conditional discounts under the reference bill regime in the ACT, the Commission considers that it may be appropriate to adopt the

[121] Evoenergy - AER approved 2019-20 Annual Pricing Proposal Compliance Model - Revised - 29 May 2019.

requirements for advertising conditional discounts that apply under the DMO scheme. These are as follows:[122]

- The headline price compared against the reference price must be the unconditional offer price, that is, the offer price excluding any discounts such as pay on time incentives; and
- The lowest possible price for offer must be visible, that is, the offer price including all possible discounts available.

The Commission notes that currently there are no similar requirements for advertising conditional discounts under the VDO. Instead, there is a requirement that retailers offering discounts must disclose how their discounts are calculated against the benchmark of VDO tariffs. However, in its recent Clean and Fair Contracts Final Decision report released on 28 February 2020, the ESC indicated that it will be adopting the measures used under the DMO and will require that the headline price must be the unconditional offer price,[123] and that an electricity price comparison must include the lowest possible price for that offer.[124]

What prices should be used in setting the reference bill?

The Commission considers that a simple and pragmatic approach would be to use the regulated flat rate and controlled load tariffs for the purposes of calculating the residential reference bill amounts. As noted above, the Commission's analysis found that the most customers in the ACT are on flat rate tariffs.

The Commission notes that ActewAGL proposed that the regulated time of use rates should be used to calculate a reference bill amount for customers on time of use tariffs. A potential issue with this proposal is that this would result in two additional reference bills, a controlled load time of use bill and a non-controlled load time of use bill. The Commission considers that additional reference bills may lead to confusion and complexity for consumers comparing electricity offers.

In addition, the Commission has found that customers on time of use and flat rate tariffs using the same annual amount of electricity have similar bills.[125] Therefore, the Commission considers that a separate reference bill is not required for customers on time of use tariffs. Under this arrangement, retailers operating in the ACT would need to be provided with time of use profile assumptions in order to calculate annual bills for time of use market offers in a consistent manner for comparison against reference bill. This approach is the same as in the DMO and VDO. The possible usage assumptions are discussed below.

[122] Competition and Consumer (Industry Code – Electricity Retail) Regulations 2019, cl. 12 (3).

[123] ESC 2020b, p 8.

[124] Ibid

[125] ActewAGL 2020, p 20.

In relation to small business customers, the Commission notes that there is no regulated flat rate tariff and that a step tariff is the most common tariff type for small businesses in the ACT. Given that the average small business' usage is unlikely exceed the Block 1 consumption threshold, it may be appropriate to estimate the reference bill amount based on Block 1 rates for small business customers.[126] The Commission considers that it would be appropriate to base the reference bill amount on the regulated step tariff rates.

Consistent with its view in the draft report, the Commission considers that ActewAGL's regulated standing offer rates should be used in developing the reference bill. As described in the draft report, the main objective of the reference price is to provide a benchmark for comparing electricity offers. Unlike other jurisdictions, achieving this objective does not require a new price because electricity prices are already regulated in the ACT. In addition, a new price may introduce complexity into the market. This approach was supported by stakeholders who commented on this issue, including ACAT, ActewAGL, Origin Energy, and EnergyAustralia.[127]

As discussed in section 7.2.2, the Commission does not set individual standing offer prices. The side constraint proposed in Chapter 2 would ensure that changes in any standing offer prices used as a reference price would not be significantly different from the Commission's weighted average price increase.

Average usage assumptions

The calculation of a reference bill amount would require assumptions about the electricity usage of average residential and small business customers in the ACT. Average usage assumptions would need to be provided to retailers so that they can calculate comparable annual bill amounts. This section considers these electricity usage assumptions.

As explained above, the Commission considers that it would be appropriate to base the reference bill amount for a residential customer on a flat rate tariff, with and without controlled load. The Commission found that the average consumption for flat rate customers with controlled load is 8,800 kWh per annum, while the average customer without controlled load consumes around 6,100 kWh per annum, as shown in Table 7.2. Most customers in the ACT are on flat rate tariffs and it may therefore be appropriate to base the reference bill on these usage assumptions.

[126] Under ActewAGL's standing offer Business Plan, Block 1 rate is charged for the first 330 kWh per day.

[127] ACAT 2019, p 2; ActewAGL 2020, p 5; Origin Energy 2019, p 8, EnergyAustralia 2020, p 2.

Table 7.2 Annual usage in the Evoenergy distribution zone for residential customers on flat rate tariffs

Average residential consumption	Average residential consumption without controlled load	Average residential consumption with controlled load (CL)		
		Non-CL	CL	Total
6,700 kWh	6,100 kWh	6,300 kWh	2,500 kWh	8,800 kWh

Source: Evoenergy's response to the Commission's information request provided to the Commission on a confidential basis, data from February 2019 to January 2020.

In order to calculate comparable annual bill amounts for time of use offers, electricity retailers could use the total usage assumption outlined above but would also need to be advised on a suitable usage profile. The usage profile for residential customers is shown in Table 7.2.

Table 7.3 Annual usage profile in the Evoenergy distribution zone for residential customers on time of use tariffs

Time of use tariff period usage allocations			
Peak	Shoulder	Off peak	Total
29%	41%	30%	100%

Source: Evoenergy's response to the Commission's information request provided to the Commission on a confidential basis, data from February 2019 to January 2020.

In relation to small business customers, the Commission found that the average consumption for a small business on the step tariff (the most common tariff type for small business customers) in the ACT is 17,700 kWh per annum.[128] The Commission notes that the AER and ESC assumed that the average small business customer consumes 20,000 kWh per annum, based on analysis from Energy Consumers Australia.[129] 20,000 kWh per annum represents an average consumption for small businesses across the NEM jurisdictions. The Commission considers that it may be appropriate to adopt the annual consumption of 20,000 kWh per annum for small businesses in the ACT instead of the ACT-specific figure. This approach would be consistent with the DMO and VDO arrangements.

[128] Evoenergy's response to the Commission's information request provided to the Commission on a confidential basis, data from February 2019 to January 2020.

[129] Energy Consumers Australia, 2019b.

The 20,000 kWh figure is based on a rounded average consumption for small businesses in various NEM by Jacobs Australia for AEMO.

7.5.2 Retailer notifications of a better offer

In the draft report, the Commission considered that transparency could be improved by requiring retailers to regularly inform customers of the best electricity plan for their circumstances and how much they could save by switching.

As explained in section 7.2.1, this measure was introduced in Victoria in October 2019. In Victoria, retailers must tell customers on their bill whether they are on the best energy plan and how much the customer could save by switching. This must be done at least quarterly for electricity bills, and at least every four months for gas bills.[130] The ESC considers that this requirement will remind customers to regularly consider the suitability of their current energy plan.

In the draft report, the Commission highlighted that retailers in NSW are also required to inform certain residential customers of the most appropriate market offer for their circumstances under the NSW Social Programs Code. The Code applies to customers who are receiving a rebate and are on a standing offer contract. The Code requires retailers, at six monthly intervals, to use 'all reasonable endeavours to inform and assist the customer to identify the most appropriate market offer for that customer, having regard to:

- the customer's consumption profile,
- the objective of reducing the customer's costs of buying electricity and/or gas,
- the estimated yearly monetary saving for the customer from accepting a market offer, and
- the price and non-price terms and conditions of the retailer's market offers.'[131]

A potential risk associated with presenting the 'best offer' on the bill is that it may not be suitable for the customer, because of potential complexities associated with the contract terms and conditions. This risk is more pronounced for vulnerable customer cohorts, such as those from culturally and linguistically diverse backgrounds, who may experience difficulties in understanding the fine print of the contract.[132]

For this reason, the ESC introduced the best offer notification with Clear Advice Entitlement. This entitlement means that, to switch to an alternative offer in response to receiving a best offer message in Victoria, the customer must contact the retailer (even if the contact is published online) to provide explicit informed consent. The intended outcome is to ensure customers better understand the way the contract terms will affect their bills. In practical terms, the obligation requires retailers to communicate with the customer in clear and easily understood terms:

[130] ESC 2018b, p 3.

[131] NSW Government 2019, p 1329.

[132] ESC 2018b, p 47.

- on the estimated dollar implications of terms and conditions (including tariff structures) that influence the costs the customer will face over the term of the contract, and
- to discuss the customer's individual (or household) circumstances with the aim of checking whether any of that retailer's other offers might be better suited to the customer.

The retailer must meet the 'Clear Advice Entitlement' before obtaining explicit informed consent. Obtaining this consent is a legal requirement under the Energy Retail Code.[133]

In the draft report, the Commission suggested that the Victorian best offer notification and Clear Advice Entitlement may be a guide for how to implement this measure in the ACT. The Commission recognised that ACT specific issues would need to be considered. For example, unlike in Victoria, electricity consumers in the ACT do not all have smart meters. This means that half hourly electricity consumption patterns are not available for all customers in the ACT. Consequently, the best offer for a basic meter customer in the ACT may need to rely on their total electricity use and average consumption patterns, and, for customers with interval meters, their broad time of use.

Submissions

ActewAGL considered that the best offer notification could potentially weaken competition in the ACT retail electricity market. If customers were notified of a cheaper electricity plan offered by their existing retailer, ActewAGL considered this could reduce customers' willingness to shop around and also constrain retailers from developing innovative pricing plans.[134]

ActewAGL considered that because smart meters in the ACT are only gradually being rolled out, the opportunity to provide a best offer notification based on an individual customer's usage is limited.[135] ActewAGL submitted that providing a personalised best offer notification based on customers' data and circumstances would require substantial changes to operating systems and the large costs of these changes would outweigh the small benefits that customers would experience.[136] ActewAGL stated that it may apply for a cost pass through if a personalised best offer notification were implemented.[137]

ActewAGL asked the Commission to consider changing its recommendation to one that did not require customisation or personalisation of the best offer notification. ActewAGL proposed that a practical and cost-effective approach would be to notify standing offer customers of the best unconditional market offer of the same tariff type. This approach would mean that ACT retailers would identify each standing offer customers' existing

[133] Energy Retail Code, cl. 3C.

[134] ActewAGL 2020, p 22.

[135] Ibid, p 23.

[136] Ibid.

[137] Ibid.

plan and notify them of the market offer with the same underlying tariff structure. The notification would only be applied to ACT customers with standing offers, because those on market offers already receive a discounted bill. Market offer customers also already receive regulated communications such as rollover letters and benefit change notices.[138] ActewAGL considers that this approach would eliminate the issue of determining whether a customer has an electricity meter that is capable of supporting the best generally available market offer. [139]

ActewAGL suggested that the best offer notification exclude 'value-based' and multi-year market offers. In particular, ActewAGL stated that:

> Value-based offers include offers that provide the customer with non-financial rewards such as subscriptions, frequent flyer points or appliances. Multi-year offers are those that fix prices over longer than a 12-month period. Value-based and multi-year market offers are not comparable to standing offers and therefore should be excluded from the best offer notification mechanism.[140]

EnergyAustralia expressed reservations about the draft recommendation based on limitations in accurately identifying the best plan due to the lack of smart meters in the ACT. EnergyAustralia also submitted that there would be significant costs in implementing the best offer notification as outlined in the Commission's draft recommendation.[141] Further, EnergyAustralia considered that if the benefit for requiring the best offer on bill is restricted by the limited data provided by basic meters, there should be consideration of whether the implementation costs will outweigh the benefits.[142]

ACT Energised Consumers Project Partners suggested implementing the measures introduced with the best offer notification in Victoria including:

- Clear advice entitlement;
- Bill change notice; and
- All customers' bills must include information about how the customer can access the Australian Government's Energy Made Easy comparator website.[143]

The ACAT also supported the implementation of these measures, considering that their implementation would protect vulnerable ACT customers and allay concerns about the potential for current advertising of offers and discounts to mislead consumers.[144] Further,

[138] Ibid

[139] Ibid

[140] ActewAGL 2020, p 24.

[141] EnergyAustralia 2020, p 2.

[142] Ibid, p 3.

[143] ACT Energised Consumers Project Partners 2020, p 7.

[144] ACAT 2020, p 9.

the ACAT notes that customers who have moved to smart meters should be advised of the best offer for their consumption and circumstances, such as:

- The type of smart meter the customer has;
- Whether the customer can access the billing system IT which allows customers to monitor usage;
- Access issues for customers who have English as a second language, low literacy and/or poor internet access; and
- The ability for customers who have smart meters to opt into a flat rate tariff.[145]

Commission's final conclusions

The Commission has confirmed its draft finding that consumers would be better off if their retailer could notify them of an offer that better suits their circumstances. However, the Commission has revised its draft recommendation in response to stakeholder feedback.

The Commission has found that the costs of implementing a personalised best offer on the bill are likely to be significant relative to the benefits to customers, given that there is limited data to identify the best plan due to the low number of smart meters in the ACT. Only about 10 per cent of ACT customers have smart meters installed. Therefore, the Commission has concluded that the draft recommendation in its current form would not be practical to implement. Given this, the Commission has considered alternative approaches to notifying customers.

The Commission considered ActewAGL's proposed version of the notification, which would require retailers to notify standing offer customers if there was a better unconditional market offer of the same tariff type.[146] As part of the notification, ActewAGL proposed to display the expected dollar savings for an average customer. ActewAGL's proposal would avoid retailers having to analyse individual customer usage data to customise the best offer notification.[147]

The Commission has some concerns about ActewAGL's proposal. First, the notification would be sent to standing offer customers only. Around 50 per cent of ACT consumers are on standing offer contracts.[148] The Commission considers that it is desirable for as many ACT customers as possible to benefit from the measure. Second, the proposed notification would display savings for the average customer. The Commission is concerned that this would be of limited assistance, or even misleading, for customers with usage substantially different from the average. Third, without considering a customer's actual usage pattern, the 'best offer' may not be right for the customer as

[145] Ibid

[146] ActewAGL 2020, p 23.

[147] Ibid

[148] AER 2019, p 33.

there may be a more appropriate tariff type (flat rate, time of use or demand tariff) for that customer.

The Commission accepts that it would be costly for retailers to analyse their customers' data and provide a customised notification as retailers in Victoria are required to do. In the ACT, the cost is likely to exceed the benefits given the limited ability to offer customisation as a result of the low take up of smart meters. Consequently, the Commission has considered alternative, less costly approaches to notifying customers that there may be a better offer for their circumstances.

Based on its further analysis, the Commission's final recommendation is that retailers should be required to notify their customers (both standing offer and market offer customers) if they have an offer that is likely to better suit an individual customer's circumstances and ask those customers to call them for information. The retailer's staff should then be required to advise the customer on better offers, based on a discussion with the customer on their usage pattern, relevant household characteristics and needs.

The Commission considers that if the recommended 'better offer' notification requirement were to be implemented in the ACT, it should be implemented with a Clear Advice Entitlement. This entitlement would require retailers to help customers navigate their way to the retailer's offer that suits their circumstances the most. It would also require retailers to explain any contractual terms to customers that could lead them to pay more than they expect. As in Victoria, this information should be provided to a customer prior to retailer obtaining explicit informed consent from the customer (as required under cl. 57 of the National Energy Retail Rules).

The Commission has considered the provisions in the national framework and found that a Clear Advice Entitlement would not duplicate existing requirements applying to retailers. Under the National Energy Retail Law, retailers in the ACT are required to comply with the AER's Retail Pricing Information Guidelines, which prescribe how retailers must present their standing offer plan prices and market offer plan prices to customers.[149] These guidelines require retailers to notify their customers about the availability of key information they need to assess the new plan prior to signing up and to send this information to the customer on request. However, the guidelines do not create an obligation on retailers to help customers navigate the complexity of the retailer's offers, with a particular view to avoiding conditions or contract terms that may not be in that customer's interests. The Commission recognises that requiring retailers to place a notification message on bills and comply with 'Clear Advice Entitlement' for customers is likely to impose some additional costs on retailers. This includes the costs of redesigning bills, developing automated notification systems, and training staff. The Commission understands that retailers generally already help customers find the best offer for their circumstances when they contact them. As such, the training costs may

[149] https://www.aer.gov.au/retail-markets/retail-pricing-information.

not be substantial and may be limited to explaining to staff what the 'Clear Advice Entitlement' mean and ensuring staff are complying with those requirements.

The Commission has considered ACT Energised Consumers Project Partners' suggestion of implementing the full set of measures introduced with the best offer notification requirement in Victoria, including a bill change notice and a reference to the Energy Made Easy website on all customer bills.[150] The Commission has concluded that these measures are not needed in the ACT. Under the national framework, which Victoria has not signed up to, similar consumer protection measures already apply in the ACT. [151] For example, retailers are required to notify their customers in advance of any price changes.[152] Also, retailers are required to give customers prior notice of changes to the benefits they receive as part of their energy contract.[153] This notice must include a reference to Energy Made Easy.[154]

Implementation issues

There are practical questions that would need to be considered should the ACT Government decide to implement this recommendation. First, consideration would need to be given to how to best present the notification to customers. For example, customer bills could include a simple message using words like: 'We think you could save money on another plan' but there may be other options. The notification would need to include information on how to contact the retailer for further information.

Second, how the consumer is notified would need to be determined. It may be appropriate to include the notification on quarterly electricity bills. In Victoria, the ESC considers the receipt of a bill to be the ideal moment for notifying a consumer of the best offer. However, the Commission received feedback from consumer groups indicating that many consumers do not read their electricity bill in detail, and therefore may not notice the 'better offer' notification.

7.5.3 Awareness of Energy Made Easy

A limitation of the 'better offer' notification is that there may be even better offers in the market from other retailers. A 'better offer' notification would only apply to plans offered by the customer's current retailer. For this reason, the Commission considers that transparency and comparability could be further improved if retailers notified customers that there may be better offers in the market and that customers should visit the Australian Government's electricity price comparison website Energy Made Easy to check whether there is a better offer available from another retailer.

[150] ACT Energised Consumers Project Partners 2020, p 7.

[151] The retail electricity market in Victoria faces different regulations than in the ACT. This is because the ACT is a signatory to the National Energy Customer Framework (NECF), whereas Victoria is not.

[152] National Energy Retail Rules, r. 46.

[153] National Energy Retail Rules, r. 48A and 48B.

[154] National Energy Retail Rules, r. 48A (3).

The key benefit of the Energy Made Easy website is that it provides impartial and unbiased comparison services. The Commission's consumer survey (described in section 7.3.1) found that awareness of the Energy Made Easy website is low. Only 17 per cent of respondents had used the website. Encouraging consumers to visit the Energy Made Easy website will remind consumers of their ability to switch power companies, as well as ensure that consumers who are looking for a better deal consider a wider range of offers available to them. As discussed in section 7.5.2, the Energy Made Easy information already appears as part of benefit change notifications to customers. However, the Commission considers there is the need to further increase the profile of the Energy Made Easy website due to the relatively low awareness of it among the ACT customers.

7.6 Commission's final recommendations

The Commission has made the following final recommendations to improve transparency and comparability of retail electricity offers in the ACT market.

1. A reference bill amount should be developed to provide ACT consumers with a common point of comparison for assessing electricity offers. The reference bill should be based on existing regulated standing offer prices.
2. The ACT Government should consider imposing a new regulatory obligation on retailers to regularly notify their customers if they have a better offer and ask customers to call them for information. This new regulatory obligation should be implemented with a new regulatory obligation establishing a Clear Advice Entitlement to help ensure that consumers have information they need to make an informed decision.

Appendix 1 Terms of Reference

Australian Capital Territory

Independent Competition and Regulatory Commission (Price Direction for the Supply of Electricity to Certain Small Customers on Standard Retail Contracts) Terms of Reference Determination 2019

Disallowable instrument DI2019–72

Made under the Independent Competition and Regulatory Commission Act 1997 ('the Act'), Section 15 (Nature of Industry References) and Section 16 (Terms of Industry References).

1 Name of instrument

This instrument is the *Independent Competition and Regulatory Commission (Price Direction for the Supply of Electricity to Certain Small Customers on Standard Retail Contracts) Terms of Reference Determination 2019**.

2 Interpretation

In this instrument:

"National Energy Retail Law (ACT)" has the same meaning as in the *National Energy Retail Law (ACT) Act 2012*.

"***small customer***" has the same meaning as in the ***National Energy Retail Law (ACT)***.

"standing offer prices" has the same meaning as in the ***National Energy Retail Law (ACT)***.

"ActewAGL Retail" means the partnership of Icon Retail Investments Limited (ACN 074 371 207) and AGL ACT Retail Investments Pty Ltd (ACN 093 631 586).

2 Commencement

This instrument commences on the day after it is notified.

3 Reference for investigation under Section 15

In accordance with section 15(1) of the Act, I provide a reference to the Independent Competition and Regulatory Commission (the 'Commission') to determine a price direction for the standing offer prices for the supply of electricity to small customers who consume less than 100MWh of electricity over any period of 12 consecutive months.

The price direction will be for the period of 1 July 2020 to 30 June 2024. The price direction must make provision for annual recalibrations to be undertaken by 30 June 2021, 30 June 2022 and 30 June 2023.

In accordance with 15(4) of the Act, the price direction determined by the Commission under this reference is to only apply to the electricity retailer ***ActewAGL Retail***.

4 Terms of reference for investigation under section 16

In accordance with section 16(1) of the Act, I require that the Commission must consider the following matters in relation to the conduct of the investigation.

1. The Commission must consider:
    a. The direct impact on electricity costs of government policies and pass through of costs and savings to regulated prices including, but not restricted to:
    i. the ACT retailer obligations under the Energy Efficiency Improvement Scheme;
    ii. the Commonwealth Government's Large-scale Renewable Energy Target and Small-scale Renewable Energy Scheme;
    iii. any other schemes implemented to address climate change relevant to electricity pricing; and
    iv. any other policies or schemes that may directly impact on pricing in the retail or wholesale electricity market.
    b. The efficient and prudent cost of managing risk in the cost of purchasing electricity for the period of the price direction.
2. The Commission must identify and report on the efficient costs of complying with the Energy Efficiency (Cost of Living) Improvement Act 2012 for the period that the determination is being made.
3. The Commission must identify and report on the cost allowance of the ACT Feed-in Tariffs (small and large scale) for the period that the determination is being made.
4. The Commission must consider whether changes could be made in the Territory to promote improved transparency and comparability of both

regulated pricing offers for small customers who consume less than 100MWh of electricity, and unregulated market offers.

   a. In considering this matter, the Commission should consider relevant findings and recommendations outlined in the Australian Competition and Consumer Commission's 2018 *Retail Electricity Pricing inquiry – Final Report.*

5. The Commission must release its final report within the period of 1 March 2020 to 5 June 2020, to provide sufficient time for ActewAGL Retail to make any necessary changes to its billing system, and to provide information on the new tariff to customers in time for implementation on 1 July 2020.

Andrew Barr MLA
Treasurer
28 May 2019

Appendix 2 Compliance with the terms of reference and the ICRC Act

This appendix first sets out how the Commission's investigation complies with the terms of reference. Second, it considers how the proposed price direction, should it be adopted, would comply with the provisions of the ICRC Act, and particularly the requirements of section 20(2).[155]

A2.1 Compliance with the terms of reference

Table A2.1 Compliance with the terms of reference

Clause	Requirement	Chapter	Comments
3	The price direction will be for the period of 1 July 2020 to 30 June 2024. The price direction must make provision for annual recalibrations to be undertaken by 30 June 2021, 30 June 2022 and 30 June 2023.	2, 3, 4, 6	The price direction applies for a 4-year period and provides for annual price recalibrations.
4.1a	The Commission must consider the direct impact on electricity costs of government policies and pass through of costs and savings to regulated prices including but not limited to:		
i	The ACT retailer obligations under the Energy Efficiency Improvement Scheme;	3,4	The prudent and efficient costs of the ACT Government's EEIS are included in the cost build-up.
ii	the Commonwealth Government's Large-scale Renewable Energy Target and Small-scale Renewable Energy Scheme;	3, 4	LRET and SRES costs are included in the cost build-up.
iii	any other schemes implemented to address climate change relevant to electricity pricing;		The Commission considered other schemes and found none to be applicable.
iv	any other policies or schemes that may directly impact on pricing in the retail or wholesale electricity market.		The Commission considered other policies and schemes and found none to be applicable.
4.1b	The Commission must consider the efficient and prudent cost of managing risk in the cost of purchasing electricity for the period of the price direction.	3, 4	The energy purchase cost model incorporates a hedging strategy.
4.2	The Commission must identify and report on the efficient costs of complying with the Energy Efficiency (Cost of Living)	3, 4	The costs of the ACT Government's EEIS scheme are identified, assessed for prudence and efficiency and reported.

[155] For avoidance of doubt, it is the price direction that the Commission makes at the conclusion of the price investigation, and not the proposed price direction, that is subject to the provisions set out in section 20(2) of the ICRC Act.

Clause	Requirement	Chapter	Comments
	Improvement Act 2012 for the period that the determination is being made.		
4.3	The Commission must identify and report on the cost allowance of the ACT feed-in tariffs (small and large scale) for the period that the determination is being made.	3, 4	The costs of the ACT feed-in tariffs are reported in the final report.
4.4	The Commission must consider whether changes could be made in the Territory to promote improved transparency and comparability of both regulated pricing offers for small customers who consume less than 100MWh of electricity, and unregulated market offers.		.
4.4a	In considering this matter, the Commission should consider relevant findings and recommendations outlined in the Australian Competition and Consumer Commission's 2018 Retail Electricity Pricing inquiry – Final Report.	7	Comparability and transparency of electricity offers in the ACT are examined and recommendations are made to improve them. Findings and recommendations of the Australian Competition and Consumer Commission's 2018 Retail Electricity Pricing inquiry – Final Report were considered when making recommendations.
5	The Commission must release its final report within the period of 1 March 2020 to 5 June 2020, to provide sufficient time for ActewAGL Retail to make any necessary changes to its billing system, and to provide information on the new tariff to customers in time for implementation on 1 July 2020.		The final report is released on 5 June 2020

A2.2 Compliance with the ICRC Act

A2.2.1 Objectives

Table A2.2 Compliance with section 7 of the ICRC Act

Section 7	Requirement	Chapter	Comments
(a)	to promote effective competition in the interests of consumers	3, 4	The Commission considered whether a competition/CARC allowance should be included in the regulated retail electricity price in the ACT in order to promote competition. The Commission acknowledges that retailers incur costs relating to customer acquisition and management and has included in the retail operating cost allowance the efficient costs of customer acquisition and retention.
(b)	to facilitate an appropriate balance between efficiency and environmental and social considerations	3, 4, 5, 6, 7	The Commission's retail electricity pricing model is designed to recover the efficient costs of providing retail electricity services in the ACT. This includes the efficient costs of various environmental measures such as the national LRET and SRES schemes and the ACT energy efficiency schemes. Social considerations are taken into account by ensuring that the regulated price is based on efficient costs so that consumers do not pay more than is justified. The Commission also considers the impacts of proposed price changes on customer electricity bills. In this investigation the Commission has also assessed

Section 7	Requirement	Chapter	Comments
			the comparability and transparency of electricity offers in the ACT and made recommendations for improvements to help consumers find an offer that suits their circumstances.
(c)	to ensure non-discriminatory access to monopoly and near monopoly infrastructure		N/A

A2.2.2 Section 19(L)

Table A2.3 Compliance with section 19(L) of the ICRC Act

Section 19L	Requirement	Chapter	Comments
	The objective of the Commission, when making a price direction in a regulated industry, is to promote the efficient investment in, and efficient operation and use of regulated services for the long term interests of consumers in relation to the price, quality, safety, reliability and security of the service	3, 4, 5, 6, 7	The Commission's retail electricity pricing model is designed to recover the efficient costs of providing retail electricity services in the ACT, including the costs of meeting quality, reliability and safety standards. This provides incentives for the efficient operation and use of regulated services. Setting prices to recover the efficient costs, which include the costs of environmental measures, also promotes the efficient use of regulated services. The long-term interests of consumers are promoted by ensuring that the regulated price allows for the recovery of efficient costs, including an appropriate retail margin on investments in providing services that meet the required standards.

A2.2.3 Section 20(2)

Table A2. 4 Compliance with section 20(2) of the ICRC Act

Section 20(2)	Requirement	Chapter	Comments
(a)	The protection of consumers from abuses of monopoly power in terms of prices, pricing policies (including policies relating to the level or structure of prices for services) and standard of regulated services	2, 3, 4	The Commission's price control mechanism sets the maximum allowable price change that ActewAGL can apply across its basket of regulated tariffs from one year to the next. The allowable price change is based on the recovery of efficient costs. This form of price control protects consumers from the abuses of monopoly power in terms of prices and pricing policies.
(b)	Standards of quality, reliability and safety of the regulated services	3, 4	The Commission's retail electricity pricing model, and in particular the retail operating cost component, is designed to recover the efficient costs of providing retail electricity services. This includes the costs of meeting quality, reliability and safety standards. For example, the payment of ancillary services fees, which is captured in the pricing model, assists AEMO in providing for safe and reliable delivery of electricity to all consumers.

Section 20(2)	Requirement	Chapter	Comments
(c)	The need for greater efficiency in the provision of regulated services to reduce costs to consumers and taxpayers	2, 3, 4	The Commission's retail electricity pricing model is based on the efficient costs of providing retail electricity services in the ACT. The Commission has implemented improvements to its model and methodology to reflect up-to-date efficient retailer practices, such as in hedging energy purchase cost risks, to ensure that the costs used for setting prices as low as they can efficiently be.
(d)	An appropriate rate of return on any investment in the regulated industry	3, 4	The Commission has determined a retail margin of 5.6 per cent of the total efficient cost of providing retail electricity services (equivalent to 5.3 per cent of the total cost stack). In setting this margin, in the Commission has considered current market circumstances to ensure the margin provides an appropriate rate of return on investments in retail electricity supply.
(e)	The cost of providing the regulated services	3, 4	The Commission's retail electricity pricing model is designed to recover the efficient costs of providing retail electricity services in the ACT. The Commission considers that the allowance for retail operating costs allows for efficient cost recovery and provides incentives for the retailer to operate efficiently.
(f)	The principles of ecologically sustainable development	3, 4	The Commission's retail electricity pricing model includes the efficient costs of various environmental measures such as the national LRET and SRES schemes and the ACT energy efficiency schemes. These costs reflect environmental costs incurred in the consumption of electricity that the Australian Government and the ACT Government consider should be passed through to electricity consumers.
(g)	The social impacts of the decision	3, 4, 7	Social considerations are taken into account by ensuring that the regulated price is based on efficient costs, which means that consumers do not have to pay higher prices than is justified to recover these costs. The Commission also considers the impacts of proposed price changes on customer electricity bills. In addition, the Commission has identified ways to improve the transparency and comparability of offers help consumers choose an offer that best suits their circumstances.
(h)	Considerations of demand management and least-cost planning	3, 4	The ACT Government's energy efficiency scheme has a demand-management element. The costs of this scheme are accounted for in the Commission's pricing model.
(i)	The borrowing, capital and cash flow requirements of people providing regulated services and the need to renew or increase relevant assets in the regulated industry	3, 4	The Commission's retail electricity pricing provides for the efficient costs of providing retail electricity services in the ACT. This includes a retail margin of 5.6 per cent of the total efficient cost (equivalent to 5.3 per cent of the total cost stack). The Commission is confident that this

Section 20(2)	Requirement	Chapter	Comments
			provides enough revenue to meet the retailer's borrowing, capital and cash flow requirements and provide incentives for efficient investments in supplying retail services.
(j)	The effect on general price inflation over the medium term	3, 4, 6	The Commission ensures that only efficient costs are applied in its pricing model. Some components of the model are adjusted each year by the change in the consumer price index.
(k)	Any arrangements that a person providing regulated services has entered into for the exercise of its functions by some other person	3, 4	The recovery of energy losses in the pricing model is mandated in the NEM framework and therefore meets the 20(2)(k) requirement.

Appendix 3 Summary of submissions

A3.1 Submissions on the issues paper

	Date received	Submitter	Key issues raised/information provided
1	19 September 2019	ACAT	Supported the Commission in using the ActewAGL's regulated standing offer rates in developing the reference bill. Suggested the Commission not only set a maximum percentage increase but also determine the nature and the number of the suite of default price offers which are to be used for comparative purposes. Supported the Commission's proposed annual price recalibration process. Supported the cost pass through arrangements. Supported developing a heuristic to determine the contract position based on the ACT electricity load profile. Supported a 40-day forward price averaging period for spot price scaling purposes. Suggested to use the volatility allowance provided by the Victorian ESC. Supported the Commission's approach to calculating the cost of energy losses. Suggested that the introduction of a CARC allowance was unnecessary. Supported the pass-through of the EEIS costs. Suggested setting the retail margin at a relatively low level to reduce costs to end users. Identified three distinct issues associated with electricity offers, including difficulties in understanding different tariff structures available to customers with different meter types; difficulties in changing electricity retailers to access better offers due to existing debts; and difficulties in relation to customer understanding of and/or ability to access offers with conditional discounts.
2	11 October 2019	ActewAGL	Supported the Commission's current regulatory approach. Questioned the appropriateness of using five years of historical data in determining a heuristic. Suggested the Commission should adopt a benchmarking approach to determine the contract position and viewed the heuristic determined by ACIL Allen for the QCA as a suitable benchmark. Supported the Commission's proposal to bring forward the averaging period for contract prices by one month. Proposed to use the 23-month averaging period ending 30 April as the averaging period for spot price scaling purposes. Supported a forward margin of five per cent when calculating scaling index for spot prices. Proposed to calculate the volatility allowance by taking an average of the volatility allowances used by the ESC for the VDO. Supported the Commission's market-based approach for determining the LRET and SRES costs.

	Date received	Submitter	Key issues raised/information provided
			Suggested the Commission uses WACC instead of cost of debt alone when determining holding cost for green scheme certificates. Supported the Commission's approach to calculating the cost of energy losses. Supported the Commission's proposed approach in calculating NEM fees Supported the Commission's approach to passing on network costs to customers as determined by the AER. Considered the Commission's current retail operating cost allowance to be appropriate. Stated that the Commission's current approach of not including a separate allowance for CARC is inconsistent with regulatory practices in other jurisdictions, and with the cost recovery requirements of the ICRC Act given the increasing level of competition in the ACT. Supported the Commission's current approach to calculating EEIS costs. Proposed to include smart meter costs in the Commission's cost stack. Stated that in applying the benchmarking approach for retail margins, the Commission should consider Frontier Economics' review of recent regulatory decisions and the expected returns approach, the ESC's final decision for the VDO to apply from 1 July 2019, and the margins reported in the ACCC's Inquiry into the National Electricity Market. Proposed to increase the current retail margin from 5.3 per cent to at least 6.04 per cent to be in line with the latest regulatory determinations made in other jurisdictions. Noted that the AER's Energy Made Easy website does not incorporate cost reflective tariffs, such as demand tariffs, for electricity offer comparison purposes. Noted that reference prices have only recently been introduced in other jurisdictions and the effects are yet to be fully understood. Stated that the introduction of changes to improve transparency and comparability of electricity offers is only useful if consumers are engaged, and the potential benefits will depend on the level of engagement.
3	11 October 2019	Energy Australia	Noted that measures to improve comparability in offers are the best way to ensure customers get the best deal. Noted that retailers generally appear to have withdrawn some forms of advertising that mention prices and discounts. Noted that many retailers have withdrawn or removed conditional discounts. Noted that the incremental cost of meeting the same obligations of introducing reference prices as other jurisdictions' may be small although not immaterial. Stated that the Commission should undertake intensive testing with customers to understand exactly what they expect or need to compare offers. Noted that the benefits of switching market offers available to the bulk of ACT customers is small. Noted that multiple regulated standing offers for ActewAGL pose challenges in calculating a reference price that reflects the customer's actual point of reference.

	Date received	Submitter	Key issues raised/information provided
4	17 October 2019	ACTCOSS	Stated that ACTCOSS has a particular interest in ensuring the Commission considers impact on the low-income households when making decisions related to electricity prices. Noted that there are potential benefits in building on the strengths of existing regulatory arrangements in the ACT and drawing on the strengths of the DMO and VDO measures. Suggested that the Commission undertake further consultation with ACTCOSS and community service providers to address the questions raised in the issues paper.
5	18 October 2019	Origin Energy	Stated that the contract position should be determined based on a heuristic. Considered that a conservative hedging strategy should be adopted. Considered that the underlying demand data used in the energy purchase cost model be drawn from an extensive history that includes weather extremes. Considered that the volatility allowance provided in the VDO draft decision understates the level of costs associated with the expected exposure. Suggested the Commission use WACC instead of cost of debt to calculate the holding cost for green scheme certificates. Noted that the divergence in available retail operating cost estimates may make it difficult to determine a suitable benchmark. Suggested the Commission obtain a clear understanding of how cost estimates are developed and why they can differ significantly from the publicly reported costs of retailers. Considered that an allowance for CARC should be added to retail costs at a sufficient level to allow a hypothetical efficient retailer to recover the costs associated with engaging in competition. Noted that the current allowance provided by the Commission of 5.3 per cent is lower than the current regulatory practice in other jurisdictions. Proposed to increase the current retail margin from 5.3 per cent to at least 6.04 per cent to be in line with the latest regulatory determinations made in other jurisdictions. Supported the concept of a reference price, stating that it has been a long-standing supporter of reference pricing in the ACT.
6	29 November 2019	Electricity Consumer	Stated that the maximum demand supply charge is unfair and inequitable and should be proscribed. Stated that the information provided by ActewAGL when smart meters were installed was deficient, false and misleading.

A3.2 Submissions on the draft report

	Date received	Submitter	Key issues raised/information provided
1	19 March 2020	ACAT	Supported the Commission's proposed side constraint and stated that it would help protect particular groups of customers from unfair price increases. Stated that there is a problem in the fact that the Commission does not approve miscellaneous fees and charges within the regulatory framework.

	Date received	Submitter	Key issues raised/information provided
			Supported the Commission's proposed contract position approach and using the ACT specific heuristic to determine the contract position. Asked if the Commission intends to move to a shorter interval when AEMO implements the proposed reduction from 30-minute intervals in the NEM. Supported the Commission's approach in determining volatility allowance, cost of energy losses, NEM fees, and network costs. Opposed the inclusion of a separate CARC allowance in determining retail operating costs. Supported the EEIS program and stated that the program has delivered considerable energy efficiency benefits to ACT consumers, including vulnerable consumers. Supported excluding smart meter costs and suggested the Commission revisit this issue in two years. Supported the Commission's draft decision of 5.3 per cent retail margin. Considered that the reference price should be developed using ActewAGL's regulated standing offer rates and that the Commission should use the flat rate tariff if it intends to only have one reference price. Supported the implementation of measures introduced with the best offer notification in Victoria, considering that their implementation would protect vulnerable ACT customers and allay concerns about the potential for current advertising of offers and discounts to mislead consumers. Noted that customers who have moved to smart meters should be advised of the best offer for their consumption and circumstances.
2	20 March 2020	ActewAGL	Supported the Commission's proposed weighted average price increase form of control. Suggested to impose a two per cent side constraint at the customer segment level (residential customers and business customers), not at the individual components of regulated tariffs. Supported the proposed process of annual recalibration and cost pass-through arrangements. Supported the Commission's proposed contract position approach and using the ACT specific heuristic to determine the contract position. Supported the Commission's proposed approach to determining contract prices, half-hourly profile of load and spot prices, volatility allowance, cost of energy losses, NEM fees and network costs. Did not support the Commission's methodology to calculate national green scheme holding costs. Stated that the holding cost should be based on the efficient retailer's weighted average cost of capital (WACC) rather than the cost of debt. Did not support the Commission's approach to determining the retail operating cost allowance nor the exclusion of a customer acquisition and retention costs allowance. Asked the Commission to quantify the proportion of CARC in the retail operating cost allowance. Mentioned that retail operating cost should include fixed and variable components. Supported the Commission's draft decision on the approach to estimating EEIS compliance costs for the next regulatory period. Did not support excluding smart meter costs from the cost stack because smart meter costs are an essential cost incurred in the

	Date received	Submitter	Key issues raised/information provided
			provision of electricity services; basic meter costs will be depreciated by 2030–31; there is an established regulatory precedent to include smart meters as a regulatory cost; smart meter costs support effective operation of a reference bill; and smart meters promote fairness and equity. Mentioned that a 5.3 per cent retail margin is below the Frontier Economics' base case and does not reflect a benchmarking approach. Mentioned that the retail margin was lowered from 6.04 per cent as in the 2014–17 regulatory period due to a rapid escalation of wholesale energy purchase costs and this argument is no longer valid. Consequently, suggested to return the retail margin to 6.04 per cent. Recommended a reference bill framework that is similar to the AER's approach to the DMO. Proposed that a reference bill be based on particular regulated standing offers. Considered that the best offer notification could potentially weaken competition in the ACT retail electricity market. Stated that if customers were notified of a cheaper electricity plan offered by their existing retailer, customers' willingness to shop around reduces and developing innovative pricing plans by retailers is constrained. Considered that because smart meters in the ACT are only gradually being rolled out, the opportunity to provide a best offer notification based on an individual customer's usage is limited. Stated that it may apply for a cost pass through if a personalised best offer notification were implemented. Asked the Commission to consider changing its recommendation to one that did not require customisation or personalisation of the best offer notification. Proposed that a practical and cost-effective approach would be to notify standing offer customers of the best unconditional market offer of the same tariff type. Suggested that the best offer notification excludes value-based and multi-year market offers.
3	20 March 2020	Energy Australia	Considered that if the benefit for requiring the best offer on bill is restricted by the limited data provided by basic meters, there should be consideration of whether the implementation costs will outweigh the benefits. Considered that while well intentioned, reference pricing could cause confusion for customers with consumption levels different from the average. Stated that it is unclear whether customers understand the difference between comparing their market offer to a reference price and comparing their market offer to other retailers' market offers. Recommended that the Commission explore whether the reference price is required with developments in the market such as the ACCC's Consumer Data Right provisions and the AEMC's rule change regarding conditional discounting. Considered that if the Commission were to implement a reference bill, it should be a weighted average across three of ActewAGL's tariffs (Home, Home Saver, Home Saver +). Suggested that the reference bill regime should exclude energy plans that do not fit the standard energy plan model (usage + supply charge), such as EnergyAustralia's 'Easy Plan' which provides

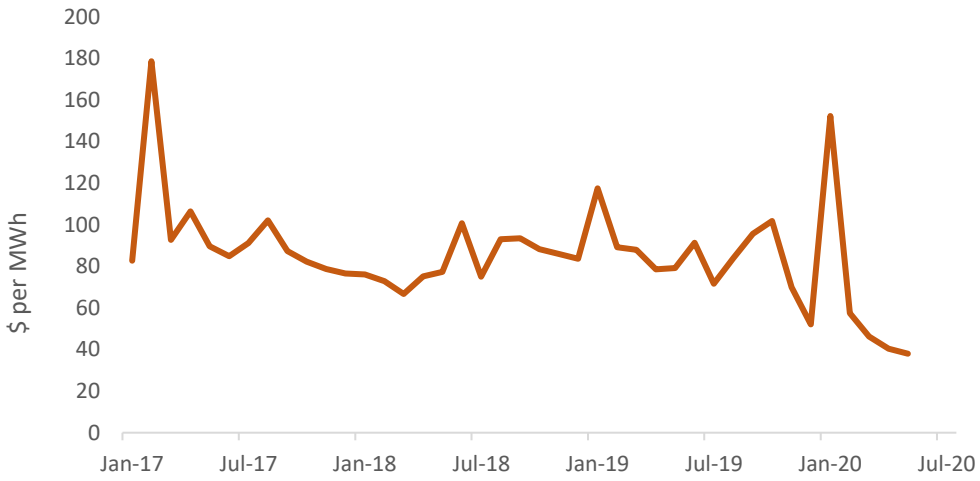
	Date received	Submitter	Key issues raised/information provided
			customers the capacity to pay a different monthly price depending on their usage band. Stated that the advertising and marketing requirements of the reference pricing requirements should be aligned with the DMO and VDO. Stated that there would be significant costs in implementing the best offer notification as outlined in the Commission's draft recommendation. Considered that if the benefit for requiring the best offer on bill is restricted by the limited data provided by basic meters, there should be consideration of whether the implementation costs will outweigh the benefits.
4	20 March 2020	Harvest Hot Water	Stated that ActewAGL's tender processes failed to establish a competitive third-party abatement market for the installation of EEIS-supported HPWH. Stated that tender processes failure is the result of a flawed tender process due to a number of reasons including ActewAGL setting a market restricting shopfront requirement sharply limiting the potential field of HPWH abatement providers and arbitrarily applying or choosing not to apply a '5 years' minimum experience' requirement. Mentioned that ActewAGL failed to observe its own HPWH product eligibility criteria in its tender decisions and in one tender failed to set a requirement in relation to price and value for money.
5	30 March 2020	ACT Energised Consumers Project Partners	Supported the Commission's proposed side constraint. Stated that side constraint restriction is welcome in providing price stability for consumers, avoiding sharp increases in favour of allowing any cost-reflective tariff increases to be spread over a number of years. Suggested that the implementation of a reference bill could be strengthened with the supplementary implementation of the Basic Service Offer framework that accompanies similar provisions in Victoria under the VDO.

Appendix 4 Recent developments in the wholesale electricity market

The cost of wholesale energy purchases is one of the biggest cost components in the Commission's pricing model. There have been important developments in the wholesale market over the past 18 months that are likely to affect electricity prices over the regulatory period. This appendix briefly discusses these developments.

Wholesale electricity prices in the NEM have been decreasing over the past few years. Prices averaged around $85 per MWh in 2017 compared to $69 per MWh in 2020 across the NEM.[156] Figure A4.1 shows that electricity spot prices in NSW have decreased from $82 in January 2017 to $38 in May 2020. Energy market commentators expect wholesale electricity prices to continue to fall over the medium term. For instance, the AEMC, in its 2019 annual residential electricity price trends report, forecast that wholesale costs would fall by 11.6 per cent across the NEM between 2018 and 2022.[157]

Figure A4. 1 Average monthly wholesale electricity prices in NSW ($ per MWh)



Source: Commission's calculation using AEMO data.

A key reason for the fall in wholesale electricity prices is additional electricity generation. Over the period from 2017 to 2020, electricity generation capacity in the NEM increased by 13 percent. This increase was almost entirely driven by an increase in renewable generation, which grew by 50 percent over the same period. Electricity

[156] Details at: https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/data-nem/data-dashboard-nem.

[157] AEMC 2019b, p 4.

generation capacity is expected to increase by another 13 percent between 2020 and 2022, driven by growth in renewable sources.[158]

Over the past few months, wholesale prices have also been affected by the economic slowdown caused by COVID-19, which has reduced electricity demand. In March 2020, the wholesale electricity price was $43 per MWh, compared to $61 per MWh in December 2019.

Large-scale renewable energy generation

The transition to renewable generation has brought challenges. This includes how to best integrate large-scale renewable generation into the transmission and distribution network.

The AEMC is undertaking the coordination of generation and transmission investment (COGATI) review, as requested by the COAG Energy Council, to identify reforms needed to the Australian power system to accommodate new electricity generation from renewable sources. As part of the review, the AEMC is considering whether it is appropriate to implement dynamic regional pricing. Under dynamic regional pricing, generators and storage operators would receive a 'local price' that more accurately represents the marginal cost of supplying electricity at their location in the network. The local price would be affected by energy losses in the area. This is different from the single regional reference price that generators currently receive under the regional reference pricing system. The AEMC expects this change to lead to better locational, operational and investment decisions that would make the transmission network more efficient.

Small-scale renewable energy generation

The increased take-up of small-scale renewable energy generation, particularly rooftop solar, has brought with it an increase in battery storage and the formation of 'virtual power plants' that allow households to sell power stored in their battery to the grid (collectively, small-scale generation and battery technology are known as 'distributed energy resources'). As with large-scale renewable energy generation, this has also brought challenges to the national electricity system for how to best integrate distributed energy resources into the transmission and distribution network. For example, AEMO has been increasingly cutting electricity flows into the grid because of the power system's inability to connect new small-scale technologies.[159]

The increase in small-scale generation means that electricity demand does not always need to be met by the electricity grid. Indeed, the growth in demand for power from the grid is flattening as consumers invest in rooftop solar, battery storage and load management technology. AEMO expects that this will continue in the future. At times

[158] AEMO 2019, p 37.

[159] Details at: https://www.aemc.gov.au/news-centre/media-releases/delivering-grid-future.

of low demand and high rooftop solar output, the proportion of 'controllable resources' (that is, large-scale generation controlled by AEMO) is projected to fall from about 75 per cent in 2019 to as low as 29 per cent by the next 20 years.[160]

On 1 March 2020, AEMO launched the Distributed Energy Resource Register, which is a database of information about consumer-owned small-scale renewable energy generation units. This database aims to help smooth the transition in the energy sector by providing the information needed to plan grid enhancements in a way that supports system reliability and security.

[160] AEMO 2018, p 64.

Abbreviations and acronyms

ACAT	Australian Capital Territory Civil and Administrative Tribunal
ACT	Australian Capital Territory
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ASX	Australian Securities Exchange
CARC	Customer acquisition and retention costs
ICRC	Independent Competition and Regulatory Commission
CPI	Consumer Price Index
EEIS	Energy Efficiency Improvement Scheme
EPC	Energy purchase cost
EPSDD	Environment Planning and Sustainable Development Directorate
ESC	Essential Services Commission
ICRC	Independent Competition and Regulatory Commission
IPART	Independent Pricing and Regulatory Tribunal
LGC	Large-scale Generation Certificate
LRET	Large-scale Renewable Energy Target
MWh	Megawatt hour
NEM	National Electricity Market
NSW	New South Wales
OTTER	Office of the Tasmanian Economic Regulator
RPP	Renewable power percentage
STC	Small-scale Technology Certificate
SRES	Small-scale Renewable Energy Scheme

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