ICRC

independent competition and regulatory commission

Retail electricity price investigation 2020–24

Draft report

Report 2 of 2020, February 2020

The Independent Competition and Regulatory Commission

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.

We have responsibilities for a broad range of regulatory and utility administrative matters. We have 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. We also have responsibility for arbitrating infrastructure access disputes under the ICRC Act. In discharging our objectives and functions, we provide independent robust analysis and advice.

Our objectives are set out in section 7 and 19L of the ICRC Act and section 3 of the *Utilities Act 2000*.

Correspondence or other inquiries may be directed to the Commission at the following address:

Independent Competition and Regulatory Commission
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The Commission may be contacted at the above address, by telephone on (02) 6205 0799, or via our email address: icrc@act.gov.au. Our website is www.icrc.act.gov.au.

How to make a submission

This draft report provides an opportunity for stakeholders to provide feedback and evidence to inform the development of the final report. It will also ensure that relevant information and views are made public and brought to the Commission's attention.

Submissions on the draft report close at **5pm Friday 20 March 2020** and can be emailed to the Commission at icrc@act.gov.au.

Alternatively, submissions may be made online through the form on the Commission's website: www.icrc.act.gov.au or mailed to the Commission's address below.

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Please enclose a completed submission cover sheet with your submission. A copy of the submission coversheet is available at the weblink: https://www.icrc.act.gov.au/submissions.

The Commission encourages interested parties to make submissions in either Microsoft Word format or PDF (OCR readable text format – that is, they should be direct conversions from the word-processing program, rather than scanned copies in which the text cannot be searched).

The Commission is guided by and believes strongly in the principles of openness, transparency, consistency, and accountability. Public consultation is a crucial element of the Commission's processes. It is the Commission's preference that all submissions it receives be treated as public and be published on the Commission's website unless the author of the submission indicates clearly that all or part of the submission is confidential and not to be made available publicly. Where confidential material is submitted, the Commission prefers that this be under a separate cover and clearly marked 'In Confidence'. The Commission will assess the author's confidentiality claim and discuss appropriate steps to ensure that confidential material is protected while maintaining the principles of openness, transparency, consistency and accountability.

The Commission secretariat may be contacted at the above addresses, by telephone on (02) 6205 0799 or via email address: icrc@act.gov.au. The Commission's website is www.icrc.act.gov.au.

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Executive Summary

The Independent Competition and Regulatory Commission (the Commission) received a 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 require 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 to determine retail electricity prices from 1 July 2020. The publication of the draft report and the proposed Price Direction is the second milestone in the Commission's consultation process in this investigation.

This report sets out the Commission's draft decision on the proposed regulatory approach, pricing model and price adjustment for 2020–21. The Commission's draft decision has been made based on information up to 29 January 2020, and therefore only provides an indication of likely price changes for 2020–21. This will be updated for the final report to include data available up to 29 May 2020. This report also sets out the Commission's draft recommendations to improve the transparency and comparability in the ACT retail electricity market.

The Commission encourages stakeholders and other interested parties to submit feedback and information in response to the draft decision. The Commission is also inviting submissions on the draft Price Direction which has been released at the same time as this draft report.

Pricing model and cost components

The Commission's proposed 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 considers inputs to the pricing model that will be used during the 2020–24 regulatory period.

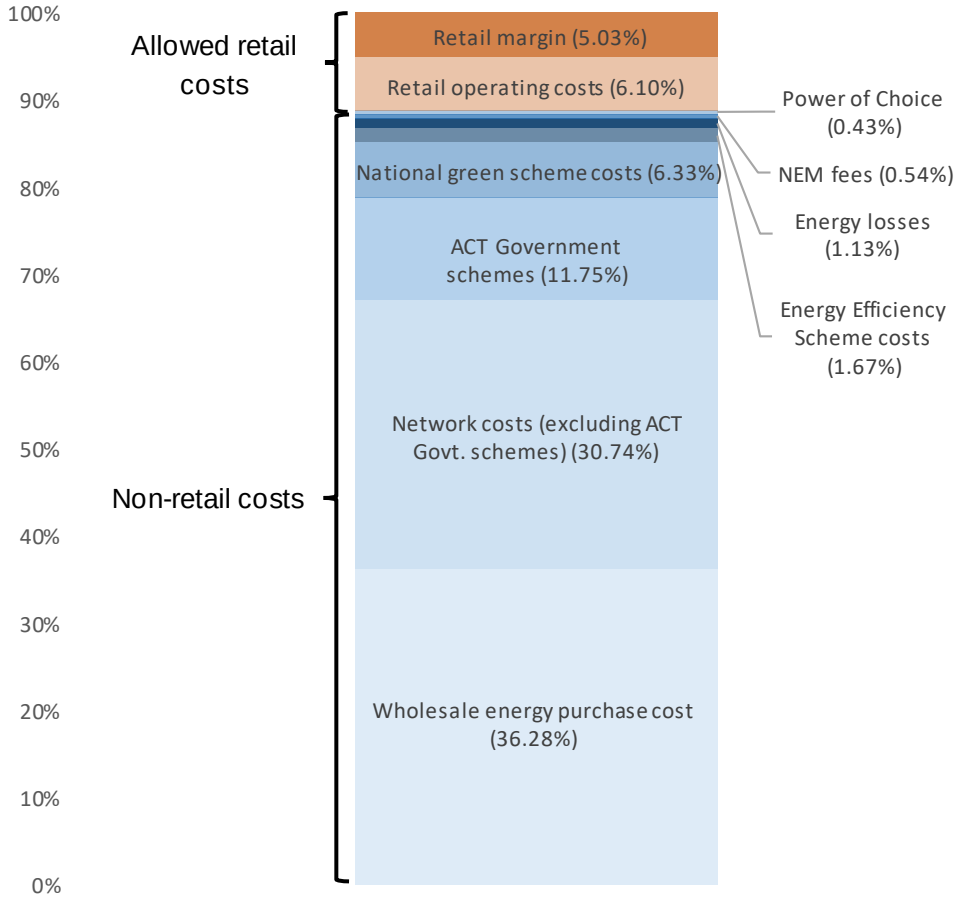
The Commission's pricing model contains three main cost categories:

- 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 45 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 42 per cent of the total costs.

- Retail costs, which include retail operating costs, Energy Efficiency Incentive Scheme (EEIS) compliance costs and a retail margin. These costs account for around 13 per cent of total costs.

The share of each cost component on 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 (87 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 13 per cent of the total cost.

The Commission's draft decision would result in lower electricity prices in 2020-21

The Commission's draft decision would result in the average price of ActewAGL's basket of regulated tariffs falling by around 6.75 per cent in 2020–21 (Table ES.1). This

is equivalent to a real decrease of 8.41 per cent (after adjusting for inflation). This draft price decrease is indicative only and will change between the draft and final report. For the final report, the Commission use updated information as at 29 May 2020 to determine the final average price change.

As noted above, an important component of the pricing model is network costs, which account for more than 40 per cent of total costs. For this draft report, the Commission has used the same level of network costs as in 2019–20, pending the Australian Energy Regulator (AER)'s decision on 2020–21 network costs. The AER will release network costs for 2020–21 in May 2020 and therefore updating these costs has the potential to change the final average price change allowed by the Commission. Any significant change in wholesale electricity costs between this draft report and the final decision would also have the potential to change the average price change calculated by the Commission, since they account for more than one third of total costs.

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

Table ES.1 Draft decision on cost elements, 2020–21

Cost	2019–20 ($/MWh)	2020–21 ($/MWh)	% change
Wholesale energy purchase cost	92.93	87.30	-6.05%
National green scheme costs	25.73	15.22	-40.84%
Energy losses	3.81	2.72	-28.62%
NEM fees	0.92	1.30	41.72%
Total energy purchase cost	**123.39**	**106.55**	**-13.65%**
Network costs (excluding ACT Government scheme costs)	73.96	73.96	0.00%
ACT Government schemes	28.28	28.28	0.00%
Total network costs	**102.24**	**102.24**	**0.00%**
Retail operating costs	14.41	14.67	1.80%
Energy efficiency scheme costs	4.00	4.01	0.25%
AEMC's Power of Choice costs	1.02	1.03	1.80%
Total retail costs	**19.43**	**19.72**	**1.48%**
Total energy + retail + network costs	**245.06**	**228.50**	**-6.75%**
Retail margin	12.99	12.11	-6.75%
Total costs	**258.05**	**240.62**	**-6.75%**

Source: Commission's calculations.

The draft price reduction is primarily driven by reductions in national green scheme costs and wholesale costs (Table ES.2). Green scheme costs have contributed 4.07 percentage points to the price decrease while wholesale costs contributed 2.18 percentage points. 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] The reduction in wholesale costs were driven by an increase in generation capacity, mainly from renewable sources.

Changes to the Commission's pricing model that were made as part of the 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. The changes to the Commission's pricing methodology have contributed around 1.3 percentage points to the draft 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
National green scheme costs	-4.07
Wholesale energy purchase cost	-2.18
Energy losses	-0.42
Retail margin	-0.34
Network costs (excluding ACT Govt schemes)	0.00
ACT Government scheme costs	0.00
Energy Efficiency Scheme costs	0.00
Power of choice	0.01
Retail operating costs	0.10
NEM fees	0.15
Total cost	**-6.75**

Source: Commission's calculations.
Note: The Commission has not updated the EEIS, network and ACT Government scheme costs as the information required to update these costs is not yet available.

Impact on customers

The draft decision would reduce the annual electricity bill for an average customer who uses 6,500 kWh of electricity by $113 in 2020–21 compared to 2019–20. The impact on non-residential customers ranges from a reduction of $697 per year for a large customer to $174 for a small customer. The draft decision would mean that ACT consumers would continue to pay amongst the lowest standing offer electricity prices in Australia.

As described above, this draft report only provides an indication of likely customer impacts based on data up to 29 January 2020. For the final report, the Commission will use more up to date information.

1 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

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;
- a workshop with electricity retailers and consumers groups;
- targeted consultation with consumer groups and financial counsellors;
- a survey of ACT electricity consumers; and
- feedback from consumers via the Commission's online feedback form.

The Commission has found that the range between the highest and lowest market offer is less than in other jurisdictions. Nevertheless, the Commission found that most ACT consumers still find it difficult to compare electricity offers, and that the transparency of offers could be improved. Comparing offers is difficult for the following main reasons:

- there are a large number of offers which 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 such as has been found to have 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, differences between market offer and standing offer electricity prices mean that some consumers could save by shopping around. The Commission considers that improving the comparability and transparency of electricity offers would help consumers find the best offer for their circumstances.

The Commission considers 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 has therefore made draft recommendations to achieve this.

Similar measures have recently been introduced in other Australia jurisdictions. Initial market outcomes from these jurisdictions suggest these measures have assisted consumers in finding the best offer for their circumstances.

In the Commission's view, implementing these measures together as a package is likely to increase the benefits to consumers, given the relative advantages and limitations of each single 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. As such, individual consumers may be better off if their retailer notifies them of the best offer for their circumstances.

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 the 'best offer' notification can only tell a customer whether they are on the best offer with their current retailer; the customer could find an even better offer in the market by using the Energy Made Easy website.

The Commission notes that while regulated standing offer prices only apply to ActewAGL, the recommendations on improving comparability and transparency of electricity offers would apply to all retailers operating in the ACT.

List of draft recommendations

The Commission's draft recommendations are outlined below.

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 whether they are on the best offer and how much can be saved by switching, taking account of the customers' circumstances.

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[2] 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 require the Commission to investigate whether changes are needed in the Territory to improve the comparability of electricity offers (including standing offers and market offers). This has come 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.

As part of this price investigation the Commission is implementing the updated methodology from its 2018–19 electricity model and methodology review (methodology review).[3] 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 therefore made decisions to change how some cost categories are estimated. The Commission is using the updated methodology in this price investigation. As part of this price investigation the Commission is determining the inputs to the methodology and seeking stakeholder feedback on these inputs.

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

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

The Commission released an issues paper on 2 September 2019 as the first step in the consultation process for this investigation. The Commission received six submissions on the issues paper, which are available on the Commission's website. A summary of the submissions is provided in Appendix 3. The Commission has considered issues raised in the submissions in the relevant chapters of this report.

The publication of the draft report and proposed Price Direction is the second step in the Commission's consultation process for this investigation. Stakeholder submissions on the draft report will inform the Commission's development of the final report and Price Direction scheduled for release by 5 June 2020.

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

(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 require 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 requires 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 The Commission's investigation process

The Commission proposed to adopt the indicative timeline set out in Table 1.1.

Table 1.1 Indicative timeline for the retail electricity price investigation

Task	Date
Terms of reference	**28 May 2019**
Release of issues paper	**2 September 2019**
Workshop on the transparency and comparability of electricity offers	**25 September 2019**
Submissions on issues paper close	**11 October 2019**
Draft report and proposed Price Direction	**4 February 2020**
Public hearing	Early March 2020
Submissions on draft report close	20 March 2020
Final report and Price Direction	5 June 2020

The Commission is seeking comments on this draft report and proposed Price Direction. The closing date for submissions is 20 March 2020. Written submissions received by the closing date will be considered in the development of the final report and the Price Direction.

Since the commencement of the investigation, the Commission has consulted with a range of stakeholders, including electricity retailers, consumers, consumer groups and financial counsellors. The Commission recognises the importance of engaging with stakeholders as part of its investigation and has used a range of methods to seek comments from interested parties. The Commission has sought comments through its online feedback form, conducted a survey of consumers, invited formal submissions from stakeholders, arranged targeted meetings with stakeholders, and issued requests for information and data from electricity retailers.

The Commission is required under section 17(4)(b) of the ICRC Act to conduct a public hearing for all price regulation investigations. The Commission intends to conduct a hearing after the release of the draft report to give interested stakeholders an opportunity to ask questions and provide feedback on the Commission's draft decisions. The date of

the public hearing will be made available on the Commission's website (www.icrc.act.gov.au).

1.5 Structure of the draft report

The remainder of this report is structured as follows:

- Chapter 2 discusses the Commission's proposed form of price control for the regulatory period.
- Chapter 3 discusses the Commission's pricing model and draft 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 draft decision.
- Chapter 6 describes the draft 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.

2 Commission's regulatory approach

2.1 Overview

This chapter sets out the Commission's draft 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 offset 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 The Commission's price control formula

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.

In the issues paper, the Commission sought views from stakeholders on this approach and on the amount of discretion that ActewAGL should have in applying the weighted average price change to its standing offer tariffs. In doing so the Commission considered whether changes would contribute to improving the transparency and comparability of electricity offers in the ACT (discussed in Chapter 7). For example, the Commission considered whether regulated standing offer rates should be used as reference prices in the ACT.

Issues paper submissions

ActewAGL's submission supported the Commission's current regulatory approach for two reasons. First, it stated that changing the level of discretion ActewAGL has in determining prices would not lead to improved comparability or transparency.[4]

Second, ActewAGL stated that removing the discretion it has in determining tariffs would reduce its ability to ensure tariffs are cost reflective. It stated that the current form of price control provides the flexibility to align tariffs with underlying costs within the overall constraints of the weighted average price cap, particularly network costs.

The ACT Civil and Administrative Tribunal (ACAT) suggested the current form of price control be altered if the regulated tariffs are used as the reference point. The ACAT

[4] ActewAGL 2019, p. 11.

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.[5]

Commission's consideration and draft decision

The Commission considers 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 considers that ActewAGL should retain discretion to set individual tariffs in the regulated tariff basket. The Commission agrees with ActewAGL that changing the level of discretion ActewAGL has in determining prices may not lead to improved comparability or transparency. However, the Commission considers that there would be benefits to consumers by restricting how much ActewAGL can change individual charges in any single year.

Recent tariff changes by ActewAGL

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 a number of cases the change in individual tariffs was larger than the weighted average price change and led to larger electricity bill changes 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.

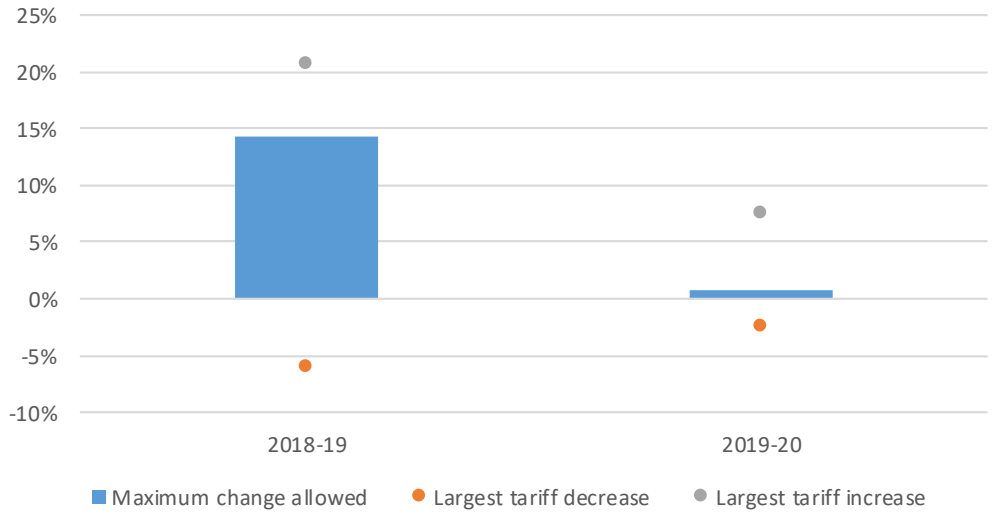
In 2018–19, 16 of the 47 individual tariffs increased by more than the weighted average price change of 14.28 per cent. The average increase was 17.15 per cent and the highest individual tariff increase was 20.77 per cent (Figure 2.1). Conversely, 31 individual

[5] ACAT 2019, p. 2.

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

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 has therefore made a draft decision 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.

Draft decision on side constraints

The Commission's draft decision is 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 was -6.75 per cent, the side constraint will mean that ActewAGL must decrease all individual charges for a regulated standing offer tariff by at least 4.75 per cent. The constraint does not limit price reductions, in the sense that ActewAGL is able to reduce charges by any amount that is 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 considers that the introduction of a side constraint in the form of price control will reduce the magnitude of individual price changes that may apply to a customer.

The Commission notes 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 their regulation of water and sewerage businesses.[8]

The Commission considers that a 2.0 per cent side constraint will provide price stability for consumers and give ActewAGL flexibility in setting tariffs, in the sense that it can adjust prices to meet market conditions and ensure that tariffs are cost reflective. For example, ActewAGL has the ability to ensure tariffs are cost reflective as it can change individual tariffs for several years in a row to ensure cost reflectivity; the side constraint would only slow down the rate of relative price change. The proposed form of price control is shown in Box 2.2.

Box 2.2 Proposed price control formula

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

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

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.

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

[7] AER 2019, p. 5.

[8] ESC 2018, p. 89.

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.

Issues paper submissions

Submissions received by the Commission did not raise any issues with the annual recalibration process. The ACAT's submission was supportive of the proposed process.[9]

Commission's consideration and draft decision

The Commission's draft 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 draft report sets out the details of the proposed 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.[10] 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.

Issues paper submissions

Submissions received by the Commission did not raise any issues with the cost pass-through arrangements. The ACAT's submission was supportive of the arrangements.[11]

Commission's consideration and draft decision

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

[9] ACAT 2019, p. 3.

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

[11] ACAT 2019, p. 3.

2.6 Summary of draft decisions on the regulatory approach

The Commission's draft decision on the form of regulation for the next regulatory period is summarised in Table 2.1.

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

Component	Draft decision
Length of regulatory period	Four years (specified in the terms of reference).
Form of price control	The Commission proposes to use a weighted average price increase form of control with a 2.0 percentage point upper bound side constraint. 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 no individual charge in a regulated tariff can 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 proposes to maintain its current pass-through criteria.

3 Pricing model for the regulatory period 2020-24

The Commission's pricing model is used to determine 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.

As described earlier, 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.[12] The Commission is using the updated methodology in this price investigation. As part of this price investigation, the Commission is determining the inputs to the methodology and seeking stakeholder feedback on these inputs.

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

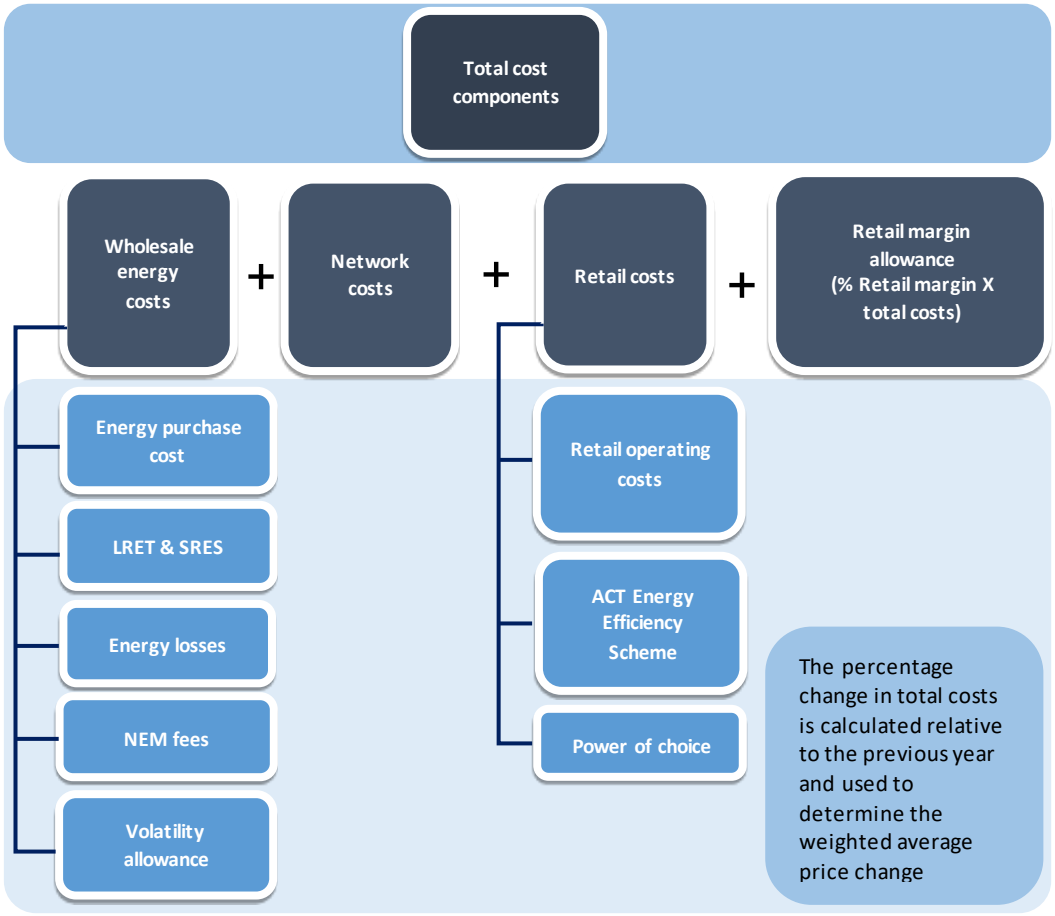
- wholesale electricity costs, which comprise energy purchase costs, Large-scale Renewable Energy Target (LRET) and Small-scale Renewable Energy Scheme (SRES) costs, energy losses, and National Electricity Market (NEM) fees;
- network costs, which include transmission and distribution costs and jurisdictional scheme costs (which include the feed-in-tariff schemes); and
- retail costs, which comprise retail operating costs 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). This cost is 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 draft decisions on the model inputs and proposed approach to setting retail electricity prices for the next regulatory period.

[12] ICRC 2019

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 currently accounts for around 36 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 which are outlined in the following subsections.

Step 1: Determine the appropriate contract position

Step 2: Determine contract prices

Step 3: Develop a half-hourly profile of load and spot prices

Step 4: Calculate 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.

The Commission intends 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 issues paper proposed to use a modelling approach to develop a suitable heuristic, consistent with the conclusion arrived at in the methodology review. The issues paper also proposed to use five years of historic input data to inform the development of the heuristic and sought feedback on this approach.

Issues paper submissions

Stakeholders had differing views on the Commission's proposed approach to developing a heuristic to determining the contract position.

ActewAGL questioned the appropriateness of using five years of historical data in determining a heuristic, claiming that the resulting heuristic would optimise the contract position for the specific five-year period being examined and will not take into account potential market volatility, which is the reason retailers hedge. ActewAGL suggested the Commission should adopt a benchmarking approach to determine the contract position and viewed the heuristic determined by ACIL Allen for the Queensland Competition Authority (QCA) as a suitable benchmark.

Origin Energy agreed that the contract position should be based on a heuristic. Origin Energy considered that a conservative hedging strategy should be adopted to accommodate a wide range of possible scenarios. Similar to ActewAGL's position, Origin Energy considered that the underlying demand data used in the energy purchase

cost model be drawn from an extensive history that includes weather extremes, and stated that:

> …a tight range of demand distributions naturally leads to a more efficient 'model hedge position' in turn understating modelled energy costs.

The ACAT supported developing a heuristic based on the ACT electricity load profile. The ACAT stated that the ACT has a distinctly different load profile than that exists elsewhere in Australia due to ACT's winter temperatures and the high number of gas customers.

Commission's consideration and draft decision

The Commission's draft decision is to use an ACT specific heuristic. The Commission considers that the heuristic used by the QCA is not necessarily appropriate for the ACT because it does not reflect the demand characteristics of the ACT. For example, the ACT has a smaller industrial sector which may lead to differences in energy use during off-peak periods. The ACT also has a different climate and a higher proportion of customers with gas heating.

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[13] 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 financial years (the latest data available at the time). The load data was adjusted to account for the future trends in electricity demand resulting from solar photovoltaic (Solar PV) take up. Frontier Economics used Monte Carlo simulations to generate load and prices based on this adjusted historic data.[14] These simulated data inform the STRIKE model. Simulated years were used rather than actual data as actual data may be subject to unique market conditions that are unlikely to be repeated.

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 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

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

[14] Monte Carlo simulation is a statistical technique that repeatedly generate random samples of demand and spot prices based on characteristics specific to a given data set. 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 uses a Minimum Variance Portfolio approach to select a contract position. The Minimum Variance Portfolio 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 draft decision to adopt a conservative hedging strategy. This is based on the need to ensure that ActewAGL, the retailer of last resort, is not potentially exposed to financial failure.

The Commission's draft decision is to use the heuristic developed by Frontier Economics. The Commission considers 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 volumes 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 third quarter
- The peak period contract volume is set to equal the 65th percentile of the peak period half hourly demand, less the base contract volumes for the third 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 proposes to use the above-mentioned heuristic on demand data from 1st January 2015 to 31 December 2019.

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 the 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 issues paper proposed to use the 23-month averaging period between 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 the Commission to finalise the model outputs ahead of its final decision in June each year.

Issues paper submissions

ActewAGL supported the Commission's proposal to bring forward the averaging period by one month compared with the Commission's previous averaging period.

Commission's consideration and draft decision

The Commission's draft decision is to use the 23-month (from 1 June to 30 April) average of forward prices from the ASX Energy 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 retailer that uses a hedging strategy.

The Commission's final decision in the methodology review 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 recalibrations.

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.[15] The methodology review concluded that the forward price margin would be set at five per cent.

The issues paper sought feedback from stakeholders on an appropriate period for calculating an average forward price for the purpose of scaling spot prices.

Issues paper submissions

ActewAGL proposed to use the 23-month averaging period ending 30 April as the averaging period for scaling purposes. ActewAGL viewed this averaging period as consistent with the averaging period used to determine contract prices, and noted that it smooths out fluctuations in forward prices, resulting in more stable regulated retail prices for customers. ActewAGL supported the five per cent margin as it is consistent with the Commission's previous model and is used by other regulators in Australia.

The ACAT supported a 40-day averaging period, as this period was recommended to the ESC by Frontier Economics. The Commission notes that the Victorian ESC uses the 40-day average of ASX Energy contract prices for quarterly base swap prices as representing the market's current view of spot prices for each quarter of 2020.

Commission's consideration and draft decision

The Commission intends to use the most recent five calendar years of observed data from AEMO as the half-hourly profile of load and spot price. The Commission also intends to use a forward price margin of five per cent, consistent with that used by the ESC in Victoria and decided by the Commission in the methodology review.

The Commission's draft decision is to use the 23-month period from 1 June to 30 April as the averaging period for scaling purposes. The Commission agrees with ActewAGL that this averaging period smooths out fluctuations in forward prices resulting in more stable regulated prices for customers. Also, this averaging period is consistent with the period used to average contract prices.

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

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

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 final decision in the methodology review was to determine the volatility allowance using a benchmark approach.

Issues paper submissions

ActewAGL's submission proposed to calculate the volatility allowance by taking an average of the volatility allowances used by the ESC for the VDO to apply from 1 January 2020. Specifically, ActewAGL proposed a two-step approach to calculating the volatility allowance:

- Step 1: take the simple average of the ESC's volatility allowances across the five Victorian distribution zones. ActewAGL proposed to do this separately for residential and business customers because the ESC reports separate volatility allowances for each.
- Step 2: take the weighted average volatility allowance between residential and business customers (weighted by ActewAGL's residential versus business electricity demand).

ActewAGL sought clarification on whether the Commission will update the volatility allowance during the regulatory period.

The ACAT also considered that it would be appropriate to use the ESC volatility allowances.

Origin Energy considered that the volatility allowance provided in the VDO draft decision understates the level of costs associated with the expected exposure.

Commission's consideration and draft decision

The Commission's draft decision is to calculate the volatility allowance using the method proposed by ActewAGL and described above. The Commission proposes to use volatility allowances determined by the ESC in its final decision on the VDO to apply from 1 January 2020 as input data for the calculation. Both the ESC and the Commission adopt a conservative hedging strategy (described above) which reduces the need for a large volatility allowance.

The Commission considers 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. The Commission intends to update the volatility allowance at the start of each 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 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).[16] The cost of meeting these obligations accounts for six 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.

As part of the methodology review 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. The issues paper sought feedback on the cost of debt to use in determining the holding cost, including on whether it was appropriate to use the regulatory cost of debt determined by the Commission for the ACT's water business or the cost of debt used by the ESC in determining the VDO.

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.

[16] 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.

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

Box 3.1 Equation to calculate the LRET costs

LRET costs (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 denotes the half-yearly load weight for the calendar year
- RPP denotes the renewable power percentage for the calendar year
- LGCspot denotes 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 denotes the holding cost percentage based on half of the cost of debt parameter
- CA denotes the LRET cost adjustment from the previous financial year.

Box 3.2 Equation to calculate the SRES costs

SRES costs (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 denotes the half-yearly load weight for the calendar year
- STP denotes the small-scale technology percentage for the calendar year
- STCspot denotes 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 denotes the holding cost percentage based on half of the cost of debt parameter
- CA denotes the SRES cost adjustment from the previous financial year.

Issues paper submissions

ActewAGL supported the Commission's market-based approach for determining the LRET and SRES costs.

To calculate the holding cost, ActewAGL suggested the Commission use the weighted average cost of capital (WACC) instead of cost of debt alone. ActewAGL stated that the benchmark cost of capital is a weighted average of both debt and equity financing. ActewAGL proposed that the Commission adopt the WACC parameters from its water and sewerage decision except for the equity beta, which should be specific to retail electricity. For the equity beta, ActewAGL proposed to use the same value used by the ESC in the VDO (i.e an equity beta of 1.00). ActewAGL sought clarification on whether the Commission intended to update the cost of debt parameter annually.

Origin Energy also suggested the Commission use WACC instead of cost of debt to calculate the holding cost. Origin Energy stated that a commercial WACC provides a more accurate indication of holding costs than the cost of debt. In Origin Energy's view, the ACT's water business does not provide an appropriate proxy for an efficient electricity retailer in the ACT as it is a low risk regulated monopoly business.

Commission's consideration and draft decision

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

The Commission's draft decision on the holding cost is to provide an allowance based on the cost of debt. The Commission considers that an efficient retailer would finance the holding costs of green scheme certificates using their working capital — the amount of money businesses use for day to day operations — which is usually financed through corporate debt.

The Commission agrees with Origin Energy that the risks associated with electricity retail businesses differ from those of water businesses. Therefore, the Commission considers that a cost of debt parameter specific to a retail electricity business should be used when calculating green scheme certificate holding costs.

The credit rating for both Origin Energy and AGL was reported as Baa2 in 2019.[17] The Commission proposes to use the cost of debt for businesses with this credit rating as the appropriate cost of debt. For the draft report, 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[18]. This was 1.98 per cent based on data from

[17] See 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

[18] https://www.rba.gov.au/statistics/tables/

the Reserve Bank of Australia. For the final report, the Commission intends to update this value as the 11-month average to 30 April 2020.

This means that the holding cost applied by the Commission to LGC and STC prices in the draft report is 0.99 per cent per year. 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.[19] Retailers purchase additional electricity to allow for these losses. The loss factors are calculated by the AEMO and are used by all regulators to determine the energy loss allowances where regulated tariffs apply. The 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.

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

[19] 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.

Issues paper submissions

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

Commission's consideration and draft decision

The Commission intends 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.[20] 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.

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. Should the AEMC decide to change its methodology, the Commission will use the new loss factors. The Commission notes that the AEMC made a draft determination in November 2019 that rejected the proposed change by Adani Renewables.[21] The AEMC intends to release its final determination in February 2020.

3.5 NEM fees

The NEM is managed by the AEMO, which recovers its costs from market participants. Its 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 a retailer and should be appropriately passed through in retail electricity prices.

As set out in its final decision on the methodology review, the Commission intends to calculate ancillary fees for the first year of the regulatory period using AEMO's ancillary service payments data averaged over a 52-week period. The Commission intends to determine NEM fees for the first year of the regulatory period using cost estimates

[20] AEMC 2019, p. vii.

[21] AEMC 2019, p. ii.

reported by AEMO. For subsequent years of the regulatory period, these costs will be indexed to the Consumer Price Index (CPI).

Issues paper submissions

ActewAGL supported the proposed approach. Other submissions did not discuss NEM fees.

Commission's consideration and draft decision

The Commission intends to calculate NEM fees using the approach set out in the final decision on the methodology review[22] using data available in the AEMO's Final Budget and Fees 2019–20 publication.[23]

In calculating ancillary fees, the Commission intends to use the 52-week averaging period ending 30 April 2020. This is consistent with the end date of the averaging period used when calculating electricity forward prices.

The Commission notes that AEMO does not develop 2020–21 cost estimates for ECA fees. The Commission will therefore apply CPI indexation to the 2019–20 ECA fee reported by AEMO.[24]

3.6 Network costs

Network costs are the sum of transmission, distribution and jurisdictional charges paid by ActewAGL. They 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), energy industry levy and utilities network facilities tax.

Issues paper submissions

ActewAGL supported the Commission's approach to taking network costs as determined by the AER. Other submissions did not raise any issues with the Commission's approach to recovering network charges.

[22] 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.

[23] AEMO 2019, 2019–20 AEMO Final Budget and Fees, available at https://www.aemo.com.au/-/media/Files/About_AEMO/Energy_Market_Budget_and_Fees/2019/Final-201920-AEMO-Final-Budget-and-Fees.pdf.

[24] This fee is available from AEMO 2019.

Commission's consideration and draft decision

As network costs are unavoidable for all retail businesses, the Commission intends 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. The Commission's final decision in the methodology review was to continue using a benchmarking approach to determine retail operating costs.

Issues paper submissions

Submissions received by the Commission on retail operating costs provided suggestions on data sources to be considered in the Commission's benchmarking approach.

ActewAGL's submission stated that in undertaking its benchmarking, the Commission should consider Frontier Economics' review of recent regulatory decisions, the ESC's final decision for the VDO to apply from 1 July 2019, and costs reported in the Australian Competition and Consumer Commission's (ACCC) Inquiry into the National Electricity Market.

Based on the sources mentioned, ActewAGL considered the Commission's current retail operating cost allowance to be appropriate, stating that:

> In ActewAGL's view, benchmarking suggests that the ICRC current estimate for [retail operating costs] is consistent with benchmarking results, particularly considering the small scale of the ACT.[25]

Origin Energy stated that the divergence in available retail operating cost estimates may make it difficult to determine a suitable benchmark. Origin Energy 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, stating that:

> We urge the Commission to consult on the development of an appropriate data template to ensure that it collects data that is consistent across all retailers. In particular, it is important that the Commission consider the broad nature of retail costs and seek to understand the full suite of these costs before excluding any category in its assessment.[26]

[25] ActewAGL 2019, p 23.

[26] Origin Energy 2019, p 6.

The Commission has invited Origin Energy to provide retail operating cost data to assist in understanding how the retail operating costs are derived. The Commission also requested ActewAGL provide such data during the Commission's methodology review.

Customer acquisition and retention costs

ActewAGL stated that the Commission's current approach of not including a separate allowance for customer acquisition and retention costs (CARC) is inconsistent with regulatory practices in other jurisdictions. ActewAGL also stated that continuing to exclude a separate allowance for CARC is inconsistent with the cost recovery requirements of the ICRC Act given the increasing level of competition in the ACT. In terms of an appropriate CARC amount, ActewAGL stated that:

> Benchmarking suggests that the ICRC should include an allowance for CARC of between $38 per customer per year and $103 per customer per year (adjusted appropriately for inflation).[27]

Origin Energy also 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. Origin Energy requested the Commission provide clarification on the omission of CARC, stating:

> Origin seeks clarification from the Commission regarding the application of a benchmarking approach where a critical component of the retail cost stack (CARC) is apparently omitted from the benchmarking exercise.[28]

The ACAT suggested that the introduction of a CARC allowance was unnecessary as competition in the ACT was slowly increasing regardless. It stated that:

> The ACAT is strongly opposed to the introduction of an allowance for CARC. This will simply raise prices for all domestic customers in Canberra to promote "competition" among retailers in relation to market offers. We note also that there is a slowly increasing penetration of the ACT residential electricity market by national retailers, particularly Origin Energy, which is occurring without an allowance for CARC costs.[29]

Commission consideration and draft decision

In making its 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.

[27] ActewAGL 2019, p 24.

[28] Origin Energy 2019, p 7.

[29] ACAT 2019, p 4.

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.

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]

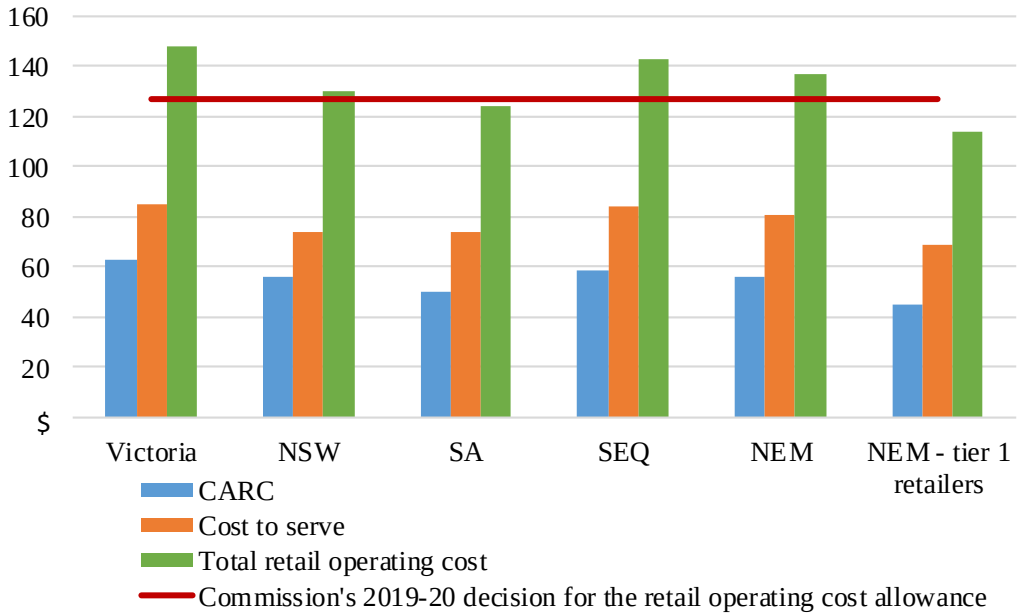
The ACCC reported that CARC ranged from $50 per customer per year in South Australia and $63 per customer per year in Victoria. It averaged $56 per customer per year across the NEM. As with cost to serve, with NEM average was lower for tier 1 retailers ($45 per customer per year) than for others ($87 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 Essential Services Commission of South Australia (ESCOSA) the ICRC, Independent Pricing and Regulatory Tribunal (IPART), Office of the Tasmanian Economic Regulator (OTTER), the QCA and the 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, the ICRC, the 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 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 had been adjusted for inflation in each subsequent year.[34]

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] 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.[35]

Commission's draft decision

The Commission's draft decision is 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 $127.81 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.

The Commission maintains that a separate allowance for CARC in the ACT is not warranted, as stated in its final decision on the methodology review. The Commission considers that the current retail operating cost allowance recovers reasonable costs

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

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.[36]

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.[37] The details of the scheme from 2021 are not currently available; once details are available the Commission will take these into account. 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.[38] ActewAGL is the only current tier 1 retailer in the ACT.

The EEIS sets Territory-wide energy savings targets (Box 3.4) as well as 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 obligation 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)[39]

[36] AER 2019, p 15.

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

[38] 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.

[39] For more information see 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

- $SESO_t$ denotes the supplier energy savings obligation for calendar year t (t CO_2-e);
- EST_t denotes the energy savings target for calendar year t (percentage);
- $Sales_t$ denotes the electricity sales by the retailer for calendar year t (MWh); and
- EF_t denotes 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;
- disposal of refrigerator or freezer; and
- install ceiling insulation.

Tier 1 retailers can meet their energy savings obligation 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 obligation 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.[40] The estimated cost of compliance after 2020 is not yet available. The Commission proposes to use new data as relevant in its future price determinations during the next 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.

The Commission determines the EEIS allowance using the Commission's methodology and using cost estimates provided by ActewAGL, subject to a prudency and efficiency

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

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

Issues paper submissions

ActewAGL supported the Commission's current approach to calculating EEIS costs. The ACAT supported the pass-through of the EEIS costs as the program has delivered considerable energy efficiency benefits to ACT consumers, including vulnerable consumers.

Commission's consideration and draft decision

The Commission's draft decision is to retain its current 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.

3.9 Power of Choice pass-through costs

Power of Choice reforms are a set of regulatory changes introduced by the AEMO 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.[41]

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

For 2018–19 and 2019–20, the Commission approved the Power of Choice costs in the previous two price resets. 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 'smear' smart meter costs (for standing offer customers) across the regulated customer base because this cost is not in the

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

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.

Issues paper submissions

In its submission to the issues paper, ActewAGL proposed to include smart meter costs in the Commission's cost stack. ActewAGL stated that this would improve the comparability of ActewAGL's standing offers with the offers from other retailers. This is because the proposal would simplify ActewAGL's standing offers, which currently have two sets of supply charges (as discussed above).

ActewAGL stated that the inclusion of smart meter costs in the cost stack would be essential if a reference price is introduced in the ACT. In ActewAGL's view, if smart meter costs are not included in the cost stack, advertising discounts based on a reference price could be complex and confusing to customers.

Commission's consideration and the draft decision

To inform its consideration, the Commission gathered confidential information from ActewAGL relating to smart meter costs. The Commission also considered how other retailers recover smart meter costs.

Current state of the market

The Commission found that 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, for example, Origin Energy and Energy Australia smear smart meter costs across all customers.

The Commission notes that ActewAGL is currently able to smear smart meter costs for customers on its market offers (which are unregulated) but has not chosen to do so. In other words, ActewAGL maintains separate supply charges for smart meter and non-smart meter customers for both standing and market offers.

The number and cost of smart meters

The number of smart meters in the ACT is relatively small but is increasing. The Commission estimates that there are around 18,500 smart meters installed in the ACT.

Annual smart meter cost estimates provided by ActewAGL (as confidential information) falls within the range used by other regulators such as the QCA and the 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.[42] 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. [43]

If smart meter costs were smeared across all customers (by being included in the Commission's cost stack), the Commission estimates that it would lead to an increase in costs of around $1 per MWh or a bill increase of $6.50 per year for an average household consuming 6,500kWh per year. The Commission expects this amount would increase over time as the take up of smart meters increases in the ACT.

Advantages and disadvantages of smearing smart meter costs

The Commission has considered the advantages and disadvantages of including smart meter costs in the cost stack.

The Commission agrees with ActewAGL that the inclusion of smart meter costs in the cost stack could improve the transparency and comparability of electricity offers in the ACT. The Commission considers that comparability could be improved for two reasons. 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.

The Commission also notes that the current arrangements have the potential to affect the relative competitiveness of electricity retailers in the ACT. This is because the prices for each retailer will depend, to a degree, on smart meter costs and how they are recovered. If retailers recover the costs differently, it may lead to differences in prices for smart meter versus basic meter customers across retailers. However, the Commission considers that this issue is not significant. As described above, the Commission notes that ActewAGL currently does not smear its smart meter costs for market offer customers even though it is able to do this. This suggests that the impact on ActewAGL's competitiveness for smart meter tariffs is not material.

The Commission considers that there are a number of disadvantages of including smart meter cost in the cost stack. First, the smearing of smart meter costs would lead to regulated standing offer rates that are not 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.

The Commission notes the smearing of smart meter costs also raises equity and fairness issues. This is because basic meter customers would have to pay for smart meter services for which they do not receive a direct benefit. This cross subsidisation could have

[42] ACIL Allen, 2019, p 16

[43] ICRC Communication with the OTTER

adverse effects on low-income and vulnerable consumers in the ACT, who are less likely to have a smart meter than other customers. Under the ICRC Act, the Commission is required to consider social objectives when making regulatory decisions.

Commission's draft decision

The Commission considers that the disadvantages of smearing the costs of smart meters outweigh the advantages proposed by ActewAGL. Therefore, the Commission's draft decision is to not include the costs of smart meters in the cost stack. As discussed above, the Commission includes an allowance for the costs associated with implementing the Power of Choice reforms because these costs apply to all standing offer customers.

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. The Commission's final decision in the methodology review was to adopt a benchmarking approach in determining the retail margin.

Issues paper submissions

Submissions received by the Commission on the retail margin supported the Commission's proposed benchmarking approach.

ActewAGL's submission stated that, in applying the benchmarking approach, 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.

ActewAGL stated that the ICRC's current margin is below that used in other Australian regulatory decisions, below Frontier's base case expected returns estimate and below the NEM-wide retail margin for 2017–18.[44]

ActewAGL does not consider it is appropriate to include retail margins from other industries in the consideration of benchmarks for retail electricity. It stated that:

> Other industries will face inherently different risks to a retail electricity business and hence cross-industry comparisons are not likely to be helpful.[45]

[44] Actew AGL 2019, p 26.

[45] ActewAGL 2019, p 24.

Origin Energy noted that the current allowance of 5.3 per cent provided by the Commission is lower than current regulatory practice in other jurisdictions. Origin Energy stated that:

> Given the increase in market risk (e.g. wholesale volatility) and regulatory risk, we consider that the Commission should adopt a margin at the higher end of the range of available estimates. Setting the margin too low risks impacting retail competition in the market. Conversely, adopting a higher margin represents a conservative approach – facilitating retailer entry and competition in the ACT market with any upside in the margin effectively competed away as a result.[46]

ActewAGL and Origin Energy both 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.

The ACAT suggested setting the retail margin at a relatively low level to reduce costs to end users. It stated that:

> A good starting point is the Commission's prior determination for the 2017–20 regulatory period.[47]

Commission's consideration and draft decision

In making its draft decision, the Commission adopted a benchmarking approach as proposed in the methodology review and the issues paper. The Commission considered the retail margins discussed in Frontier Economics' review of recent regulatory decisions and the expected returns approach, the ESC's final decision for the VDO to apply from 1 January 2020, and the ACCC's November 2019 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 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 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).[48] The average margin for NEM retailers was 4 per cent (equivalent to 4.2 per cent of cost of goods sold).

The Commission considers that these margins do 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

[46] Origin Energy 2019, p 7.

[47] ACAT 2019, p 4.

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

Inquiry[49] highlighted some features that may indicate the market was not operating efficiently such as high electricity prices and poor consumer outcomes.

These concerns about inefficiencies in the NEM were also shared by Frontier Economics in its advice to the ESC, stating 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.[50]

Second, the ACCC benchmarks for the retail margin are 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.[51]

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 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.[52]

As part of the 2017–20 electricity price investigation, the Commission decreased the retail margin from 6.04 per cent to 5.3 per cent 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 the Commission's obligations under the ICRC Act to protect customers from the abuse of monopoly power and to consider the social impacts of its decisions.

[49] ACCC 2018, p iv

[50] Frontier Economics 2019, p 21.

[51] ACCC 2019a, p 103.

[52] SFG Consulting 2013, p 30.

The Commission notes that energy purchase costs remain higher than the Commission's 2014–17 decision and IPART's 2013 decision. The Commission considers that its reasons for adopting a lower retail margin as part of the 2017 electricity price investigation remain relevant for this current price investigation.

Frontier Economics also 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[53] associated with a business, otherwise seen as the risk faced by an efficient retailer.[54] Using this method, Frontier Economics generated 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).

Commission's draft decision

The Commission's draft decision is to maintain a retail margin of 5.3 per cent. This margin is within the acceptable range for the retail margin estimated by Frontier Economics using the expected returns approach discussed above.

The Commission considers that the retail margin range recommended by SFG Consulting to IPART in 2013 may be less relevant because it does not reflect the increases in energy purchase costs that have occurred since then. The Commission considers that its reasons for adopting a lower retail margin in the 2017 electricity price investigation remain relevant for this current price investigation. Specifically, the Commission's draft decision ensures that the dollar value of the retail margin allowance remains within a reasonable range.

The Commission considers 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 found to be 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. These factors suggest that the probable incidence of bad and doubtful debts in the ACT may be lower than that in any other NEM jurisdiction.

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

[54] Frontier Economics 2019, p 23.

[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.

Market indicators suggest that retailers in the ACT are able to 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 range from 12 per cent (unconditional) to 25 per cent (conditional) off usage charges compared to standing offer contracts. Similarly, Origin Energy offers between 10 per cent and 25 per cent off standing offer usage charges. Origin Energy also offer standing offer contracts that are priced below the regulated standing offer rates used by ActewAGL.

The ability of retailers to offer large discounts to standing offer rates suggests 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 suggests that the retailers can recover a reasonable profit under the current regulatory settings.

3.12 Summary of draft decisions on the cost components

The draft decisions on the Commission's pricing model to be applied for the regulatory period commencing 1 July 2020 are summarised in Table 3.5.

Table 3.5 Draft decisions 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 the 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 prudence and efficiency assessment.
Network costs	Maintain the current approach of passing through the network costs determined by the AER.
Retail margin	Maintain the current retail margin of 5.3 per cent.

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. The Commission will use more up to date data in estimating efficient supply costs for the final decision.

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 this draft report, the Commission applied the heuristic on the half hourly ACT load data from 1 January 2015 to 29 September 2019 (the latest date for which data is available). The resulting contract positions are shown in Table 4.1. For the final report, the Commission will update these positions using data for the period 1 January 2015 to 31 December 2019.

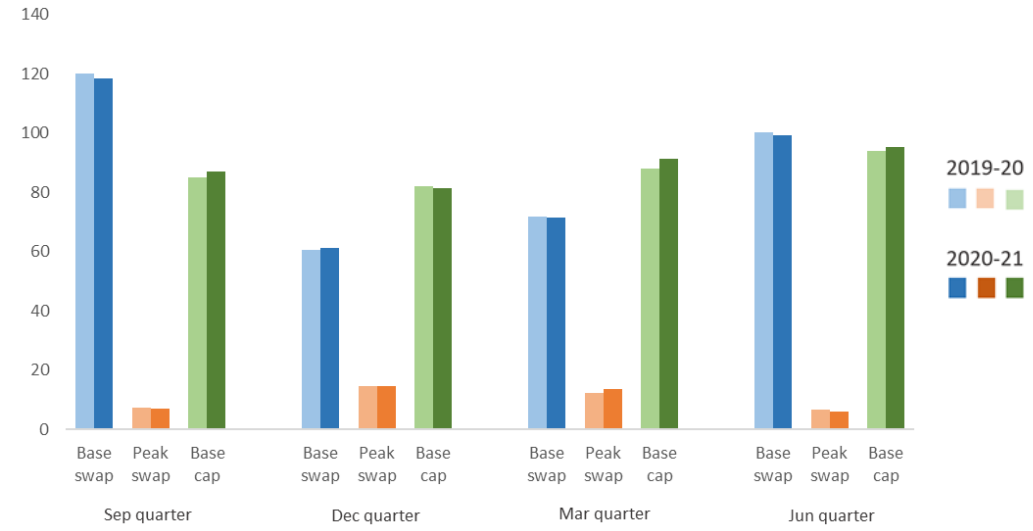
Table 4.1 Quarterly contract positions (MW), 2019–20 and 2020–21

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	71.8	100.04	118.49	61.17	71.35	99.22
Peak swap	7.40	14.79	12.32	6.69	7.06	14.75	13.85	6.26
Base cap	85.13	82.00	87.94	94.06	87.10	81.38	91.38	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), 2019–20 and 2020–21



Source: Commission's estimates using AEMO data

Contract prices

The Commission's proposed approach to determining the contract prices for 2020–21 is to use the 23-month average of forward prices from the ASX Energy. For the draft report, the Commission used the 20-month average from 1 June 2018 to 29 January 2020 (the latest available data). The Commission will update the data for the remaining three months in the final report. The contract prices used in the draft report are summarised in Table 4.2.

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

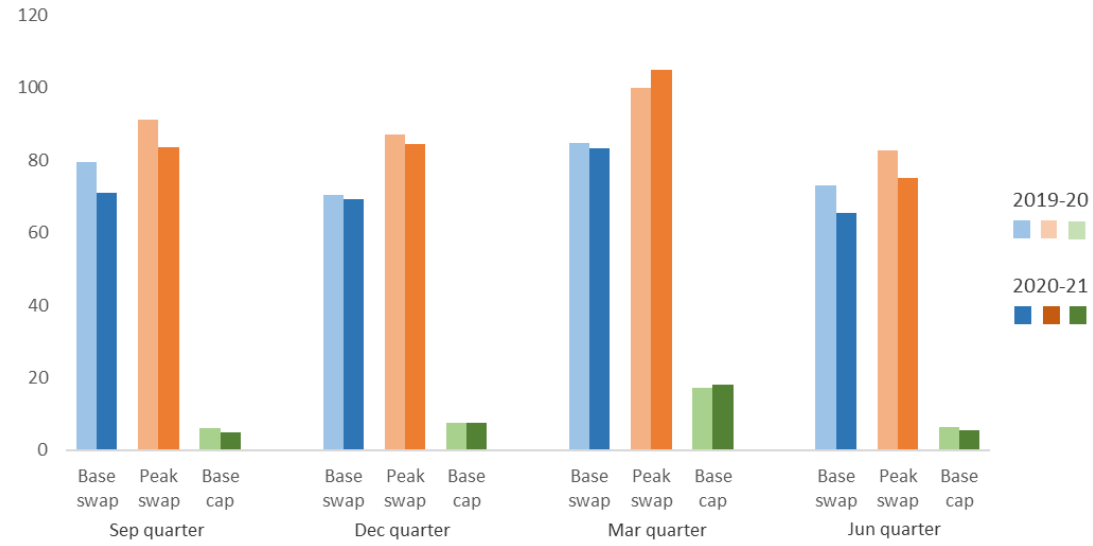
Contract price	2019–20				2020–21			
	Sep quarter	Dec quarter	Mar quarter	Jun quarter	Sep quarter	Dec quarter	Mar quarter	Dec quarter
Base swap	79.43	70.48	84.68	73.17	70.97	69.40	83.21	65.34
Peak swap	91.26	87.05	99.91	82.58	83.62	84.40	105.01	75.12
Base cap	6.24	7.71	17.17	6.34	4.92	7.48	17.97	5.44

Source: ASX Energy and the Commission's calculations.

The contract prices for 2020–21 are generally lower than that for the previous year (Figure 4.2). The main reason for lower contract prices during 2020–21 is new generation capacity entering the grid, mainly from renewable sources.[56] If this trend continues, it may lead to a lower energy purchase cost in 2020–21 than currently estimated.

[56] AEMO 2019, 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 Jan 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 $87.30 per MWh for 2020–21. This is 6.05 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 (per cent)	0.99	0.99
LRET data		
Renewable power percentage (RPP) (%)	20.15	19.64
Average LGC spot price ($/certificate)	55.34	44.50
SRES data		
Small-scale technology percentage (STP) (%)	14.56	12.88
Average STC spot price ($/certificate)	36.23	37.39

Sources: Clean Energy Regulator (2019); ICAP; ActewAGL load data; Frontier (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 in March each year, hence 2020 and 2021 percentages are not yet available. For the draft report, 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.[57]

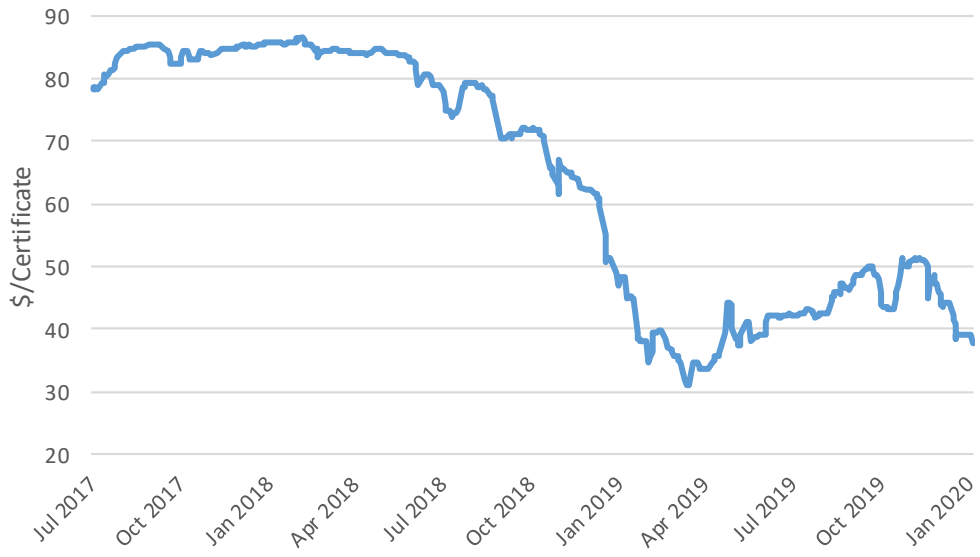
[57] The Clean Energy Regulator's default formula and data for energy savings target is available on its website: http://www.cleanenergyregulator.gov.au/RET/Scheme-participants-and-industry/the-renewable-power-percentage.

The estimated renewable power percentages for 2020 and 2021 are 20.15 per cent and 19.64 per cent, respectively. The Commission will update these estimates for the final report once the Clean Energy Regulator releases new data.

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 $44.50, which has been calculated as the 7-month average of LGC prices from 1 July 2019 to 29 January 2020 for this draft report. This increases to $44.95 per certificate when holding costs are applied. This estimate will be updated for the final report when data becomes available for the remaining four months to 31 May 2020.

The estimated average LGC price for 2021 is around $10 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.[58]

Figure 4.4 LGC spot prices, July 2017 to January 2020



Source: ICAP data.

SRES

The small-scale technology percentages used in this draft report are the estimates published by the Clean Energy Regulator. The Commission will update these estimates when the Clean Energy Regulator releases new values in March 2020.

[58] For further details see 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

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 $37.39, which is calculated as the 7-month average of LGC prices from 1 July 2019 to 29 January 2020 for this draft report. This increases to $37.76 per certificate when holding costs are applied. This estimate will be updated for the final report when data becomes available for the remaining four months to 31 May 2020.

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 and small-scale technology percentage. For this draft report, the Commission has not included a cost adjustment in the LRET and SRES cost allowance for 2019–20, as the actual values have not yet been released by the CER. The Commission will include a cost adjustment allowance in the final report.

Estimated green scheme cost

The Commission's draft estimate of the total green scheme cost allowance for 2020–21 is $15.22 per MWh, based on the data described above (Table 4.4). This is 32.6 per cent lower than the allowance provided in 2019–20. The decline mainly reflects lower LGC prices. The Commission will include a cost adjustment allowance in the final report.

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

	2019–20	2020–21
LRET	15.63	10.11
SRES	7.70	5.11
Cost adjustment from previous year	2.40	0.00
Total cost	**25.73**	**15.22**

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.

For the purpose of the draft decision, the Commission has used the 2019–20 distribution loss factors and AEMO's indicative marginal loss factors for 2020–21. This generates a draft energy loss cost component of $2.72 per MWh for 2020–21. This allowance is about $1 per MWh lower than in 2019–20.

4.5 NEM fees

The Commission calculated the cost allowance for NEM fees using AEMO's cost data. The draft NEM fee cost allowance for 2020–21 is $1.30 per MWh (Table 4.5). This is $0.42 per MWh higher than in 2019–20.

Table 4.5 NEM fees

Component ($/MWh)	2020–21
NEM management fees	0.56
Full retail contestability (FRC) fees	0.16
National Transmission Planner (NTP) fees	0.04
Energy Consumers Australia (ECA) fees	0.07
Ancillary services fees (NSW region)	0.51
Total NEM fees ($/MWh)	**1.34**

Source: AEMO and the Commission's calculations.

Notes: For the draft decision, the Commission calculated ECA fees by indexing 2019–20 ECA using CPI. For the final report, the Commission will update ECA using the updated CPI. The Commission calculated ancillary services fees by averaging weekly ancillary fees for the period of 6 May 2019 to 19 January 2020. For the final report, the Commission will update ancillary services fees by including remaining data to the end of April 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 1.80 per cent. This adjustment takes the per customer allowance to $127.81 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. For the purposes of the draft decision, the Commission used 2019–20 customer numbers and energy usage as estimates for 2020–21. This converts to an allowance of $14.67 per MWh for 2020–21 representing a 1.80 per cent increase over the 2019–20 cost allowance of $14.41 per MWh.

In the final report, the Commission will update this cost allowance with ActewAGL's customer numbers and energy usage for the year to 31 March 2020.

4.7 Energy Efficiency Improvement Scheme (EEIS)

The Commission has not received data from ActewAGL on EEIS compliance costs ahead of finalising the draft report. The Commission has therefore used the 2019–20 EEIS cost allowance in the pricing model. The Commission will receive EEIS cost data from ActewAGL ahead of the final decision. The Commission's draft EEIS allowance for 2020–21 is $4.01 per MWh (Table 4.6).

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 2019	115.93	0.4	8.6	3.99	52.80
Jan–Jun 2020	115.93	0.4	8.6	3.99	47.20
2020–21 EEIS ($ per MWh)				**4.01**	

Source: Commission's calculations using ActewAGL data.

4.8 Network costs

For the draft decision, the Commission has used the 2019–20 network cost of $102.24 per MWh because the AER's final decision on Evoenergy's network costs for 2020–21 is not yet available. In the final report, the Commission will use the network cost allowance approved by the AER. The Commission expects that the AER's final decision will be available in May 2020.

4.9 Power of Choice pass-through costs

The Commission's draft 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 $1.03 per MWh in 2020–21, which is an increase of 1.80 per cent compared to 2019–20. The Commission's draft decision of per MWh value is based on electricity usage for the year to 31 March 2019. For the final decision, the Commission will use the usage for 31 March 2020, when that data becomes available.

4.10 Retail margin

For the reasons set out in section 3.7, the Commission's draft decision is for a retail margin of 5.3 per cent over the regulatory period. Applying this margin to all of the cost categories of the retail electricity cost index model generates a retail margin allowance of $12.11 per MWh for 2020–21.

4.11 Summary of draft decisions on cost elements

Table 4.7 sets out the Commission's draft decision on the cost components used to determine the maximum allowed change in the regulated retail electricity price for 2020–21. The Commission's draft decision provides for an average nominal decrease of 6.75 per cent in ActewAGL's basket of regulated tariffs. This is equivalent to a real (adjusted for inflation) decrease in the regulated retail price of 8.41 per cent.

Table 4.7 Draft 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	87.30	-6.05%
National green scheme costs	25.73	22.92	15.22	-40.84%
Energy losses	3.81	3.69	2.72	-28.62%
NEM fees	0.92	1.13	1.30	41.72%
Total energy purchase cost	**123.39**	**120.28**	**106.55**	**-13.65%**
Network costs (excluding ACT Government scheme costs)	73.96	73.96	73.96	0.00%
ACT Government schemes	28.28	28.28	28.28	0.00%
Total network costs	**102.24**	**102.24**	**102.24**	**0.00%**
Retail operating costs	14.41	14.41	14.67	1.80%
Energy efficiency scheme costs	4.00	4.00	4.01	0.25%
AEMC's Power of Choice costs	1.02	1.02	1.03	1.80%
Total retail costs	**19.43**	**19.43**	**19.72**	**1.48%**
Total energy + retail + network costs	**245.06**	**241.95**	**228.50**	**-6.75%**
Retail margin	12.99	12.82	12.11	-6.75%
Total costs	**258.05**	**254.77**	**240.62**	**-6.75%**

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

Table 4.8 shows the contribution of the various cost components to the total percentage change in prices from 2019–20 to 2020–21. The national green scheme costs and wholesale electricity purchase cost are the main drivers of the price decrease in 2020–21; they explain 60 per cent and 34 per cent of decrease in total electricity price, respectively. As described earlier, the decline in national green scheme costs are driven by reductions in the cost of large-scale generation certificates.[59] Wholesale costs decreased due to increase in generation capacity.

Changes to the Commission's pricing model that were made as part of the 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. This is evident in Table 4.7, which 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 draft price decrease.

[59] AEMO 2019, p.5.

Table 4.8 Percentage point contributions to the total cost change from 2019–20 to 2020–21

Cost components	Percentage point
National green scheme costs	-4.07
Wholesale energy purchase cost	-2.18
Energy losses	-0.42
Retail margin	-0.34
Network costs (excluding ACT Govt schemes)	0.00
ACT Government scheme costs	0.00
Energy Efficiency Scheme costs	0.00
Power of choice	0.01
Retail operating costs	0.10
NEM fees	0.15
Total cost	**-6.75**

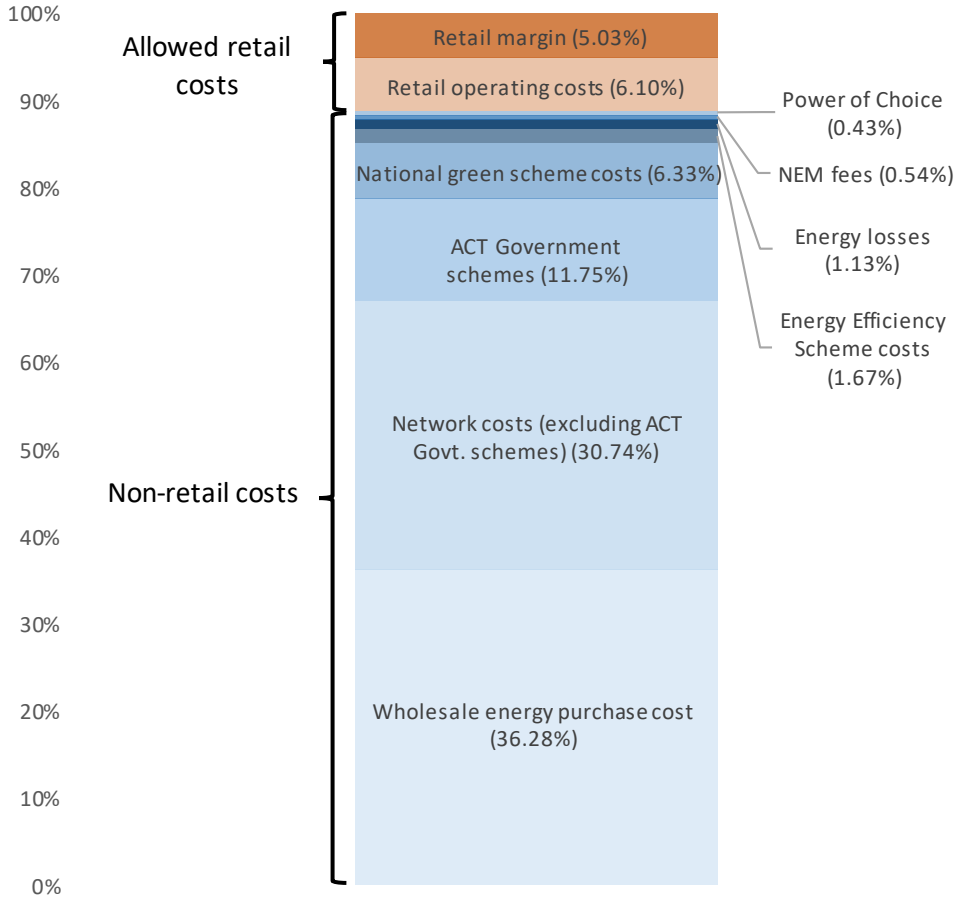
Source: Commission's calculations.
Note: The Commission has not updated the EEIS, network and ACT Government scheme costs as the information required to update these costs is not yet available.

Figure 4.5 shows the proportion 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 the AEMO for operating the wholesale market, and
- the charges for the transport of electricity through the poles and wires.

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

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 an indicative reduction of prices by 6.75 per cent on a range of typical customers in 2020–21.

5.1 Average residential electricity consumption in the ACT

When analysing customer impacts of a price change, the Commission intends to use 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).[60] In contrast, the 8,000 kWh figure may be representative of average usage for an all-electric household.[61]

The Commission notes that the AEMC uses a different benchmark (7,151 kWh) in its 2019 analysis of residential electricity price trends.[62] AEMC's benchmark is based on electricity usage for a household with 2 people, no gas and controlled load, and hence may not reflect average electricity usage. The benchmark of 6,500 kWh is closer to the actual average usage level.

The benchmark of 6,500 kWh represents the electricity consumption by a household with 2 to 3 people according to data available on the EnergyMadeEasy website.

5.2 Estimated annual bill change

The Commission estimates that the annual electricity bill for an average customer will fall by $113 in 2020–21 compared to 2019–20 (Table 5.1). As discussed above, the Commission estimated that an average customer in the ACT uses 6,500 kWh of electricity which may be representative of a household with 2 to 3 people.

For a large family with 4 to 5+ people that consumes around 7,500 kWh, the reduction is likely to be around $131 per year.

[60] AER 2019

[61] St Vincent de Paul 2019

[62] AEMC 2019, p.20

For a customer using a smaller than average amount of electricity, which may be representative of a single person household, is likely to experience a reduction of $66 per year.

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	1,805	-131
Average	6,500	1,677	1,564	-113
Small	3,800	981	914	-66

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; 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 6.75 per cent. The impact on a typical bill ranges from a $174 saving for a small non-residential customer to a $697 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	9,625	-697
Average	25,000	6,451	6,015	-436
Small	10,000	2,580	2,406	-174

Source: Commission's calculations.

5.3 Comparison of residential electricity prices across jurisdictions

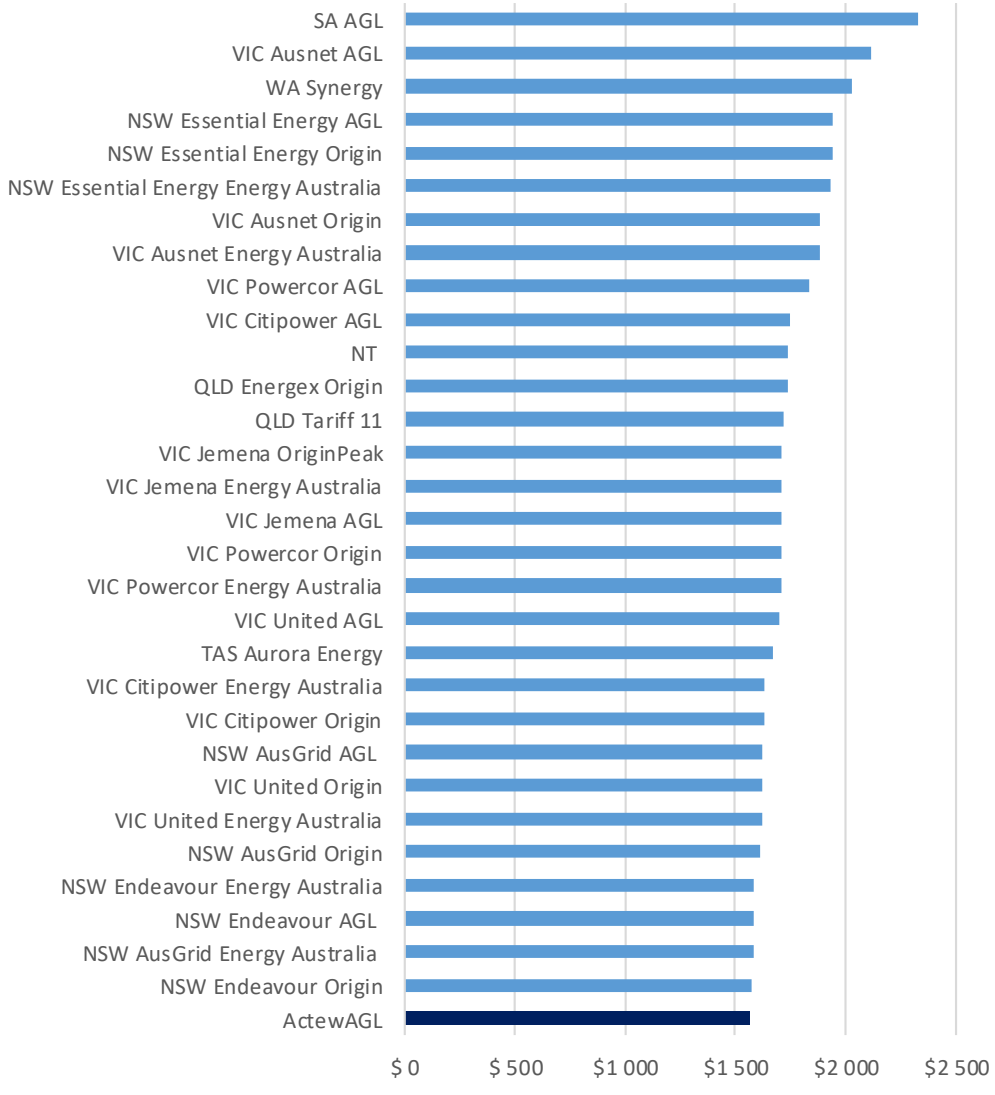
The draft decision would mean that ACT consumers would continue to pay amongst the lowest standing offer electricity prices in Australia.

Table 5.3 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 (the 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 is likely to remain amongst the lowest in the NEM.

The Commission notes that standing offer prices in other jurisdictions may change from 1 July 2020. The Commission also notes that the VDO increased by around eight per cent from 1 January 2020 and, as such, standing offer prices in Victoria may be higher than shown in the figure.

Table 5.3 Annual residential standing offer electricity bills as at 1 July 2019 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 OTTER (2019).
Note: Based on annual consumption of 6,500 kWh. Refer to OTTER (2019) for further information on the calculation methods. The standing offer prices in NSW, SEQ and SA reflect the DMO as at 1 July 2019; prices in Victoria reflect the VDO as at 1 July 2019. The average ActewAGL bill is based on the Commission's assumption that all retail prices in the regulated basket of tariffs are decreased by 6.75 per cent. Standing offer prices in other jurisdictions may change from 1 July 2020. The VDO increased by around eight per cent from 1 January 2020 and, as such, standing offer prices in Victoria may be higher than shown in the figure.

6 Annual recalibration and pass-through arrangements

This chapter describes the proposed procedure for setting regulated prices in each year of the regulatory period and the proposed arrangements to pass through the costs associated with regulatory and tax change events triggered during the regulatory period that are not recognised in the Commission's pricing model.

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, which is based on the Commission's current annual adjustment process.

The Commission proposes 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; 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 increase may be adjusted. The Commission will provide its direction to ActewAGL by 5 June prior to the regulatory year in question. ActewAGL will provide the Commission with 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 proposals are 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.
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 (%)	Maintain a retail margin of 5.3 per cent throughout the regulatory period.

The Commission proposes to 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 charges cannot increase by more than two percentage points above the weighted average price change in any financial year within the regulatory period.

6.2 Pass-through arrangement details

As discussed in Chapter 2, the Commission is proposing to institute pass-through arrangements for the next regulatory period. The details of the proposed 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.

6.2.1 Regulatory change and tax change events

Event 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 the 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.

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 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 pass-through 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.

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 proposes to 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),[63] for a regulatory or tax change pass-through event, the Commission will include the value of the pass-through event, which can be either negative or positive, in the cost-index model.

[63] 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 draft 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 draft findings

The Commission has found that the range between the highest and lowest market offer is less than in other jurisdictions. Nevertheless, the Commission has found that most ACT consumers still find it difficult to compare electricity offers, and that the transparency of offers could be improved. In particular:

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

The Commission considers that a range of measures would 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;
- requiring retailers to notify customers of their best offer given a customer's circumstances; and
- encouraging customers to visit the Australian Government's energy comparison website, Energy Made Easy, to check whether there is a better offer available that suits their circumstances.

Similar measures have recently been introduced in other Australia jurisdictions. Whilst it is still early days, initial market outcomes from these jurisdictions suggest these measures may be assisting consumers in finding the best offer for their circumstances.

The Commission considers that there are benefits from improving comparability and transparency in the retail electricity market in the ACT because it would assist consumers in finding the best offer for their circumstances.

The ongoing regulation of the retail electricity market in the ACT has meant that retailers are less able to charge very high standing offer rates than retailers were previously able to do in other jurisdictions. This has contributed to the ACT having lower retail electricity prices compared to other jurisdictions. Nevertheless, there are large differences in market offer and standing offer electricity prices in the ACT and many consumers can save by shopping around. Improving the comparability and transparency of electricity offers would make it easier for consumers to shop around and find an offer that better suits their circumstances.

The Commission considers that a package of measures may be more effective than implementing a single measure, given the relative advantages and limitations of each individual measure, and the differing needs and preferences of individual consumers.

7.1 Commission's approach

The Commission has assessed the transparency and comparability of electricity offers in the ACT, and, based on the outcomes of its assessment, identified options for improving comparability and transparency.

The Commission has 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 such as Energy Made Easy and 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, ACCC and the Victorian Government's review of the retail electricity market in Victoria (known as the Thwaites Review). This included examining:

- 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. In particular, 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;
- 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 (discussed in section 7.3).

7.2 Submissions to the issues paper

The Commission received six submissions to its issues paper. Stakeholders generally supported the Commission's proposed approach to the investigation and encouraged the

Commission to work with retailers, consumer groups, financial counsellors, and consumers to ensure that the solutions considered adequately address the issue of transparency and comparability.

Factors that make it difficult for consumers to compare offers and choose the offer best suited to their circumstances

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. [64]

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

- 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. [65]

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. [66]

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. [67]

[64] ActewAGL 2019, p. 32.

[65] ACAT 2019, p. 5.

[66] ActewAGL 2019, p. 32.

[67] Electricity Consumer, p. 4.

Suggestions for how to improve the transparency and comparability of offers in the ACT

ActewAGL stated that the introduction of references prices in other jurisdictions does not necessarily mean that this is appropriate for the ACT. ActewAGL noted that reference prices have only recently been introduced in other jurisdictions and the effects are yet to be fully understood. ActewAGL stated that it would support the concept of a reference price if the Commission found that:

- comparability of retail offers in the ACT is an important problem for ACT consumers;
- a reference price is the best solution to addressing this issue in the ACT;
- ACT customers are sufficiently engaged to make the introduction of a reference price an effective solution; and
- overall, the potential benefits of introducing a reference price outweigh the potential difficulties (particularly in terms of introducing further confusion for customers and the potential implications for competition).

ActewAGL highlighted the potential limitations of establishing a reference price based on average electricity consumption. In particular, some consumers have consumption levels or patterns different to the average, and this may make it difficult to market appropriate offers to these customers. ActewAGL stated that some tariffs have been designed to suit particular usage profiles and a reference price based on an average consumption level would mean that customers with a different consumption profile may be confused regarding the best offer for them. ActewAGL stated that this issue may become more important in the future if customers transition from dual fuel (i.e. gas and electricity) to electricity only, in line with the ACT Government's Climate Strategy.[68]

ActewAGL stated that the Commission could consider improvements to the presentation and communication of pricing information to improve transparency of offers.

EnergyAustralia noted that the costs of implementing a reference price similar to the DMO or VDO "may be small although not immaterial".[69] EnergyAustralia also discussed limitations around reference pricing. It stated:

> Reference pricing will involve a trade-off in terms of simplicity versus accuracy in terms of what it means for the individual customer's circumstance. For example, non-interactive mediums would require the development of some sort of average or representative customer. Web-based or direct sales allow customisation of offers to the customer's usage and other circumstances, which will be more useful for the customer.[70]

[68] ActewAGL 2019, p. 30.

[69] EnergyAustralia 2019, p. 2.

[70] EnergyAustralia 2019, p. 2.

Origin Energy supported the concept of a reference price, stating that it has been a long-standing supporter of reference pricing in the ACT.[71]

ACTCOSS considered 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 that were recently introduced in other jurisdictions. This includes exploring the potential benefits of the 'best offer', 'bill change notice', and 'clear advice entitlement' arrangements under the VDO.[72]

Other issues raised in submissions

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. [73]

ActewAGL 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.[74]

7.3 Existing measures in the ACT and other jurisdictions

This section discusses recent regulatory developments in other jurisdictions, existing measures to improve the transparency and comparability of offers, and the potential implications for the ACT.

7.3.1 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 have been the following:

[71] Origin Energy 2019, p. 8.

[72] ACTCOSS 2019, p. 1.

[73] EnergyAustralia 2019, p. 3.

[74] ActewAGL 2019, p. 29.

- 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. [75]

The Commission also notes that there are ongoing regulatory investigations. For example, the AEMC is currently investigating a rule change request to limit conditional discounts on energy offers (discussed in section 7.3.).[76] The Commission will continue monitoring regulatory developments during this price investigation.

Key drivers of recent retail market policy changes

Electricity offers were difficult for consumers to compare

In markets where price regulation no longer applied, retailers were using the price of standing offers as a reference point for advertising their market offers. This resulted in customer confusion and reduced the ability of customers to find the best deal for two reasons.[77] First, standing offers varied between retailers, making it difficult for consumers to compare offers between the retailers. Second, discounts to the standing offers were off different parts of the bill, with some retailers applying the discount to usage while others were applying it to the total bill.[78]

Another factor that made offers difficult for consumers to compare was that retailers often made the headline discount and price on marketing material conditional. This added to the number of factors that consumers had to consider selecting the best deal.[79] Some offers that were advertised[80] as providing very large discounts were more expensive than offers advertised with much smaller discounts.[81]

In addition, because standing offer rates were used as a reference point, retailers had an incentive to set those standing rates relatively high. By inflating the standing offer, a retailer could advertise an even higher percentage discount on its market offers, even if the market offer price had not changed. In other words, setting the standing offer high provided a way for retailers to charge higher prices to customer who did not switch

[75] AER 2019, p. 6.

[76] AEMC 2019.

[77] AEMC 2018, p. v.

[78] ACCC 2018, p. xi.

[79] Ibid.

[80] ACCC 2018, p. 260.

[81] ACCC 2019b.

(disengaged customers), whilst marketing bigger percentage discounts to those who were shopping around for better deals.[82]

Many consumers were paying too much for their electricity

A second driver of the policy changes was that many consumers were paying more for their electricity than what would be expected in a competitive retail electricity market. The ACCC and the Victorian Government reviews into the retail electricity market found that the best offers in the market were achieved only by active consumers who switched regularly and remained engaged (that is, they were willing and able to invest the time and effort to find the best deals).[83] They also noted that inactive customers who were either unable (for example, due to various factors such as language barriers) or unwilling (for example, due to the complexity) to engage in the market would often find themselves paying the most expensive prices.[84] They also noted that even for active customers, there were challenges in finding the best offer due to the difficulties in understanding and comparing (described above).

Measures to improve comparability and transparency

Following the ACCC and Thwaites inquiries, the Australian and Victorian Governments introduced policies to address the problems that had been identified. Two important policy objectives were to:[85]

- reduce retail prices (and retail margins), which were perceived to be too high – particularly for inactive and vulnerable customers; and
- promote improved transparency and comparability of retail pricing offers for all electricity consumers.

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 'prices' to apply from 1 July 2019 in NSW, South Australia and SEQ. (The DMO 'prices' are presented as bills; this is discussed further below.) In determining the level of its DMO prices, 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.[86]

[82] Ibid.

[83] Independent Review Panel 2017, p. ix.

[84] ACCC 2018, p. xi.

[85] AER 2019, p. 6.

[86] AER 2019a, p.7.

Consequently, the ACCC indicated in its final report that the default offer should not be the lowest price in the market. The purpose of the default offer is to act as a more reasonable 'fall-back' option for disengaged consumers or for those requiring its additional protections.[87]

For this reason, the ACCC recommended that DMO prices should fall somewhere between the then current standing offer prices and current market offers. The AER consequently set the DMO price as the midpoint between the median market offer and median standing offer.[88]

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

The DMO is specified in this way to make it easier for customers to understand the DMO 'prices' and to facilitate comparisons with standing and market offers that have different tariffs.[89] It also gives retailers flexibility to translate the annual amount into their own tariff structures. Specifically, provided that retailers structure their prices so that they do not exceed the annual DMO sum at the assumed usage level, then they will be compliant. Fifteen bespoke annual DMO prices have been estimated – one for each of the three broad categories of customer type (residential with and without controlled load, and small business) across the five different distribution regions (Table 7.1).

[87] ACCC 2018, p. 249.

[88] AER 2019, p. 15.

[89] AER 2019, p. 19.

Table 7.1 Default market offer prices from 1 July 2019

Distribution region	Residential Annual Price without Controlled Load	Residential Annual Price with Controlled Load	Small business Annual Price
Ausgrid	$1,467	$2,059	$7,371
	for 3,900 kWh p.a.	for 6,800 kWh p.a.	for 20,000 kWh p.a.
Median saving#	*$129*	*$200*	*$878*
Endeavour Energy	$1,720	$2,166	$6,204
	for 4,900 kWh p.a.	for 7,400 kWh p.a.	for 20,000 kWh p.a.
Median saving#	*$175*	*$236*	*$579*
Energex	$1,570	$1,927	$6,025
	for 4,600 kWh p.a.	for 6,300 kWh p.a.	for 20,000 kWh p.a.
Median saving#	*$118*	*$169*	*$457*
Essential Energy	$1,957	$2,375	$8,045
	for 4,600 kWh p.a.	for 6,600 kWh p.a.	for 20,000 kWh p.a.
Median saving#	*$181*	*$231*	*$709*
SA Power Networks	$1,941	$2,420	$9,120
	for 4,000 kWh p.a.	for 6,000 kWh p.a.	for 20,000 kWh p.a.
Median saving#	*$171*	*$219*	*$896*

Median saving is the difference between the median standing offer price and the DMO price in that distribution zone, based on the model annual usage.

Source: AER 2019a.

To make it easier for customers to compare competing offers on a 'like-with-like' basis, these yearly DMO amounts must be used to set a reference bill amount from which all advertised discounts must be calculated and presented to customers. The DMO also requires that electricity retailers must not advertise a conditional discount as the most obvious price-related matter in the advertisement.[90]

Because the DMO, and discounts to the DMO, are based on average electricity usage, they will not be representative of an annual bill for all consumers. In addition, because retailers can choose their own tariff structure (that is, the mix of variable and fixed charges), consumers need to account for their own usage level, and sometimes the pattern of their usage over the day (for time-of-use tariffs), to know what the best deal is, if their usage differs from the average.

[90] AER 2019a, p. 16.

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 consists of a fixed daily charge and a variable usage charge (in cents per kilowatt hour) (see Table 7.2). The VDO is also reported as an indicative annual bill, based on average consumption.

Table 7.2 VDO prices for residential customers

Distribution zone	Daily charge ($ per day)	Variable charge structure	Variable charge ($ per kWh)	Controlled load (if applicable) ($ per kWh)
AusNet Services	$1.1368	Block 1 (1020 kWh) Block 2 (>1020 kWh)	$0.2763 $0.3113	$0.2024
CitiPower	$1.1055	Anytime	$0.2325	$0.1809
Jemena	$1.0037	Anytime	$0.2547	$0.1618
Powercor	$1.2333	Anytime	$0.2403	$0.1561
United Energy	$0.9115	Anytime	$0.2620	$0.1873

Source: ESC 2019a - VDO Final Decision.

Similar to the DMO prices, 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 the customer an annual yearly saving against the applicable 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 Victorian ESC is responsible for determining the VDO price each year and has commenced its next inquiry for the period from 1 January 2020.

The ESC has also imposed other obligations on retailers aimed to improve transparency. These do not feature in the AER's DMO framework. The ESC has created three new regulatory obligations on Victorian retailers that are intended to make it easier for electricity customers to compare offers and choose the best offer for their circumstances.[91]

First, retailers are required to regularly display their 'best offer' on customers' bills, along with advice on how to access it.[92] This information is to be presented prominently on bills every three months. Retailers are required to personalise the information by

[91] ESC 2018, p. 3.

[92] Ibid.

using the customer's actual meter data (which measures their level and pattern of usage) to calculate the savings that may be available.

Second, the ESC has created a new 'bill change notice' that retailers must send to customers ahead of price changes.[93] These notices need to arrive at least five business days prior to any change taking effect, which allows customers to consider their options before their energy prices increase. Retailers are also required to display their best offer for customers on these bill change notices. The best offer notice on bills gives customers a head-start in assessing whether there could be better plans available.

Third, the ESC has established a 'clear advice entitlement' that requires retailers to explain to customers any contractual terms that could lead to them paying more than they expect.[94] This could include conditional discounts, or discounts that expire after a period of time. The clear advice entitlement also requires retailers to tell customers about other offers that might suit them.[95]

For all three regulatory obligations, a retailer is only required to tell customers about other offers provided by that retailer; the retailer is not required to consider offers by other retailers that are available in the market.

7.3.2 Current regulatory arrangements in 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 so, 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 levels of 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 issues paper, 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 prevalent 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.[96]

[93] ESC 2018, p. 3.

[94] Ibid.

[95] This entitlement will operate whenever a retailer (or their agent) is signing a customer up to an energy plan, irrespective of who initiated the contact or whether it was triggered by the best offer message.

[96] ICRC 2019, p. 22.

Nevertheless, the Commission has found that comparing offers and discounts in the ACT is still be 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 7.4.

7.3.3 Potential implications for the ACT

This section summarises the features of the DMO and VDO that could be considered in the ACT, as well as the potential limitations of these regimes. It also discusses early insights on the outcomes of these regimes.

Potential strengths and weaknesses of the DMO and VDO regimes

One of the features of the DMO and VDO arrangements is that each provides a single, more robust reference point against which customers can assess prices (each in slightly different ways). The ACT does not currently have an equivalent benchmark. 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 (for example, 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.
- 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 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 advanced warnings 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).

The DMO and VDO arrangements may make it easier for customers to compare electricity offers. It may therefore be worthwhile to consider whether some aspects of these arrangements would provide benefits for ACT consumers, noting that retail electricity prices are already regulated in the ACT.

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.

Two recent inquiries have examined the initial market outcomes since 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. These 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. [97]

This finding is consistent with the ACCC report, which examined the effects of both the DMO and VDO. The ACCC stated:

> 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. [98]

The shift away from conditional discounting may improve the comparability of electricity offers. As described in section 7.4, many ACT consumers have found conditional discounting a source of confusion when comparing electricity offers.

[97] Energy Victoria 2019, p. 12.

[98] ACCC 2019a, p. 96.

The ACCC's 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).[99]

The ACCC inquiry stated that customers are better able to identify cheaper plans because retailers are no longer advertising discounts based on inflated and inconsistent base rates.[100]

The Commission will continue monitoring the impacts of the DMO and VDO on the retail electricity market in other jurisdictions in the lead up to its final report.

7.3.4 Other existing measures to improve transparency and comparability

This section discusses other existing measures to improve the transparency and comparability of offers, such as the consumer data right, the AER's rules on how offers are presented, comparison websites, and retailer websites.

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.[101]

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.[102]

[99] ACCC 2019a, p. 66.

[100] ACCC 2019a, p. 96.

[101] ACCC 2020.

[102] ACCC 2019a, p. 31.

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.[103] In states and territories which 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.[104]

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.[105]

AEMC draft decision to limit conditional discounts on energy offers

As described in section 6.3.1, the AEMC is currently investigating a rule change request to the National Energy Retail Rules to limit conditional discounts on energy offers. The AEMC made a draft decision on 21 November 2019 to restrict conditional discounts and conditional fees to the "reasonable costs" the retailer is likely to incur when payment conditions are not met. The proposed 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. [106]

The AEMC anticipates a final determination to be published by mid-February 2020 with the new rule to be implemented 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

[103] See https://www.aer.gov.au/consumers/my-energy-bill/tariff-and-fees-explained.

[104] AER 2020a.

[105] AEMC 2018, p. ii.

[106] AEMC 2019.

(provided the customer knows their usage level) or 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 (this includes Tasmania, the ACT, South Australia, NSW and Queensland).[107] There are 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 different from the average customer; this is where bill reading capabilities, such as those proposed by Energy Made Easy, are poised to make a big impact in effective comparability.

Energy Made Easy has been undergoing major redevelopment since early 2018, with additional functionalities due for completion by July 2020. The redevelopment is designed to simplify the comparison process for consumers and may include features such as smart meter data upload and bill reading technology to minimise the amount of manual input required from users.[108]

Comparison websites generally do not show every available offer, although government-run comparison websites are generally more complete. Comparison websites that operate on a for-profit basis may only show offers from retailers that pay to have their offers advertised, therefore posing an issue regarding incomplete information.

Retailer websites

In the ACT some retailers provide additional information on their own websites, above what is required by the AER, to assist customers to understand the range of electricity offers. This includes the provision of information sheets that include diagrams to help consumers understand each offer and whether it suits their circumstances. Not all retailers in the ACT offer additional information.

[107] ACCC 2020b.

[108] See https://www.aer.gov.au/retail-markets/retail-guidelines-reviews/energy-made-easy-redevelopment-project and https://www.aer.gov.au/communication/public-release-of-the-new-energy-made-easy-beta.

7.4 ACT consumers have difficulty finding the best offer for their circumstances

This section summarises the Commission's findings in relation to comparability and transparency of electricity offers in the ACT. The Commission gathered 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 also 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.[109]

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.

Fourth, the Commission analysed results from the Energy Consumer Sentiment Survey (June 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.

7.4.1 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, a number of free-text responses to the survey suggests 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.

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

These findings are consistent with a smaller survey of 204 ACT consumers conducted by the ECA, which found that only 45 per cent of respondents believe that the available information is easily understandable, the second lowest in Australia.[110]

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 that 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 35 per cent of respondents who considered switching had used a comparison website to assist their search.

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.

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.

[110] Energy Consumers Australia 2019, p. 136.

7.4.2 Analysis of current consumer environment

Electricity offers and tariff types

As outlined above, the YourSay survey found that the majority of 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 often 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.[111] 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.

[111] 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.

Table 7.3 Retail electricity offers as at 21 January 2020

	Single rate	Time of use	Total
Canberra	113	43	156
Sydney	140	182	322
Brisbane	113	99	212
Adelaide	110	2	112
Melbourne	372	235	607
Hobart	6	5	11

Source: Energy Made Easy and Victorian Energy Compare websites.

Advertisement 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 on the basis of discounts with reference to 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.

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, 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 7.3, the AEMC is

investigating a rule change request to limit 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 means that consumers must compare another product across retailers when deciding on the best energy option for their circumstances. This may contribute to making comparisons difficult.

Electricity usage assumptions

The Commission found that retailers do not use comparable electricity usage information when advertising their offers as annual bill amounts. This may 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.

7.5 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 7.4 above, only 18 per cent of ACT electricity consumers are confident that they are on the best plan for their circumstances.

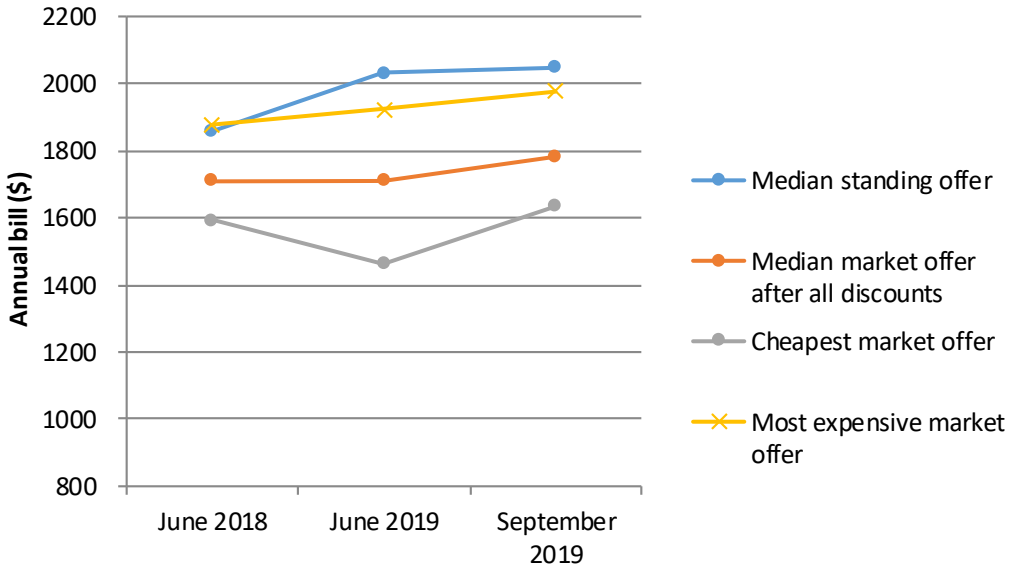
Figure 7.1 shows the annual bill amounts for a variety of electricity offers in the ACT. It shows that the annual bill for the median standing offer is higher than that for the median market offer, and that both of these are above the annual bill for the cheapest market offer. For instance, the difference between the cheapest market offer and the median standing offer is around $400 per year, whilst 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, exhibiting 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.[112] 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.

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.

7.6 Commission's consideration

The Commission considers that practical options are available to improve the comparability and transparency of electricity offers in the ACT. The Commission has made two draft recommendations to improve the transparency and comparability of electricity offers (see section 7.7). In summary, the Commission considers that comparability and transparency of offers could be improved if:

1. there was a reference bill amount which consumers could use as a common point of comparison for assessing electricity offers; and

[112] AER 2019, p. 33.

2. electricity retailers notify customers of their best offer given a customer's circumstances, including how much they could save by switching.

The Commission is also encouraging 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.

These measures are discussed in the following subsections.

7.6.1 Reference price

The Commission considers that a reference bill would provide ACT consumers with a single and consistent benchmark to help them compare offers. It would overcome the current issue of inconsistent discounting and advertising practices, which creates confusion for many customers.

A number of stakeholders supported introducing a reference price. As discussed in section 7.4, the majority of respondents to the YourSay survey stated that a reference price would help them find the best offer for their circumstances. Consumer groups and financial counsellors expressed support for a reference price during targeted consultation and Origin Energy supported a reference price in their submission (see section 7.2).

A limitation of a reference annual bill amount is that it can only show what a representative or 'average' customer would pay under certain assumptions (for example, a particular usage level and pattern). 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.

This issue could be partially overcome by developing a range of reference prices 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.

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

Implementation issues

There are a number of other practical questions that would need to be worked through should this measure be implemented. The Commission intends to consider these issues further ahead of the final report, taking into account feedback and suggestions from stakeholders. For instance, guidance would need to be given to retailers regarding the average consumption patterns and profiles that retailers should use when calculating an annual bill amount for customers on non-flat tariffs.

Further, the rules for advertising offers and/or discounts would need to be developed. For example, retailers in DMO jurisdictions are subject to the requirement that they must clearly present how their standing offers and market offers compare to the DMO.[113] The rules are different in Victoria, where retailers are only required to state how their discounts compare to the estimated annual cost of the VDO.[114] The Commission notes that the ESC has recently proposed a change that would require electricity offers to be advertised in relation to the VDO.[115]

The reference annual bill amount would also need to be based on an electricity price. The Commission considers that ActewAGL's regulated standing offer rates should be used in developing the reference bill. The main objective of the reference price is to provide a common base 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 and Origin Energy.[116]

Under the current arrangements, ActewAGL proposes regulated standing offer prices following the Commission's decision on the maximum weighted average price increase. These proposed prices are then assessed by the Commission to ensure that the weighted average change in those prices does not exceed the maximum allowable percentage change. While the Commission does not set standing offer prices at a particular level, the side constraint proposed in Chapter 3 would ensure that increases in the reference price are similar to the Commission's weighted average price increase.

ActewAGL has five standing offers for residential customers in the ACT: one flat rate tariff; two step tariffs; one time of use tariff and one demand tariff. As such, a decision would need to be made on which standing offer rate(s) would form the reference price(s).

The Commission notes that many retailers in the ACT also operate in other jurisdictions where reference price regimes exist, such as NSW. For this reason, retailers should

[113] AER 2018, p. 21.

[114] Energy Victoria 2019, p. 18.

[115] ESC 2019b.

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

already have systems in place to accommodate such a regime in the ACT. This was raised in EnergyAustralia's submission, which noted that the costs of implementing a reference price similar to the DMO or VDO are likely to be small for most retailers.[117] The Commission therefore considers that the implementation of this measure would not result in substantial costs for retailers.

The Commission considers, given the limitations of a reference price discussed above, some customers might still find it difficult to find the best offer for their circumstances. However, the Commission still considers the introduction of a reference price would assist many consumers, at least in undertaking an initial analysis of the plans that are likely to suit their circumstances. Combining a reference price with a requirement for retailers to notify customers of their best offer for their circumstances and improving awareness of Energy Made Easy would further assist consumers, especially those that are not 'average'.

7.6.2 Notification of the retailers' best offer

The Commission considers 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.

This measure was supported by consumers and consumer groups. As noted in section 7.4, most respondents to the Commission's YourSay survey stated that a best offer notification would help improve transparency of electricity offers. Similarly, targeted consultation with consumers groups indicated that this measure was expected to improve transparency.

Applications in other jurisdictions

This measure was recently introduced in Victoria (see section 7.3). 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.[118] The ESC considers that this requirement will remind customers to regularly consider the suitability of their current energy plan.

The Commission notes 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,

[117] EnergyAustralia 2019, p. 2.

[118] ESC 2018, p. 3.

- 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. [119]

The Commission notes that this measure may require some retailers to make changes to their billing or computer system that could be costly. In Victoria, this measure was implemented with a suite of other measures (described in section 7.3). A number of retailers raised issues around the cost of implementing the changes in a short timeframe, noting that in October 2018 the Victorian Government released its final decision on the changes to commence from 1 July 2019.[120] For instance, Momentum Energy stated that:

> We believe however that the timeframe under which this has been undertaken has not allowed for a proper analysis and consequently the findings cannot be taken as given, so the ESC should err on the side of caution before requiring changes to be implemented at huge cost to industry. [121]

However, the Commission notes that many retailers in the ACT operate in NSW and some also operate in Victoria. Some of these retailers may therefore have systems already in place to notify customers of the best offer for their circumstances. Further, the Commission considers that, if this option were to be adopted, retailers could be consulted so that implementation costs are considered in determining when the requirement should take effect.

Implementation considerations

The Commission considers that a potential risk associated with presenting the 'best offer' on the bill is that it may not be suitable for the customer, particularly vulnerable customers, 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 be disadvantaged in comprehending the fine print of the contract.[122]

For this reason, the ESC introduced the best offer notification with Clear Advice Entitlements. These entitlements mean 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 this contact is made online) to provide explicit informed consent. The intended outcome is to make customers more aware of the way the contract terms will affect their

[119] NSW Government 2019, p. 1329.

[120] See https://www.esc.vic.gov.au/sites/default/files/documents/Combined%20stakeholder%20submissions%20-%20recommendation%203F-H%20of%20the%20retail%20market%20review_compressed1.pdf.

[121] Momentum Energy 2020, p. 2.

[122] ESC 2018, p. 47.

bills. In practical terms, the obligation requires retailers to communicate with the customer in clear and easily understood terms:

- the estimated dollar cost implications of terms and conditions (including tariff structures) that influence the costs they will face over the term of the contract, and
- any of that retailer's alternative offers that, on the basis of their interaction with the customer, the retailer believes might be better suited to the customer.

In addition, a number of practical questions would need to be worked through should this measure be implemented, particularly those related to defining and presenting the 'best offer' to customers. These include:

- What energy consumption data should inform the best offer calculation?
- How are discounts managed when calculating the best offer?
- How are concessions managed when calculating the best offer?
- What if there is no usage data for a customer?

Moreover, how the consumer is notified of the best offer would need to be determined. The Commission received feedback from consumer groups indicating that many consumers do not read their electricity bill in detail and may therefore not notice the details of the best offer. In contrast, the ESC in Victoria states that receipt of a bill is an ideal moment for this to occur, as it is a point in which consumers are more likely to reconsider their energy plan.[123] The ESC requires that retailers report the best offer on the customer's bill.

The Commission considers that the Victorian best offer notification and Clear Advice Entitlements may be a guide on how to implement this measure. However, there are likely to be ACT specific issues that would need to be considered. For example, unlike in Victoria, not all electricity consumers in the ACT 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, average consumption patterns, or their time of use (for customers with interval meters).

7.6.3 Awareness of Energy Made Easy

A limitation of the best offer notification is that there may be even better offers in the market that are offered by other retailers. The best offer notification only applies 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.

[123] ESC 2018, p. 32.

The key benefit of the Energy Made Easy website is that it provides impartial and unbiased comparison services. As described in section 7.4.1, that awareness of the Energy Made Easy, is low. Only 17 per cent of respondents had used the website. Encouraging consumers to visit Energy Made Easy 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.

7.7 Draft recommendations

The Commission has made the following draft 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 whether they are on the best offer and how much can be saved by switching, taking account of the customers' circumstances.

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).[124]

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 proposed 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;		N/A
iv	any other policies or schemes that may directly impact on pricing in the retail or wholesale electricity market.		N/A
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) Improvement Act 2012 for the period that the determination is being made.	3, 4	The costs of the ACT Government's EEIS scheme are identified, assessed for prudence and efficiency and reported.
4.3	The Commission must identify and report on the cost allowance of the ACT feed-in	3, 4	The costs of the ACT feed-in tariffs will be identified and reported in the final report.

[124] 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
	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.		.
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 was 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.		This clause relates to the final report.

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 but maintains that it remains appropriate not to include an additional separate competition allowance because the Commission, via its allowed retail operating cost structure, is currently allowing retailers to recover relevant costs relating to 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 first by ensuring that the regulated price is based on efficient costs. The Commission also considers the impacts of proposed price changes on customer electricity bills. In this investigation the Commission has also assessed the comparability and transparency of electricity offers in the ACT and made recommendations for improvements.

Section 7	Requirement	Chapter	Comments
(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. This includes the costs of meeting quality, reliability and safety standards. The long-term interests of consumers are taken into account by ensuring that the regulated price is based on efficient costs to meet the required standards. The Commission also considers the impacts of proposed price changes on customer electricity bills. As part of this investigation the Commission also considered whether changes should be made in the ACT to improve the comparability and transparency of electricity offers. The Commission's model also includes the efficient costs of various environmental measures.

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 involves determining 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.
(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 cover the efficient costs of providing retail electricity services. This includes the costs of meeting quality, reliability and safety standards. As a specific example, the payment of ancillary services fees, which is captured in the pricing model, assists the AEMO in providing for safe and reliable delivery of electricity to all consumers.
(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. As an example, to determine the energy

Section 20(2)	Requirement	Chapter	Comments
			purchase cost allowance, the Commission has adopted an approach based on independent and verifiable market data and a range of assumptions based on industry standards to provide a reasonable estimate of the cost of purchasing wholesale energy.
(d)	An appropriate rate of return on any investment in the regulated industry	3, 4	The Commission is proposing a retail margin of 5.3 per cent of the total efficient cost of providing retail electricity services. The Commission is confident that this provides, in the current circumstances, an appropriate rate of return on investment in the retail electricity industry.
(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 granted for retail operating costs represents a reasonable balance between the need to allow cost recovery and the need to require the incumbent 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 to some extent the environmental costs incurred in the consumption of electricity that the Australian Government and the ACT. Government consider should be passed through to consumers.
(g)	The social impacts of the decision	3, 4, 7	Social considerations are taken into account first by ensuring that the regulated price is based on efficient costs. The Commission also considers the impacts of proposed price changes on customer electricity bills. In addition, the Commission has had regard to the social impacts of its decisions by not including a competition/CARC allowance.
(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 5.3 per cent of the total efficient cost. The Commission is confident that this provides sufficient room to meet the borrowing, capital and cash flow requirements and meet the retail industry investment requirements.
(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. A number of components of the model are adjusted each

Section 20(2)	Requirement	Chapter	Comments
			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 to 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. Suggested the Commission uses WACC instead of cost of debt alone when determining holding cost for green scheme certificates.

	Date received	Submitter	Key issues raised/information provided
			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.
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.

	Date received	Submitter	Key issues raised/information provided
			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.

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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