Victorian Default Offer 2023–24

Final Decision Paper

25 May 2023
Acknowledgement

We acknowledge the Traditional Owners of the lands and waterways on which we work and live.

We acknowledge all Aboriginal and Torres Strait Islander communities, and pay our respects to Elders past and present.

As the First Peoples of this land, belonging to the world’s oldest living cultures, we recognise and value their knowledge, and ongoing role in shaping and enriching the story of Victoria.

An appropriate citation for this paper is:


© Essential Services Commission, 2023

This work, Victorian Default Offer 2023–24, is licensed under a Creative Commons Attribution 4.0 licence [creativecommons.org/licenses/by/4.0]. You are free to re-use the work under that licence, on the condition that you credit the Essential Services Commission as author, indicate if changes were made and comply with the other licence terms.

The licence does not apply to any brand logo, images or photographs within the publication.
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgement</td>
<td>i</td>
</tr>
<tr>
<td><strong>Summary</strong></td>
<td>1</td>
</tr>
<tr>
<td>The Victorian Default Offer regulates standing offer prices</td>
<td>2</td>
</tr>
<tr>
<td>The Victorian Default Offer provides a safeguard for customers</td>
<td>2</td>
</tr>
<tr>
<td>The Victorian Default Offer also acts as a comparison price</td>
<td>3</td>
</tr>
<tr>
<td>We must review prices before the end of each regulatory period</td>
<td>3</td>
</tr>
<tr>
<td>High wholesale costs are increasing the Victorian Default Offer prices</td>
<td>3</td>
</tr>
<tr>
<td>Our decision reflects retailers’ efficient costs</td>
<td>5</td>
</tr>
<tr>
<td>State and federal governments are reducing the impact of high prices</td>
<td>6</td>
</tr>
<tr>
<td>We are here to support consumers</td>
<td>7</td>
</tr>
<tr>
<td>A retailer must inform customers about their best offer</td>
<td>7</td>
</tr>
<tr>
<td>All customers are entitled to payment assistance</td>
<td>8</td>
</tr>
<tr>
<td>Stakeholders suggested non-price options to help consumers</td>
<td>8</td>
</tr>
<tr>
<td>Changes in our final decision</td>
<td>9</td>
</tr>
<tr>
<td><strong>Victorian Default Offer cost components</strong></td>
<td>11</td>
</tr>
<tr>
<td>Wholesale electricity costs</td>
<td>12</td>
</tr>
<tr>
<td>We carefully re-tested our approach to wholesale costs</td>
<td>13</td>
</tr>
<tr>
<td>We forecast higher wholesale electricity purchase costs</td>
<td>14</td>
</tr>
<tr>
<td>Stakeholder feedback on wholesale electricity costs was mixed</td>
<td>15</td>
</tr>
<tr>
<td>Our approach to setting the wholesale cost benchmark uses market data</td>
<td>24</td>
</tr>
<tr>
<td>Our wholesale cost forecasts factor in network losses</td>
<td>26</td>
</tr>
<tr>
<td>Network costs</td>
<td>26</td>
</tr>
<tr>
<td>Our final decision is to keep our cost pass through approach</td>
<td>27</td>
</tr>
<tr>
<td>Approved network tariffs for 2023–24</td>
<td>28</td>
</tr>
<tr>
<td>Stakeholder feedback on our approach to network costs</td>
<td>28</td>
</tr>
<tr>
<td>Environmental costs</td>
<td>28</td>
</tr>
<tr>
<td>Our final decision maintains our approach to environmental costs</td>
<td>29</td>
</tr>
<tr>
<td>Stakeholders supported maintaining our approach to estimating these costs</td>
<td>30</td>
</tr>
<tr>
<td>We kept our approach to the Large-scale Renewable Energy Target costs</td>
<td>30</td>
</tr>
<tr>
<td>We kept our approach to the Small-scale Renewable Energy Scheme costs</td>
<td>32</td>
</tr>
<tr>
<td>We kept our approach to the Victorian Energy Upgrades costs</td>
<td>33</td>
</tr>
<tr>
<td>We kept our approach to the minimum feed-in tariff costs</td>
<td>33</td>
</tr>
<tr>
<td>Retail operating costs</td>
<td>34</td>
</tr>
<tr>
<td>The benchmark approach is based on efficient costs</td>
<td>35</td>
</tr>
<tr>
<td>Stakeholder feedback on the retail operating cost benchmark</td>
<td>35</td>
</tr>
<tr>
<td>Customer acquisition and retention costs</td>
<td>40</td>
</tr>
<tr>
<td>Our final decision is to maintain our approach to acquisition costs</td>
<td>40</td>
</tr>
<tr>
<td>We have considered stakeholder submissions on acquisition costs</td>
<td>41</td>
</tr>
<tr>
<td>Other costs</td>
<td>41</td>
</tr>
<tr>
<td>Market intervention costs</td>
<td>42</td>
</tr>
</tbody>
</table>
Our final decision is to include known market intervention costs 44
Australian Energy Market Operator fees 46
Ancillary fees 46
Essential Services Commission licence fees 47
Retail operating margin 47

Request for comment papers 56
Stakeholder submissions supported ‘request for comment’ papers 56

Calculating tariffs and the maximum annual bill 57
Tariff structure 57
Flat tariffs 57
Two-period time of use tariffs 58
Cost allocation 58
The compliant maximum annual bill 59
Annual reference consumption amount 59
Representative usage profiles and related usage allocations 59
Calculating the maximum bill amount 60
Retailers must show they comply with the maximum bill amount 60

Appendix A: Our legislative considerations 61
Appendix B: Order in council 64
Appendix C: Network tariffs in the cost stack 80
Appendix D: Calculation of the cost stack 82
Wholesale electricity costs 82
Network losses 82
Network costs 83
Environmental scheme costs 85
Large-scale Renewable Energy Target costs 85
Small-scale Renewable Energy Scheme costs 86
Victorian Energy Upgrades costs 86
Feed-in Tariff (social cost of carbon) 86
Retail costs and margin 87
Retail operating costs 87
Customer acquisition and retention costs 87
Retail margin 87
Other costs 88

Appendix E: How we assessed the Victorian Default Offer 90
Appendix F: Stakeholder submissions on draft decision paper 96
Appendix G: Changes to cost benchmarks 98
Summary

• Our final decision for the 2023–24 Victorian Default Offer results in higher prices than the current prices in the 2022–23 Victorian Default Offer.

• The average annual bill for domestic customers on the flat tariff Victorian Default Offer (assuming annual usage of 4,000kWh) would be $1,755. This is an increase of $352 or 25 per cent compared to 2022–23.

• The average annual bill for small business customers on the flat tariff Victorian Default Offer (assuming annual usage of 10,000kWh) would be $3,791. This is an increase of $752 or 25 per cent compared to 2022–23.

• The change in prices is mainly due to significant increases in wholesale electricity costs, which would have been even higher in the absence of the Australian Government’s Energy Price Relief Plan.

• Given the large increase in prices, and understandable concerns raised by stakeholders about the increase, in addition to our usual review processes we did additional testing of our general approach and the assumptions underlying them.

• As part of this testing process, we identified several areas we consider warranted change. These changes mean that prices in our final decision are lower than the prices in our draft decision for the 2023–24 Victorian Default Offer.

• The changes to the Victorian Default Offer tariffs will come into effect from 1 July 2023.

Table 1: Change in average annual Victorian Default Offer bills for domestic flat tariffs

<table>
<thead>
<tr>
<th></th>
<th>AusNet</th>
<th>CitiPower</th>
<th>Jemena</th>
<th>Powercor</th>
<th>United Energy</th>
<th>Victorian Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023–24 VDO</td>
<td>$2,026</td>
<td>$1,571</td>
<td>$1,720</td>
<td>$1,793</td>
<td>$1,666</td>
<td>$1,755</td>
</tr>
<tr>
<td>2022-23 VDO</td>
<td>$1,632</td>
<td>$1,293</td>
<td>$1,352</td>
<td>$1,412</td>
<td>$1,324</td>
<td>$1,403</td>
</tr>
<tr>
<td>% change</td>
<td>24%</td>
<td>22%</td>
<td>27%</td>
<td>27%</td>
<td>26%</td>
<td>25%</td>
</tr>
</tbody>
</table>
The Victorian Default Offer regulates standing offer prices

The Victorian Default Offer was introduced by the Victorian Government in a Governor in Council Order made under section 13 of the *Electricity Industry Act 2000* (pricing order).\(^1\) The Victorian Default Offer regulates standing offer\(^2\) prices for electricity in Victoria supplied and sold to domestic customers\(^3\) or small business customers.\(^4\) The first Victorian Default Offer was set by the Victorian Government in 2019 based on advice prepared by us. Our first determination of Victorian Default Offer prices came into effect 1 January 2020. We have been responsible for setting Victorian Default Offer prices since then.

The Victorian Default Offer provides a safeguard for customers

As a reasonably priced electricity option, based on the efficient costs of the sale of electricity by a retailer, the Victorian Default Offer provides an important safeguard for consumers that are unable or unwilling to engage in the electricity retail market.

Standing offers are contracts that electricity retailers must make available to domestic and small business customers. A standing offer will apply if the customer has:

- never signed up for an electricity contract
- entered into an electricity contract, cancelled the contract within the cooling-off period, but continues to use electricity without entering into a new contract
- moved into a new address and uses electricity without entering into a contract
- specifically asked for a standing offer
- moved onto a standing offer after their market offer contract came to an end.

The Victorian Default Offer specifies the prices that may be charged for standing offers. Around 400,000 households and 55,000 small businesses are on standing offers.\(^5\) This represents around 15 per cent of households and 19 per cent of small businesses.

---

\(^1\) The Order in Council made under section 13 of the *Electricity Industry Act 2000* was published in the Victorian Government Gazette No. S 208 on Thursday 30 May 2019.

\(^2\) A standing offer is defined in section 3 of the *Electricity Industry Act 2000*.

\(^3\) A ‘domestic customer’ for purposes of the Victorian Default Offer is a customer who purchases electricity principally for personal, household or domestic use (see clause 4 of the pricing order).

\(^4\) A ‘small business customer’ for purposes of the Victorian Default Offer is a small business customer is a customer who is not a domestic customer and whose aggregate consumption of electricity is not more than 40 MWh per annum (see clause 4 of the pricing order).

\(^5\) Data collected through voluntary reporting from retailers in December 2022.
Since September 2020, the Victorian Default Offer has also applied as a maximum price for most embedded network customers (covering around 150,000 customers).\(^6\) Electricity providers in embedded networks may set prices below the Victorian Default Offer.

**The Victorian Default Offer also acts as a comparison price**

Most customers are on market contracts, not standing offers. Market offers often have prices below the Victorian Default Offer.

The Victorian Default Offer plays a key role as a benchmark price for these market offers. Retailers must compare their market offers to the default offer prices when advertising. This enables customers to easily compare market offer prices and choose a plan that best suits their needs.

**We must review prices before the end of each regulatory period**

We released our previous determination on 24 May 2022 for the Victorian Default Offer to apply from 1 July 2022 to 30 June 2023. We refer to these arrangements for standing offers as the 2022–23 Victorian Default Offer.

Under the pricing order, we must make a new determination for the Victorian Default Offer to apply from 1 July 2023 to 30 June 2024 on, or before, 24 May 2023.\(^7\) We refer to the new pricing arrangements for standing offers to apply from 1 July 2023 as the 2023–24 Victorian Default Offer.

**High wholesale costs are increasing the Victorian Default Offer prices**

The annual domestic flat tariff bill in our final decision for the 2023–24 Victorian Default Offer is 25 per cent higher than those in the 2022–23 Victorian Default Offer (on average across Victoria’s five distribution zones). For domestic customers, 21 percentage points of the 25 per cent increase in the Victorian Default Offer bill is due to the increase in wholesale costs.\(^8\)

Forecast wholesale electricity costs for 2023–24 started increasing significantly in May 2022, peaking in October 2022. Forecast costs have decreased since then, but they are still roughly double what they were in 2021–22 when we last reviewed prices. Figure 1 below shows the increase in trade-weighted prices of quarterly base swaps for 2023–24.

---

\(^6\) Embedded networks supply electricity for many domestic and small business customers in apartment buildings, caravan parks or office blocks.

\(^7\) Clause 10(1) of the pricing order.

\(^8\) After accounting for wholesale costs’ contribution to the increase in the retail operating margin and GST costs.
These higher prices are not just a Victorian issue. They reflect a year of price volatility in energy markets, which is making it more expensive for energy companies to buy and supply electricity across Australia.

Figure 2: Change in Victorian Default Offer annual bills for domestic customers on flat tariffs (assuming annual usage of 4,000 kWh)
Our decision reflects retailers’ efficient costs

The objective of the Victorian Default Offer is to provide a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the electricity retail market. Under the pricing order, Victorian Default Offer tariffs are to be based on the efficient costs of the sale of electricity by a retailer. Setting prices based on efficient costs best meets our objectives under the Essential Services Commission Act, Electricity Industry Act, and pricing order.

---

9 The commission has historically reported Victorian Default Offer average annual bills for small business customers with annual usage of 20,000 kWh. We have quoted the 10,000 kWh figure in this decision to align with how small businesses prices are reported in other states. If assuming an average annual usage of 20,000 kWh, final 2023-24 Victorian Default Offer prices represents an annual increase of 27 per cent (around $1,493) for small business customers.

10 Clause 3 of the pricing order

11 Clause 12(3) of the pricing order.


13 Electricity Industry Act 2000, s 10.

14 Clause 3 of the pricing order sets out the objective of the Victorian Default Offer.

15 Clauses 12(1) and 12(2) of the pricing order.

Figure 3: Change in Victorian Default Offer annual bills for small business customers on flat tariffs (assuming annual usage of 10,000 kWh)
Setting prices based on efficient costs means customers, including those unable or unwilling to engage in the retail electricity market, will have access to a reasonable price that reflects retailers’ costs. Setting a price below efficient costs may mean, in the longer term, less retail competition and less investment in the industry. The result of this would likely be less innovation in providing long term cost reductions and less reliable electricity service. This would not be in long term interests of Victorian consumers.

In basing the 2023–24 Victorian Default Offer tariffs on the efficient costs of the sale of electricity by a retailer, we have used largely the same approach and methodology we have been using since December 2019 when we made our first Victorian Default Offer price determination. This approach and methodology are well-understood, trusted, and broadly accepted, as a reliable methodology for determining efficient costs. Using our approach and methodology shows the efficient costs of the sale of electricity by a retailer will be higher for 2023–24 than they were for 2022–23.

We acknowledge that in the short term increases in energy prices, leading to higher bills for Victorians, will impose economic and social costs on consumers, businesses, government, and community service organisations.

Following our draft decision, taking into account feedback from stakeholders, we continued to closely examine each cost benchmark in the Victorian Default Offer cost model to make sure that they reflect efficient costs. We paid especially close attention to our approach to assessing wholesale costs given the market volatility over the past year and that these costs are the cause of almost all the increase in the Victorian Default Offer prices.

Both before and after the release of the draft decision we used our compulsory information gathering powers to collect necessary data from retailers on their wholesale hedging strategies and positions. We used this information to vigorously test whether the assumptions in our wholesale cost benchmark still reflect retailer practice. The information we collected confirms that the assumptions still largely reflect retailers’ approach to managing their wholesale costs.

However, we did note that retailers are no longer purchasing Victorian peak swap contracts in meaningful volumes. This is supported by ASX Energy data which shows that over the last few years the volume of peak swap contracts traded has decreased significantly. Market participants have traded very few peak swap contracts for 2023-24. This suggests that peak swap contracts no longer form an important part of retailers’ hedgebooks. As a result, we have removed peak swaps from the wholesale cost benchmark. This has contributed to a decrease in the wholesale cost benchmark, and lower overall Victorian Default Offer prices, between our draft and final decisions.

**State and federal governments are reducing the impact of high prices**

The Australian and Victorian Governments are taking action to reduce the impact of increases in the cost of wholesale electricity. These include direct payments to energy consumers and federal
interventions in wholesale commodity markets. We urge Victorians, and the community service organisations that aid them, to take advantage of government support programs designed to mitigate the impact of these price increases.

A new round of the Victorian Government’s Power Saving Bonus opened on 24 March 2023, providing $250 to Victorian households to help ease cost-of-living pressures and encourage consumers to compare energy offers.

Additionally, the Australian Government has announced up to $1.5 billion in funding for targeted bill relief for energy consumers in the federal budget for 2023–24. This includes additional targeted assistance of up to $250 per eligible household and $325 per eligible small businesses.¹⁶

**We are here to support consumers**

Upholding the rights and protections of energy consumers remains front of mind for us as the impacts of higher wholesale energy market prices begin to flow through to retail markets and consumer energy bills.

We will continue to use our full suite of regulatory tools to support and promote energy retailer compliance with critical safeguards in place to protect Victorian energy consumers.

**A retailer must inform customers about their best offer**

Under the Energy Retail Code of Practice, a retailer must provide a customer with best offer messages on their bills and price change notifications.¹⁷

Keeping customers informed of whether they could access a better offer from their retailer is more important than ever.

We continue to closely monitor how retailers are meeting their responsibilities to inform energy consumers about whether they are receiving retailers’ best offers. This is one of our current compliance and enforcement priorities.

We want consumers to engage confidently with their retailer and search out better offers from other retailers, where possible. Victorian Energy Compare (www.compare.energy.vic.gov.au) can help consumers find the best offer on the market for them.


¹⁷ Energy Retail Code of Practice, Version 2, 1 October 2022, part 5 division 5.
All customers are entitled to payment assistance

We will also continue to focus on retailers’ obligations under the energy payment difficulty framework to provide assistance to customers experiencing bill stress. Under the Energy Retail Code of Practice, a customer is entitled to receive payment assistance when they miss paying an energy bill.\textsuperscript{18}

A retailer is also required to support customers apply for Utility Relief Grants – a grant offered by the Victorian government to provide relief of up to $1,300 every two years to eligible account holders\textsuperscript{19}. We encourage customers that are having trouble paying their bills to reach out to their energy retailer to ask about payment plans, and what concessions, rebates or utility relief grants might be available.

We want to make sure Victorian energy consumers are getting all the assistance they are entitled to. This is also a key current compliance and enforcement priority for the commission. We continue to closely monitor retailer actions, particularly on the obligations to provide payment assistance, and help to apply for Utility Relief Grants. We will not hesitate to take enforcement action if we see businesses not providing customers with the assistance they are entitled to.

Also, if a customer cannot resolve their issue with their retailer, they can contact the Energy and Water Ombudsman (Victoria) as the pathway for free, fair, accountable, independent, trusted and experienced dispute resolution for Victorian energy consumers.

Stakeholders suggested non-price options to help consumers

In response to our draft decision, stakeholders and consumer advocates raised a number of non-price suggestions that could help reduce the effect of higher retail electricity prices. These included:

\begin{itemize}
  \item providing greater support to consumers to access retailers’ best deals\textsuperscript{20}\textsuperscript{21}
  \item developing an agreed definition of energy stress or energy poverty, to better understand the nature of the problem in Victoria, and monitor progress towards reducing energy stress\textsuperscript{22}
  \item requiring retailers to provide contact information for the energy ombudsman\textsuperscript{23}
\end{itemize}

\textsuperscript{18} Energy Retail Code of Practice, Version 2, 1 October 2022, part 6.

\textsuperscript{19} Energy Retail Code of Practice, Version 2, 1 October 2022, Division 12, 128 (1)(d)

\textsuperscript{20} Council on the Ageing Victoria submission to Draft Decision, April 2023, p. 5.

\textsuperscript{21} Good Shepherd submission to Draft Decision, April 2023, p. 4.

\textsuperscript{22} Brotherhood of St Laurence submission to Draft Decision, April 2023, p. 2.

\textsuperscript{23} Energy and Water Ombudsman (Victoria) submissions to Draft Decision, p. 5.
• exploring options to facilitate consumers accessing government concessions, Utility Relief Grants and other supports.\textsuperscript{24, 25}

It is important to support customers to engage with the market and make sure they receive support when experiencing payment difficulty. It also remains important to have clear energy rules that provide appropriate minimum terms and conditions for energy contracts. We have an ongoing work program to reform our energy rules.

**Changes in our final decision**

For our final decision on the 2023–24 Victorian Default Offer we have used largely the same approach as we did in the 2022–23 Victorian Default Offer.

In making our decision we have updated our cost benchmarks to reflect changes in costs. Table 2 below shows the differences between our final decision for the 2023–24 Victorian Default Offer, the draft decision and the 2022–23 Victorian Default Offer.

We also had regard to stakeholder submissions. In general, we kept our approach unchanged between our draft and final decision, but in response to submissions we have changed our position on the wholesale cost benchmark and retail operating margin.

\textsuperscript{24} Energy and Water Ombudsman (Victoria) submissions to Draft Decision, p. 5.

\textsuperscript{25} Council on the Ageing Victoria submission to Draft Decision, April 2023, p. 5.
<table>
<thead>
<tr>
<th>Item</th>
<th>Past approach</th>
<th>Draft decision</th>
<th>Final decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale costs</td>
<td>Estimated using the trade weighted average price of contracts on ASX Energy from all days over the past 12 months</td>
<td>We proposed to use the trade weighted average price of contracts from all days over the past 12 months, except for the days options are exercised. This would improve our wholesale cost forecast accuracy.</td>
<td>As for draft, but we also removed peak swap contracts from our wholesale cost benchmark. This better reflects retailers' actual approach to building their hedgebooks.</td>
</tr>
<tr>
<td>Retail operating margin</td>
<td>Set at 5.7% after having regard to benchmarks set by other regulators and results from the expected returns model</td>
<td>No change</td>
<td>Set at 5.3% based on benchmarks set by other regulators and the expected returns model. This better reflects current market conditions.</td>
</tr>
<tr>
<td>Retail operating costs</td>
<td>Estimated based on a benchmark set by the Independent Competition and Regulatory Commission in 2017 and adjusted for the change in the consumer price index since 2017.</td>
<td>We proposed to use the customer weighted average of retailers' actual retail operating costs (adjusted for changes in the consumer price index). We are of the view that this will better reflect the efficient costs of the sale of electricity by a retailer than the retail operating cost benchmark we used for the 2022-23 Victorian Default Offer.</td>
<td>No change from draft decision</td>
</tr>
<tr>
<td>Market intervention costs</td>
<td>We include other market fees and charges from the Australian Energy Market Operator in the 'other costs' benchmark when determining Victorian Default Offer prices.</td>
<td>We proposed to include market intervention costs in the Victorian Default Offer 'other costs' benchmarks. These costs reflect the efficient costs of the sale of electricity by a retailer. We will include all known costs in the 2023-24 Victorian Default Offer. Costs determined after our decision will be included in following periods.</td>
<td>No change from draft decision</td>
</tr>
<tr>
<td>Consultation papers</td>
<td>We have published a consultation paper at the start of almost every Victorian Default Offer review.</td>
<td>We proposed to publish a brief 'request for comment' notice at the start of our future reviews (rather than a consultation paper). This will help streamline the early stages of our Victorian Default Offer review consultation processes.</td>
<td>No change from draft decision</td>
</tr>
</tbody>
</table>
Victorian Default Offer cost components

We must base the Victorian Default Offer on the efficient costs of the sale of electricity by a retailer. In doing this, we must have regard to certain cost components in setting tariffs. The costs included in our Victorian Default Offer cost model are shown below.

Figure 4: Cost items included in the Victorian Default Offer cost stack

We use a number of different approaches to estimate the benchmarks for the costs used to calculate the Victorian Default Offer prices, including:

- wholesale electricity costs – based on the price of electricity costs in the futures market
- network costs – taken directly from tariffs approved by the Australian Energy Regulator
- environmental costs – taken from public information on the costs of environmental initiatives
- retail costs – based on historical cost data
- other costs, including market intervention costs – taken directly from published reports from industry bodies
- network losses – taken from the Australian Energy Market Operator and electricity distributors
- retail operating margin – based on a benchmark from comparable regulatory decisions and expected returns approach.

---

26 Clause 12(3) of the pricing order.
27 Clause 12(4) of the pricing order.
As part of this review, we updated the estimates included in the cost stack to reflect the most up-to-date information available for this final decision.

As in past years, we collected cost data from retailers using our compulsory information gathering powers. This year we collected cost data from all retailers in Victoria with more than 10,000 domestic and/or small business customers on their costs for financial year 2021–22. We also collected information on retailers’ hedging strategies and positions.

**Wholesale electricity costs**

- Our final decision is to use forecasts of wholesale electricity prices based on futures prices from ASX Energy. This was our approach in the 2022–23 Victorian Default Offer price determination.

- Wholesale electricity purchase costs make up around 36 per cent of an annual domestic bill (averaged across the five distribution zones).

- Wholesale electricity costs in our final decision for the 2023–24 Victorian Default Offer are 87 per cent higher than those in the 2022–23 Victorian Default Offer cost stack for domestic users. This is 4.5 per cent lower than the benchmark used in our draft decision.

- Given the size of the increase in wholesale prices, and feedback from stakeholders, we undertook additional tests of our general approach and its underpinning assumptions to ensure our wholesale cost benchmark is reasonable.

- Following this further testing we have found that in general retailers are no longer using ASX Energy peak swap contracts. For this reason, we have removed them from our wholesale cost benchmark. This is driving the decrease from our draft decision benchmark to our final decision benchmark.

Retailers incur wholesale electricity purchase costs when they buy electricity from the wholesale market to meet customer demand. In basing our determination on efficient costs, the pricing order requires us to have regard to wholesale electricity purchase costs.

Electricity generators supply wholesale electricity to the National Electricity Market which matches generation with demand in real time. Electricity retailers must secure a supply of wholesale

---


29 Clauses 12(3) and 12(4) of the pricing order.
electricity to meet customer demand. Retailers buy electricity directly from the spot market.\textsuperscript{30} Buying electricity from the spot market exposes retailers to the risk that prices may be high when they need to purchase electricity. Hedging is a way of managing this risk. If a retailer hedges its wholesale electricity risk, at least some of the prices it pays are set in advance or capped. Retailers can hedge by either contracting directly with a generator, owning generation assets, or through a market transaction on ASX Energy or another financial intermediary.

In our draft decision, we used a futures market approach to estimate a benchmark for wholesale electricity costs for 2023–24. The futures market approach is based on an estimate of the costs a retailer would incur to supply electricity to customers using financial hedging products purchased on ASX Energy. We have used this approach in previous Victorian Default Offer determinations. Other Australian regulators also use the futures market approach.\textsuperscript{31}

**We carefully re-tested our approach to wholesale costs**

Some submissions responding to our draft decision proposed a fundamental change to the way we estimate wholesale electricity purchase costs for the Victorian Default Offer. Many submissions also raised concern about the size of the increase we proposed for the Victorian default offer in our draft decision and proposed we ‘stress test’ our approach to wholesale costs.

Given this feedback and the developments in wholesale markets over the past year, we have again carefully reviewed our approach to estimating wholesale electricity costs; we re-examined the futures market approach, and the inputs used under this methodology.

This included testing the impact of excluding and including different ASX contracts, using different contract averaging periods, and excluding contract trades while ASX contract prices were at their peak.

We also used our compulsory information acquisition powers to collect information from retailers on their hedging strategies and positions. This information showed us that the assumptions underlying our wholesale cost benchmark still hold. Even after the wholesale market disruptions last year, retailers continue to use ASX Energy contracts to hedge their wholesale risk one to two years in advance. However, the information we collected also shows that retailers are no longer

\textsuperscript{30} The spot market is the mechanism that the market operator uses to match the supply of electricity from power stations with real time consumption by households and businesses. All electricity in the spot market is bought and sold at the spot price. Source: Australian Energy Market Operator, spot and contract markets, available at: https://www.aemc.gov.au/energy-system/electricity/electricity-market/spot-and-contract-markets [last accessed 19 May 2023]

\textsuperscript{31} Other regulators including the Queensland Competition Authority, the Independent Competition and Regulatory Commission (in the ACT) and the Australian Energy Regulator have used a futures approach to forecast wholesale electricity costs.
using peak swap contracts. ASX Energy data also shows that very few peak swap contracts are being traded.

In past years, retailers used peak contracts more frequently. For example, almost eight times more peak swap contracts were traded for financial year 2021–22 than for financial year 2023–24. As the pattern of demand for electricity has rapidly changed over recent years, retailers seem to find these contracts less useful. The period covered by peak swaps now covers both times when prices are at their lowest and at their highest. As a result, while peak swaps protect retailers from peak prices, peak swaps also expose them to paying the difference between the swap price and negative prices when demand is at its lowest.

We provided a summary of the hedging position information we collected from retailers to Frontier Economics. Based on this information, and data from ASX Energy, Frontier Economics was of the view that peak swap contracts no longer appear to form an important part of retailers’ hedging strategies. Frontier Economics recommended removing peak swaps from the contracts used in their wholesale cost model. We accepted this recommendation. This has led to our wholesale cost benchmark decreasing relative to our draft decision.

We also note that the Australian Energy Regulator’s consultant ACIL Allen also removed peak swap contracts from its draft wholesale cost benchmark for similar reasons.32

We forecast higher wholesale electricity purchase costs

Although we have removed peak swap contracts from the benchmark, our final decision forecast for wholesale electricity costs is still 87 per cent higher than the benchmark adopted for the 2022–23 Victorian Default Offer for domestic users and 84 per cent higher for small business users. Wholesale electricity contract prices are still much higher for 2023–24 than they were in 2022–23 (figure 5).33
The Australian government introduced gas and coal price caps as measures to limit volatility in the electricity market and to suppress high prices. Following the announcement of these policies wholesale electricity contract prices have decreased from their peaks. However, as electricity retailers typically buy hedging contracts to lock in their wholesale costs in advance, the highest prices from the middle of 2022 will still make some contribution to higher wholesale costs for 2023–24. Also, futures contract prices now are still roughly double what they were at this time last year. These are both reflected in our approach to wholesale costs.

We use trade weighted contract prices from the last 12 months to develop our wholesale cost benchmark. This means the cost of all contracts traded during the last 12 months, including contracts traded while wholesale prices were at their peak, will contribute to our wholesale cost benchmark. But at the same time, the lower prices from the end of 2022 and the first part of 2023 will also contribute to our wholesale cost benchmark. This means the increase in wholesale costs is lower than it would have been had the highest prices persisted for all of 2022 and early 2023.

**Stakeholder feedback on wholesale electricity costs was mixed**

Many stakeholders supported maintaining our current approach to estimating wholesale costs.34 However, some suggested that change was needed.35

---

34 Momentum Energy submission to draft decision, April 2023, p. 1; Simply Energy submission to draft decision, April 2023, p. 1; Alinta Energy submission to draft decision, April 2023, p. 1; Red Energy and Lumo Energy submission to draft decision, April 2023, p. 2; Energy Locals submission to draft decision, April 2023, p. 2; Origin Energy submission to draft decision, April 2023, p. 2; AGL submission to draft decision, April 2023, p. 1; Australian Energy Council submission to draft decision, April 2023, p. 2.

35 Good Shepherd submission to draft decision, April 2023, p.2; Victoria Energy Policy Centre submission to draft decision, April 2023; Brotherhood of St Laurence submission to draft decision, April 2023, p. 2; Consumer Action Law Centre submission to draft decision, April 2023, p. 2; EnergyAustralia submission to draft decision, April 2023, p. 1; Powershop submission to draft decision, April 2023, p. 2; Energy Locals submission to draft decision, April 2023, p. 3; Aaron McGlade submission to draft decision, April 2023, p. 1.
Several retailers explained how a stable, consistent and predictable methodology is critical to maintaining retailers’ confidence in their ability to recover costs.\textsuperscript{36} They were of the view that stability supports the long-term interests of customers through the continuation of effective competition.\textsuperscript{37}

On the other hand, consumer advocates were of the view that given the current cost of living crisis we should stress test our approach to setting the wholesale cost benchmark to ensure it is no higher than necessary.\textsuperscript{38}

In response to stakeholder feedback, as discussed above, we did re-examine our approach. Following this additional testing we removed peak contracts from the contract mix used to set the wholesale cost benchmark. However, we found that the other assumptions underlying our wholesale cost benchmark were still fit for purpose.

**Our benchmark reflects market expectations about the efficient costs of electricity**

In setting the Victorian Default Offer, the pricing order requires us to base the Victorian Default Offer tariffs on the efficient costs of providing retail electricity services.\textsuperscript{39} To estimate wholesale electricity costs, we base our methodology on the cost of purchasing wholesale electricity. We do this through modelling the ASX Energy futures contracts a prudent retailer would purchase to manage the risk of variations in the spot price in the national electricity market.

ASX Energy futures contract prices reflect the market’s view of what wholesale prices will be in the national electricity market. Higher ASX Energy contract prices mean that people trading on ASX Energy expect that prices in the national electricity market will be higher in 2023–24. These prices in the national electricity market represent the market clearing price. The market clearing price is the price at which enough generators are willing to provide the right amount of electricity to meet demand. In a competitive market the market clearing price is equal to marginal cost which in turn reflects the efficient cost of production. For this reason, we are of the view that ASX futures contract prices reflect the efficient costs of wholesale electricity.

\textsuperscript{36} Red Energy and Lumo Energy submission to draft decision, April 2023, p. 2; Momentum Energy submission to draft decision, April 2023, p. 1; Origin Energy submission to draft decision, April 2023, p. 1-3; AGL submission to draft decision, April 2023, p. 1; Australian Energy Council submission to draft decision, April 2023, p. 1-2.

\textsuperscript{37} Alinta Energy submission to draft decision, April 2023, p. 2.

\textsuperscript{38} Victorian Council of Social Services submission to draft decision, April 2023, p. 3; Consumer Action Law Centre submission to draft decision, April 2023, p. 2.

\textsuperscript{39} Clauses 12(3) and 12(4) of the pricing order.
We received submissions from the Victoria Energy Policy Centre and Good Shepherd that suggested that we should base our wholesale cost benchmark on the costs of the generation arms of vertically integrated retailers.\(^{40}\)

The Victoria Energy Policy Centre submitted:

‘the cost of producing the vast bulk of electricity that is sold in Victoria has remained stable, relative to the large changes in observed market prices in 2022 whether measured as spot prices or the prices of contracts.

These ‘market’ prices reflect changes at the margin and are driven by factors elsewhere – mainly the price of gas and black coal.

In the market arrangements that exist in Victoria these prices give rise to a gap between the cost of supply for those generator/retailers that access Victorian electricity production, particularly from brown coal, and that are able to sell that production in wholesale spot or contract markets at the observed prices.’ \(^{41}\)

The Victoria Energy Policy Centre goes on to state:

This difference in cost and price gives rise to questions of policy. On this, it strikes me that both the Australian Government and the Victorian Government have to varying degrees rejected market determined prices, and have capped inputs (gas and coal prices) in the case of the Australian Government and have adopted policies – such as the re-creation of the State Electricity Commission – which seek to deliver price outcomes that are closer to production costs.

I think the ESC is inevitably in the position of having to decide whether to set a VDO in line with its perception of wholesale market prices in the context of the marginal clearing price construct, or whether to take account of policy decisions to deviate from that construct.\(^{42}\)

We have chosen not to deviate from the marginal clearing price in the wholesale benchmark. We consider the marginal clearing price reflects efficient costs in a competitive national generation market and promotes investment to ensure security of supply over time. We have consulted widely

\(^{40}\) Good Shepherd submission to draft decision, April 2023, p. 2; Victoria Energy Policy Centre submission to draft decision, April 2023, p. 1-2.

\(^{41}\) Victoria Energy Policy Centre submission to draft decision, April 2023, p. 1.

\(^{42}\) Victoria Energy Policy Centre submission to draft decision, April 2023, p. 2.
on this approach over the last five years and a recent review into the Victorian Default Offer pricing order\textsuperscript{43} made no recommendations to change our approach.

Nonetheless, the Victoria Energy Policy Centre and Good Shepherd are correct that there are some retailers in Victoria that are vertically integrated and currently enjoy temporary cost advantages. This includes those that generate electricity using brown coal for which the prices are not tied to the international market. Retailers with established renewable generation assets such as wind and solar farms have also not had to face increases in fuel costs.

However, basing retail prices on the current average cost of all participants in the Victorian market, which seems to be what is implicitly advocated, would represent a fundamental change in how the electricity market operates. It implies changing the short-term incentives to dispatch power through the day, and the incentives for investment in lower cost sources of electricity in the future. Consequently, setting Victorian Default Offer prices based on the average generation costs would not be consistent with the commission’s current responsibilities.

Further, it would not be efficient for the generation arm of the retailer to sell its electricity to its retail arm below the market price. It would not provide the right pricing signals for the retail arm to manage their wholesale cost risk efficiently. It would also not provide the right pricing signals for the generation arm to invest in new generation assets.

Another practical consideration is that retailers use ASX Energy contracts to manage their wholesale costs. Last year, and after our draft decision, we gathered information from a selection of retailers, which by market share cover the vast majority of the retail market, about their hedging strategies and positions. This information confirms that retailers (even vertically integrated ones) continue to rely on ASX Energy contracts to manage their wholesale risk. This means that not only do ASX Energy contract prices theoretically represent efficient prices, but they also reflect actual costs that retailers incur.

\textbf{Our benchmark reflects government intervention in wholesale gas and coal markets}

As discussed above our benchmark reflects the market’s expectations of wholesale prices for 2023–24. Also as discussed above, following the announcement of government interventions in gas and coal markets, ASX Energy contract prices show the market’s expectations for wholesale prices for 2023–24 have decreased from a peak of around $140/MWh to around $90/MWh. This decrease in prices is reflected in the trade weighted contract prices we use to set our benchmark. As a result, our benchmark reflects the impact of policy developments.

Several stakeholders submitted that the Victorian Default Offer should follow Government policies that have aimed to ease prices for customers.

Good Shepherd submits that:

“we must ensure the Victorian Default Offer is consistent with the objectives of the Federal Government’s price caps, given the Essential Services Commission must have regard to consistency in regulation between States and on a national basis when determining the Victorian Default Offer.”44

The Brotherhood of St Laurence said that:

“Governments have also signalled that the energy prices seen in 2022 were unacceptable through policy changes such as Victoria’s re-establishment of the State Electricity Commission and the Commonwealth’s intervention in coal and gas prices.”45

As mentioned above, our wholesale benchmark takes into account the impact of policy changes on efficient costs. Under the pricing order we must base tariffs on the efficient costs of the sale of electricity by a retailer, including having regard to wholesale electricity purchase costs.46 We have observed the steps taken by the Australian Government to reduce energy costs. We are of the view that the impact of these steps is already reflected in ASX contract prices, or will be in due course. As such, our methodology to base the wholesale component of the Victorian Default Offer on the trade-weighted prices of ASX futures contracts will reflect the impact of these changes.

**Efficient retailers use hedging contracts to reduce their wholesale cost risk**

Our method to estimate wholesale costs is based on using trade-weighted hedging contract prices from ASX Energy from the last 12 months. This reflects the costs an efficient retailer would incur to secure the electricity they require for the coming year and manage the risk of variations in the spot price.

Most retailers hedge their electricity costs a year or two in advance. Retailers do this to manage their wholesale price risk. This benefits consumers by sheltering them from the volatility of the spot market. When consumers turn on their appliances, they know how much they are paying for electricity.

44 Good Shepherd submission to draft decision, April 2023, p. 2.
45 Brotherhood of St Laurence submission to draft decision, April 2023, p. 2.
46 Clauses 12(3) and 12(4) of the pricing order.

Victorian Default Offer Cost Components

Essential Services Commission Victorian Default Offer 2023–24
As retailers use hedging contracts to manage their wholesale cost risk, a prudent retailer would execute its hedging strategy (reducing its wholesale cost risk). The alternative, gambling on the futures market moving, does the opposite of this and increases their spot price risk.

A number of stakeholders queried whether efficient retailers would have purchased contracts at elevated prices during 2022. They questioned whether the extremely high prices of late-2022 should be included in the calculation used to arrive at the proposed 2023–24 price.\(^{47}\)

While wholesale prices were very high for several months in 2022, our method takes into account both the volume of trades taking place as well as the price. This means that our estimate of wholesale costs is based on the actual trades that took place throughout the last 12 months, not just those taking place at times of high prices.

Nonetheless, we have tested the wholesale cost methodology and the key inputs and assumptions. We gathered evidence from a range of retailers in April 2023 to assess whether they made changes to their hedging strategy in response to volatility in the wholesale market.

We found that retailers have executed their hedging strategies as in past years. Additionally, we found that in general their hedging positions in April 2023 for 2023–24 are not significantly different to their positions in April 2022 for 2022–23. This tells us that collectively retailers are still behaving as our methodology assumes, and our view is that efficient retailers continued to purchase hedging contracts throughout 2022.

Good Shepherd pointed to the “well-anticipated and well-publicised wholesale price cap” as a reason retailers would have held off purchasing contracts at high prices.\(^{48}\) Our view is that retailers did not need to ‘hold off’ purchasing contracts as ASX Energy markets moved very quickly after the announcements of the Australian Government’s intervention in wholesale coal and gas markets. This can be seen in data from ASX Energy (see figure 6 below) which shows that from the end of October 2022, after the Australian Government announced it would intervene, prices for base swap contracts dropped by around 30 per cent to $100/MWh by the end of November. Base swap prices are now currently at around $90/MWh which is still much higher than prices were at this time last year.

\(^{47}\) Victorian Council of Social Services submission to draft decision, April 2023, p. 3; Consumer Action Law Centre submission to draft decision, April 2023, p. 2.

\(^{48}\) Good Shepherd submission to draft decision, April 2023, p. 3.
Similarly, the Brotherhood of St Laurence suggested that retailers’ exposure to high prices in 2022 are likely to have been moderated by their hedging strategies.\textsuperscript{50} We agree. It is for this reason that we did not make a variation to the 2021–22 or 2022–23 Victorian default offer prices despite national electricity market spot prices being significantly higher than what was forecast. Hedging prevented retailers, and by extension consumers, being exposed to high prices in 2022. However, retailers hedging load now must do so at prices that reflect higher expected spot prices in the National Electricity Market for 2023–24.

**Our wholesale benchmark is transparent and realistic for a range of retailers**

As discussed earlier in this section retailers use a number of different methods to hedge their wholesale electricity risk. For our wholesale benchmark we use only ASX Energy contracts. As some retailers can and do use other hedging methods it is possible that some retailers could achieve lower wholesale costs. However, we note that not all hedging approaches are open to all retailers. Using ASX Energy contracts is open to most retailers, including those that are not vertically integrated.

The Victorian Council of Social Services and the Consumer Action Law Centre pointed to our consultant’s report which notes that retailers adopt a mix of hedging strategies, which can lead to

---


\textsuperscript{50} Brotherhood of St Laurence submission to draft decision, April 2023, p. 2.
regulators overstating the costs that retailers will face, or underestimating the risk management that retailers can achieve.\footnote{Victorian Council of Social Services submission to draft decision, April 2023, p. 3; Consumer Action Law Centre submission to draft decision, April 2023, p. 2.}

We accept that our benchmark may overestimate wholesale costs for some retailers. However, it will also underestimate costs for some retailers, especially smaller retailers that may not have the same access to ASX Energy. In setting the Victorian Default Offer prices we must have regard to the costs of the retailers in general, not individual retailers.

**Market offers for 2022–23 should not be compared to prices for 2023–24**

The Brotherhood of St Laurence pointed to a report by the St Vincent de Paul Society that showed that market offers have only increased by 14–20 per cent in the past year.\footnote{St Vincent de Paul Society, Victoria Energy Prices January 2023 An update report on the Victorian Tariff-Tracking Project, January 2023, p. 10.} They therefore question why the increase to the Victorian Default Offer is significantly higher.\footnote{Brotherhood of St Laurence submission to draft decision, April 2023, p. 2.}

It is not accurate to compare the change in market offer prices between calendar years 2021 and 2022 with the change in default offer prices for financial years 2022–23 to 2023–24. A more appropriate, although still not direct, comparison would be to compare the change in market offer prices to the change between the 1 January 2022 and 2022–23 Victorian Default Offers, which saw prices default offer prices increase by approximately five per cent.\footnote{Essential Services Commission, *Victorian Default Offer 2022–23 Final Decision*, May 2022, p. 7.}

**Our approach accounts for the impact of options contracts on ASX Energy prices**

EnergyAustralia submitted that our proposal to remove the day that options are exercised is inconsistent with previous Victorian Default Offer decisions where this day was not removed, and on this occasion it will have a negative impact on the estimate of wholesale electricity costs. They do recognise the approach used until now has shortcomings and encourage us to follow the Australian Energy Regulator’s approach to options in their Default Market Offer five in our future decisions.\footnote{EnergyAustralia submission to draft decision, April 2023, p. 1.} In contrast, AGL were supportive of our proposal to remove the exercised options data from the book-build of the trade weighted forward contract prices, stating they believe this is a valid approach.\footnote{AGL submission to draft decision, April 2023, p. 1.}

Our view is that removing the specific day that options are exercised is the simplest and most appropriate way to account for these in the 2023–24 Victorian Default Offer. It is not essential for

\[
\text{(continued)}
\]
retailers to use options contracts to hedge, and excluding them makes it easier to understand the hedging position. In the past, relatively few options contracts were purchased in Victoria, and stakeholders did not appear to consider it would have a material impact on the wholesale cost benchmark. Our view is that there will only be a small difference if we include or exclude options this year, but due to their apparent increase in popularity we have removed the day they are exercised to avoid any distorting effect they may have on the wholesale cost benchmark.

**Increased credit support and prudential requirements are covered in the retail margin**

During our consultation phase, several retailers raised issues relating to increased credit support and prudential requirements stemming from volatility in the wholesale market. We investigated this and found that any cost increases were relatively small for most retailers. Further, as working capital costs, these should be accounted for in the retail margin, not the wholesale allowance.

Some retailers – including Powershop and Energy Locals – again raised similar issues in response to our draft decision. These related to reduced access to ASX contracts, increasing electricity costs leading to a corresponding increase in working capital requirements, increased requirements to maintain cash buffers to cater for margin calls and prudential requirements, as well as higher costs of capital due to interest rate increases and higher perceived risk related to the sector.

We recognise that the exit of two clearing houses in 2022 has reduced access to ASX Energy for some retailers. However, as we noted in our draft decision, our view is that any cost increases related to increased credit support and prudential requirements are relatively small. Our analysis shows that the increase in the dollar value of the retail operating margin provides an adequate amount for any increased interest costs associated with higher working capital requirements. This analysis is also supported by analysis from the Queensland Competition Authority and its consultant. As a result, we believe our wholesale cost benchmark adequately accounts for the costs incurred by a prudent retailer to participate in the market.

**We will continue to monitor wholesale markets**

The Australian Energy Council encouraged us to continue to monitor a number of issues and to consider an appropriate response when needed. These include the impacts of settled load shape of unaccounted for energy, the volume-weighted impact of over-the-counter contracts on wholesale prices, as well as investigating an allowance for extreme market movements.

---

57 Powershop submission to draft decision, April 2023, p. 2.

58 Energy Locals submission to draft decision, April 2023, p. 3.


60 Australian Energy Council submission to draft decision, April 2023, p. 2.
Regarding the impacts of settled load shape of unaccounted for energy, we will continue to monitor the data available since the implementation of global settlements and will assess whether variation is occurring between network zones.

On over-the-counter contracts, as we noted in our draft decision, our analysis showed they make up only a small share of Victorian retailers’ hedging contracts, and aside from a small divergence in prices in Q2 2022, their prices generally follow those of ASX futures contracts. This is supported by the findings of the Australian Energy Regulator’s draft decision for Default Market Offer 5 on the relationship between over the counter and ASX futures prices.\(^{61}\) The Australian Energy Regulator’s State of the Energy Market Report also shows that in financial year 2021–22 roughly 14 times more electricity was traded using ASX futures contracts than over the counter contracts.\(^{62}\)

We will continue to monitor their uptake and price trends, but at present we do not consider it necessary to account for over the counter contracts when estimating wholesale costs for Victorian retailers.

Regarding an allowance for extreme market movements, our view is that this is not required as we assume retailers are close to fully hedged, and we also include a volatility allowance in our wholesale cost benchmark to account for residual risk.

**Our wholesale benchmark provides the right incentives for small-scale generation**

One consumer submitted that basing our estimate of wholesale electricity costs on ASX futures does not incentivise investment in small-scale generation.\(^{63}\)

We recognise that there are a range of incentives for the different parties across energy generation and retail markets, and our view is that our current methodology creates the right incentives to invest in small-scale generation by setting a benchmark that reflects retailers’ wholesale costs. In doing this we ensure that customers receive the right price signals when making solar investment decisions. If we were to deviate from using retailers’ wholesale costs in our wholesale benchmark, we would be at risk of over or under-incentivising investment in small-scale generation.

**Our approach to setting the wholesale cost benchmark uses market data**

We engaged Frontier Economics to estimate wholesale electricity purchase costs. We considered their approach and we consider their recommendations reflect an appropriate benchmark for

---


\(^{62}\) Australian Energy Regulator, State of the Energy Market 2022, September 2022, p. 27

\(^{63}\) Aaron McGlade submission to draft decision, April 2023, p. 1.
efficient wholesale electricity purchase costs. A full description of Frontier Economics’ methodology including data sources is included in its report. A summary is provided below.

**Frontier Economics forecasts demand and spot prices using Monte Carlo simulations**

The first step in Frontier Economics’ methodology is to forecast demand and the relationship between price and demand. It analysed historical data on load and prices. Based on their analysis, they selected appropriate historical data and performed Monte Carlo simulations. Half-hourly customer load data was provided to us by the Australian Energy Market Operator and incorporated into Frontier Economics’ analysis. Victorian half-hourly spot prices for the same period were sourced from the market operator’s publicly available data.

The Monte Carlo simulations randomly generate a year of half-hourly observations. This process is repeated 500 times to generate a range of simulated years. Each simulated year is normalised to maintain load shape and the correlation between load and price. Each simulation is then scaled to half-hourly prices so that the time-weighted average prices in each quarter is equal to the relevant quarterly ASX Energy base swap price for 2023–24, subtracting a contract premium. These simulations give a range of possible outcomes for demand and the relationship between price and demand for 2023–24.

**Frontier Economics then selects an efficient hedging position using its STRIKE model**

With this range of possible demand outcomes, Frontier Economics then estimates the hedging position a prudent retailer would adopt. To estimate the cost of financial hedging, we asked Frontier Economics to use 12-month trade-weighted hedging contract prices from ASX Energy (base swaps and base $300 caps). An efficient contracting position was then estimated using Frontier Economics’ STRIKE model. The model uses the ASX contract prices and the demand conditions from the Monte Carlo simulations to determine the contracting positions that provide the lowest wholesale energy costs.

An amount for holding working capital (cash) to fund spot market purchases was also included – a volatility adjustment which funds shortfalls during periods of very high spot prices.

---


65 The random drawing of data is done from a pool of like days, where days are classified as either weekdays or weekends, from either Q1 (January to March), Q2 (April to June), Q3 (July to September) and Q4 (October to December).

66 The assumed contract premium is five per cent on the underlying prices.
The Frontier Economics’ approach is consistent with the approach we used in the 2022–23 Victorian Default Offer, except for a minor change to exclude data from the day that options are exercised. This change in approach was proposed in our draft decision.

**Our wholesale cost forecasts factor in network losses**

When electricity is transported through transmission and distribution networks, some of it is lost in the process. As a result, more electricity is generated than is consumed by end users. These losses must be factored into any electricity purchased through the wholesale market to ensure supply meets demand, and as such they need to be reflected in the benchmark we establish.

In calculating network loss factors, we must decide how to account for marginal (energy losses for electricity transmitted on a transmission network) and distribution (losses on a distribution network) loss factors.

We use the short sub-transmission factor for the CitiPower, Jemena, and United Energy distribution zones and the weighted average of the short and long sub-transmission factors for the Powercor and AusNet Services zones.\(^67\)

In calculating the marginal loss factor, we take a simple average of the relevant regional reference node factor for each distribution zone.\(^68\) We remove some transmission nodes that do not have any residential or small business load. We combine these to calculate an adjustment factor which is applied to energy purchase costs, environmental costs, and ancillary charges.

**Network costs**

- Our final decision is to keep using a cost pass through approach for network costs.
- For our final decision on network costs, we have used the network tariffs approved by the Australian Energy Regulator for 2023–24. These were approved in May 2023 after the release of our draft decision.
- Based on the benchmarks we adopt for the Victorian Default Offer, network costs represent about 31 per cent of the average flat tariff domestic bill (averaged across the five distribution zones).
- Network costs for residential customers are four per cent higher compared to our 2022–23 determination.

---


Network costs included in our cost stack for residential customers will decrease by five per cent when compared to our draft decision.

Network costs represent the costs of building, operating and expanding electricity transmission and distribution networks. There are five electricity distribution networks operating in five separate zones across Victoria, each with their own maintenance needs and growth rates.

The charges for each network are approved by the Australian Energy Regulator annually and are paid by electricity retailers for access to transmission and distribution services. Retailers pass these costs onto their customers via retail bills. In basing the Victorian Default Offer tariffs on efficient costs we must have regard to network costs.69

For all domestic and small business electricity customers, network tariffs comprise three components:

- distribution charges – for the use of the low voltage distribution network
- transmission charges – apply for using the high voltage transmission network
- jurisdictional charges – for the payments distributors are required to make within each jurisdiction.

**Our final decision is to keep our cost pass through approach**

We have used the cost pass through approach to establishing a benchmark for network costs, using the 2023–24 network tariffs approved by the Australian Energy Regulator for each distribution zone (Appendix C). This approach has been supported by stakeholders during our previous Victorian Default Offer reviews.70

Network costs are generally structured in one of two ways:

- a daily supply charge and a flat usage charge (flat network tariffs)
- a daily supply charge and peak usage and off-peak usage charge (two-period time of use network tariffs).71

---

69 Clauses 12(4)(b) of the [pricing order](#).


71 We amended the 2021 Victorian Default Offer price determination in July 2021 to incorporate a two-period time of use tariff.
We also include metering charges for each distribution zone, and a controlled load option for domestic customers where applicable.

Overall, network costs for the residential Victorian Default Offer bill will increase by four per cent for domestic customers and by four per cent for small business customers (averaged across all five distribution zones).

Our final decision continues to use the customer weighted average metering costs in each distribution zone. The metering costs are based on the Australian Energy Regulator approved 2023–24 network tariffs.

**Approved network tariffs for 2023–24**

The approved network tariffs for 2023–24 were not available at the time of making our draft decision. The Australian Energy Regulator approved tariffs for 2023–24 in May 2023. Our final decision incorporates those approved network tariffs for 2023–24.

Network costs are estimated to increase in 2023–24 across most distribution zones compared to the costs included in the 2022–23 Victorian Default Offer tariffs. The main reasons for the increase in network tariffs include:72

- higher than expected Consumer Price Index
- larger than anticipated increase in jurisdictional schemes and transmission use of system charges.

**Stakeholder feedback on our approach to network costs**

We received two submissions on our approach to network costs.73 Alinta Energy and Origin Energy supported us to the continued use of our pass through approach.

**Environmental costs**

- Our final decision is to maintain our current approach for estimating costs for the Small-scale Renewable Energy Scheme, Large-scale Renewable Energy Target, Victorian Energy Upgrades program and the minimum feed-in tariff.

---


73 Alinta Energy, submission to draft decision, April 2023, p. 2; Origin Energy, submission to draft decision, April 2023, p. 4.
• Environmental costs represent about eight per cent of the average domestic Default Offer bill (averaged across the five distribution zones).

• Environmental costs for domestic customers are five per cent lower compared to the amount in our 2022–23 determination. This is mainly driven by a decrease in small-scale renewable energy costs.

• The cost of environmental programs in our final decision is roughly the same as the amount in our draft decision.

In line with the pricing order, we are required to have regard to environmental costs when reviewing and setting the Default Offer. Environmental costs are incurred by Victorian electricity retailers to meet legal obligations imposed by government. As these costs are unavoidable, including them helps the Victorian Default Offer reflect retailers’ efficient costs of selling electricity.

The environmental costs faced by Victorian electricity retailers relate to the following programs:

• Large-scale Renewable Energy Target
• Small-scale Renewable Energy Scheme
• Victorian Energy Upgrades program
• The social cost of carbon applied to the minimum feed-in tariff.

Our final decision amount for environmental costs has decreased from the allowance included in the 2022–23 Victorian Default Offer for domestic and small business customers.

This was driven by a decrease in the small-scale renewable percentage and ‘true ups’ for costs under the Small-scale Renewable Energy Scheme and Large-scale Renewable Energy Target.

Since our draft decision, we have updated our estimates with more recent information.

Our final decision maintains our approach to environmental costs

Our final decision has included benchmarks for environmental costs based on public sources. This is the same approach adopted in previous reviews. The final decision includes a more recent trade-weighted average spot price for Victorian energy efficiency certificates and forward market price for large-scale generation certificates. More recent renewable energy export data and customer numbers for the minimum feed-in tariff have also been used.

The amount included in the cost stacks means the dollar value will be $132 per domestic customer, this is five per cent lower than the amount included in the 2022–23 Victorian Default Offer.

---

74 Clause 12(4)(c) of the pricing order.
Our approach in this final decision to calculate environmental costs as components of the Default Offer is as follows:

- **Large-scale Renewable Energy Target** – the 2023 renewable power percentage multiplied by the financial year 2023–24 forward market price for large-scale generation certificates. A true-up is then added to account for the difference in renewable power percentage used in 2022–23 Victorian Default Offer decision and the actual percentage for 2022–23.\(^{75}\)

- **Small-scale Renewable Energy Scheme** – the mid-point between the 2023 binding and the 2024 non-binding small-scale technology percentage is multiplied by the clearing house price ($40 excluding GST). Then a true-up is added to account for the difference between the binding small-scale technology percentages for 2023, and the non-binding 2023 percentage used in the 2022–23 Victorian Default Offer decision.\(^{76}\)

- **Victorian Energy Upgrades** – 12-month trade-weighted average spot price of Victorian energy efficiency certificates (VEEC) is multiplied by the 2023 greenhouse gas reduction rate.\(^{77}\)

- The above costs are multiplied by the network loss factors.

- The social cost of carbon applied to the minimum feed-in tariff – total renewable exports in the most recent calendar year is multiplied by the social cost of carbon (2.5 cents per kWh for 2023–24).\(^{78}\) The resulting figure is divided by the average number of domestic and small business customers in the same period.

**Stakeholders supported maintaining our approach to estimating these costs**

Overall, submissions to our draft decision on environmental costs supported these being included in the Victorian Default Offer and for our approach to estimating these costs to be maintained.\(^{79}\)

**We kept our approach to the Large-scale Renewable Energy Target costs**

The Large-scale Renewable Energy Target is an Australian Government policy designed to reduce emissions in the electricity sector and encourage additional generation from sustainable and

---

\(^{75}\) The Clean Energy Regulator set the renewable power percentage for 2023 at 18.96 per cent and 18.64 for 2022, the renewable power percentage for 2022–23 is 18.80 per cent, [https://www.cleanenergyregulator.gov.au/RET/Scheme-participants-and-industry/the-renewable-power-percentage](https://www.cleanenergyregulator.gov.au/RET/Scheme-participants-and-industry/the-renewable-power-percentage), accessed 18 May 2023.


\(^{78}\) From 1 January 2022 to 31 December 2022. Renewable export data is provided to us by distribution network service providers. We used renewable export data for financial year 2021–22 for one distribution network service provider due to its lack of updated calendar year renewable export data at the time of making our final decision.

\(^{79}\) Alinta Energy submission to draft decision, April 2023, p. 2; Origin Energy submission to draft decision, April 2023, p. 4.
renewable sources. It creates a financial incentive for the installation of renewable energy power stations.

Under the Large-scale Renewable Energy Target, eligible renewable power stations create largescale generation certificates for every megawatt hour of power they generate. Electricity retailers buy certificates to meet their legally binding renewable energy obligations. They then surrender the certificates to the Clean Energy Regulator based on the renewable power percentage the latter sets each year.

The final decision keeps our approach to calculating the cost of complying with the Large-scale Renewable Energy Target the same as in previous decisions. We consider using publicly available information on future market prices for large-scale generation certificates is a transparent and replicable method to estimating the efficient cost of the Large-scale Renewable Energy Target. 80

To estimate the per megawatt benchmark cost for the Large-scale Renewable Energy target we start with the 2023 renewable power percentage calculated by the Clean Energy Regulator. 81 We then multiply the renewable power percentage by the average future market price for 2023–24 large-scale generation certificates. 82

We then include a true-up to account for the difference between the renewable power percentage used in our previous decision and the most recent information available on the renewable power percentage. 83 We have included a true-up adjustment to reflect the midpoint between 2022 and 2023 as retailers have no control over the renewable power percentage. Our final decision has included more recent average future market prices for large-scale generation certificates for 2023–24, which has increased our estimate by $0.04 per customer compared to our draft decision.

One confidential submission raised concern that our approach to estimating retailers’ cost of complying with the Large-scale Renewable Energy Target may be underestimating retailers’ actual costs. Specifically, it noted that the cost of large-scale generation certificates obtained through power purchase agreements could be higher than the current market price for certificates.


82 We have used the most recent 12-months of average future market prices for 2023–24 large-scale generation certificates.

83 For the 2022–23 Victorian Default Offer we used the renewable power percentage for 2022, set by the Clean Energy Regulator at 18.64 per cent. The Clean Energy Regulator has set the renewable power percentage for 2023 at 18.96 per cent, the midpoint is 18.80 per cent which results in a true-up of $0.07 per customer per year. Clean Energy Regulator https://www.cleanenergyregulator.gov.au/RET/Scheme-participants-and-industry/the-renewable-power-percentage#Calculating-the-renewable-power-percentage, accessed 18 May 2023.
We have considered this view in previous decisions.\textsuperscript{84} We are still of the view that the market price for large-scale generation certificates is a better measure of efficient costs than an alternative weighted average approach. This is still supported by retailer cost data. Again, we performed analysis of retailers’ actual wholesale and large-scale generation certificate costs, as reported to us for the most recently completed financial year (2021–22). We found that the wholesale electricity cost and large-scale generation certificate cost benchmarks in the 2021 and 1 January 2022 Victorian Default Offers were still within the range of costs reported to us by electricity retailers.

\textbf{We kept our approach to the Small-scale Renewable Energy Scheme costs}

The Small-scale Renewable Energy Scheme places an obligation on electricity retailers to purchase small-scale technology certificates.

Each year the Clean Energy Regulator sets a binding small-scale technology percentage for the current year, and non-binding small-scale technology percentages for future years. This sets the amount of small-scale technology certificates retailers must buy. Energy retailers must then surrender certificates, based on the small-scale technology percentage, to meet their obligation for that year.

Our final decision is to use the same approach to calculating the cost of the small-scale renewable energy scheme as was used in previous Victorian Default Offer decisions.

We use the mid-point between the 2023 binding and 2024 non-binding small-scale technology percentages, multiplied by the STC clearing house price ($40),\textsuperscript{85} Then a true-up is applied for the difference between the percentages used in the 2022–23 Victorian Default Offer decision and the actual small-scale technology percentage for 2023.

The 2023 small-scale technology binding percentage is 16.29 per cent, and the 2024 small-scale technology non-binding percentage is 17.99 per cent, giving a mid-point of 17.14 per cent.\textsuperscript{86}

In our final decision for the 2022–23 Victorian Default Offer, we used the midpoint of the binding percentage for 2022 and the non-binding percentage for 2023. Since we made our final decision the Clean Energy Regulator has set the binding percentage for 2023, which is six percentage points lower than the non-binding percentage for the same year.


\textsuperscript{85} Small-scale renewable energy system owners and registered agents have the option to sell small-scale technology certificates (STCs) through the open market for an uncapped price, or through the STC clearing house at a fixed price of $40 (ex GST). Clean Energy Regulator, \url{https://www.cleanenergyregulator.gov.au/OSR/REC/STC-clearing-house}, accessed 18 May 2023.

This has resulted in a true-up in this final decision reducing Small-scale Renewable Energy Scheme costs for 2023–24. For more information on how we have calculated this cost see Appendix D.

The cost of complying with the Small-scale Renewable Energy Scheme for 2023–24 is $5.37 per megawatt hour. This is unchanged from our draft decision given the small-scale technology percentages and small-scale technology certificate price were known for 2023–24.

**We kept our approach to the Victorian Energy Upgrades costs**

The Victorian Energy Upgrades program is Australia's largest energy efficiency program and a key mechanism in the state’s climate change framework.

The program aims to deliver greenhouse gas emission reductions, while helping Victorians reduce their energy costs. Under the Victorian Energy Upgrades program, accredited persons carry out upgrade activities by installing energy-efficient products to generate Victorian energy efficiency certificates. Energy retailers must acquire and surrender these certificates to meet their obligations set in Victorian legislation.

Our final decision is to keep our approach to calculating the cost of the Victorian Energy Upgrades program for electricity retailers. We use the most recent 12-months’ trade-weighted average spot price for Victorian energy efficiency certificates multiplied by the 2023 greenhouse gas reduction rate for electricity.87

Using an average certificate price of $68.56 excluding GST, multiplied by the 2023 greenhouse gas reduction rate of 0.16307 results in a Victorian Energy Upgrades costs of $11.18 per megawatt hour. This is a decrease of 68 cents from the Victorian Energy Upgrades cost in the 2022–23 Victorian Default Offer and a decrease of seven cents from $11.25 per megawatt hour in our draft decision.

**We kept our approach to the minimum feed-in tariff costs**

The minimum feed-in tariff is the rate that energy retailers must pay solar customers for electricity exported to the grid. The feed-in tariff includes the social cost of carbon which is the value of avoided carbon emissions when energy is sourced from small-scale renewable generators. The Victorian Government set the social cost of carbon at 2.5 cents per kWh.88

---


When small-scale renewable generators export energy into the grid, retailers must pay them the social cost of carbon on top of the wholesale price of electricity. This is the cost of the minimum feed-in tariff that we account for in the Victorian Default Offer.

Our final decision is to maintain our current approach to calculating the cost associated with the minimum feed-in tariff. To estimate the cost to retailers, we took the total renewable exports for the 2022 calendar year and multiplied this by the social cost of carbon. The resulting figure was then divided by the total average number of domestic and small business customers over the same period. Our final decision has increased by 15 cents per customer due to an increase in total renewable exports compared to our draft decision.

**Retail operating costs**

- Our final decision is to set a retail operating cost benchmark based on the customer weighted average of retailers’ actual retail operating costs. This is a change from the approach used in our final decision on the 2022–23 Victorian Default Offer.
- Retail operating costs represent about 7.5 per cent of costs in the average flat tariff domestic bill (averaged across the five distribution zones).
- The retail operating costs in our final decision are about 10 per cent lower than the amount included in our 2022–23 Victorian Default Offer determination.
- These costs are about two per cent lower than the amount included in our draft decision.

Retail operating costs reflect a range of expenses incurred by an electricity retailer, including:

- billing and revenue collection systems
- information technology systems
- call centre costs
- corporate overheads
- energy trading costs
- provision for bad and doubtful debts
- regulatory compliance costs.

We must have regard to retail operating costs in basing the Victorian Default Offer tariffs on the efficient costs of the sale of electricity by a retailer.90

---

89 Renewable export data is provided to us by distribution network service providers. We used renewable export data for financial year 2021–22 for one distribution network service provider due to its lack of updated calendar year renewable export data at the time of making our final decision.

90 Clause 12(4)(d) of the [pricing order](#).
Our final decision is to maintain the approach outlined in our draft decision. We have set the retail operating cost benchmark based on retailers' actual costs. We have used data gathered from retailers for the 2021–22 financial year to determine the benchmark. This is the most up-to-date cost information available. It accounts for changes in costs and productivity improvements.

As noted in our draft decision, we have based our benchmark on the customer weighted average of retailers' actual costs. We consider that using this benchmark would best meet the objectives of the Victorian Default Offer and the Essential Services Commission Act.

The customer weighted average for retail operating costs per customer for retailers in 2021–22 was $125.56 excluding GST. Consistent with the approach taken in previous reviews, we adjusted the benchmark for the change in the consumer price index so it is constant in real terms. Adjusting for inflation results in a retail operating benchmark of $132.03 excluding GST. This is lower than the benchmark amount of $146.35 included in the 2022–23 Victoria Default Offer. It is also lower than the benchmark amount used in our draft decision of $134.54.

In future reviews we will continue to collect cost data from retailers that we will use to update the retail operating cost benchmark. As retailers find productivity gains or face new costs over time, these gains or new costs will be reflected in the benchmark.

**The benchmark approach is based on efficient costs**

As outlined in our draft decision, our approach to calculating a customer-weighted average benchmark for retail operating costs meets the principles outlined in our consultation paper. As the benchmark is based on cost data provided by Victorian retailers, we consider our benchmark provides retailers with a reasonable opportunity to recover efficient costs.

While individual retailers may have costs which differ from our benchmark, we do not set the benchmark for an individual retailer, or industry segments. Instead, we consider the costs faced by the overall industry when setting this benchmark.

**Stakeholder feedback on the retail operating cost benchmark**

We received 13 submissions on our approach to the retail operating cost benchmark. Consumer advocates and consumers were against any increases in the retail operating costs.\(^91\) Retailers had mixed views on our approach.\(^92\)

---

\(^91\) Consumer Action Law Centre submission to draft decision, April 2023, pp. 2-3; Victorian Council of Social Service submission to draft decision, April 2023, p. 4; Anonymous 2 submission to draft decision, April 2023, p. 1; Aaron McGlade submission to draft decision, April 2023, p. 1.

\(^92\) AGL submission to draft decision, April 2023, p. 2; Australian Energy Council submission to draft decision, April 2023, p. 3; Origin submission to draft decision, April 2023, p. 4; Powershop submission to draft decision, April 2023, p. 2; Red and Lumo submission to draft decision, April 2023, p. 3; Simply Energy submission to draft decision, April 2023, pp. 1-3;
Feedback from retailers was varied

During previous reviews, we have used a benchmark set by the Independent Competition and Regulatory Commission (ICRC) for retail electricity prices in the Australian Capital Territory.\(^{93}\) However, we investigated different approaches to setting the retail operating cost benchmark over the course of review. In our final decision, we have maintained the benchmark approach established in our draft decision, to use the customer weighted average of the retailers’ actual costs which we have continued in our final decision. Some retailers were in favour of our change in approach while others were opposed to it. Origin supported our approach and noted that our data collection process is consistent with costs reported to the Australian Competition and Consumer Commission.\(^{94}\) AGL, while supporting our approach, stated that using actual costs would create a lag in recovery of efficient costs.\(^{95}\) The Australian Energy Council was supportive of our approach while noting factors for consideration in future determinations.\(^{96}\) Two retailers recommended that the previous benchmark should be maintained and adjusted for inflation and another retailer noted their concerns about the change in approach.\(^{97}\)

We adjusted our benchmark for inflation

The current retail operating cost benchmark has decreased compared to our previous approach. Some retailers stated this does not reflect the current high inflation environment.\(^{98}\) EnergyAustralia’s submission noted:

> This lower provision in the VDO is inconsistent with increasing costs given the general rise in market risk occurring in 2022 and the state of retail competition reflecting a more volatile cost environment.\(^{99}\)

---

\(^{93}\) Independent Competition and Regulatory Commission, Standing offer prices for the supply of electricity to small customers from 1 July 2017, Final report, June 2017.

\(^{94}\) Origin submission to draft decision, April 2023, p. 4

\(^{95}\) Australian Energy Council submission to draft decision, April 2023, p. 3

\(^{96}\) Powershop submission to draft decision, April 2023, p. 2; Red and Lumo submission to draft decision, April 2023, p. 3; Simply Energy submission to draft decision, April 2023, pp. 1-3.

\(^{97}\) EnergyAustralia submission to draft decision, April 2023, p. 2; Energy Locals Pty Ltd submission to draft decision, April 2023, pp. 1-2; Momentum Energy submission to draft decision, April 2023, p. 2.

\(^{98}\) EnergyLocals Pty Ltd submission to draft decision, April 2023, p. 2.

\(^{99}\) EnergyAustralia submission to draft decision, April 2023, p. 2.
Victorian Council of Social Service voiced concerns about using the consumer price index to adjust retail operating costs. It noted that the main components of consumer price index growth do not substantially contribute to retailers’ actual efficient costs.\(^{100}\)

We acknowledge the limitations of the consumer price index. The costs that contribute to the consumer price index are different to the costs that retailers face. However, using a benchmark that is based on retailers’ actual costs will reduce the impact of the differences between general inflation and the cost pressures retailers face, especially over the long term.

We adjusted our benchmark for inflation for the three quarters from June 2022 to March 2023 in our final decision.

**The customer weighted average reflects the efficient costs of the sale of electricity by a retailer**

Retailers noted that using customer weighted average gives larger retailers greater weight in determining the benchmark.\(^{101}\) EnergyAustralia consider this would have detrimental effects on smaller retailers who have fewer customers and higher costs.\(^{102}\) The Australian Energy Council suggested monitoring the gap between the current retail operating cost benchmark and the retail operating costs for tier 2 retailers and start-up retailers.\(^{103}\) Simply Energy suggested that the median or mean measurement of retailers’ actual costs would be more appropriate than the weighted average.\(^{104}\) Consumer Action Law Centre recommended that costs toward the lower end of any range be used to determine the benchmark. The centre also recommended exploring alternative approaches for future reviews.\(^{105}\)

We have used the costs of the broader Victorian retail electricity industry when setting the benchmark. Individual retailer’s costs will vary due to different business models and market shares. Setting an industry wide benchmark provides incentives for retailers to reduce costs below the benchmark and improve their competitiveness, benefitting consumers.

EnergyAustralia also recommended that we compare the cost stack from past Victorian Default Offer decisions against retailers’ reported cost data for the same period.\(^{106}\) In preparing our

---

\(^{100}\) Victorian Council of Social Service submission to draft decision, April 2023, p. 4

\(^{101}\) Simply Energy submission to draft decision, April 2023, pp. 1-3; Red and Lumo submission to draft decision, April 2023, p. 3; EnergyAustralia submission to draft decision, April 2023, pp. 2-4; Energy Locals submission to draft decision, April 2023, p. 2; Australian Energy Council submission to draft decision, April 2023, p. 3.

\(^{102}\) EnergyAustralia submission to draft decision, April 2023, pp. 2-4

\(^{103}\) Australian Energy Council submission to draft decision, April 2023, p. 3

\(^{104}\) Simply Energy submission to draft decision, April 2023, pp. 1-3

\(^{105}\) Consumer Action Law Centre submission to draft decision, April 2023, pp. 2-3

\(^{106}\) EnergyAustralia submission to draft decision, April 2023, pp. 2-4
decision we compared retailers’ actual costs with the Victorian Default Offer benchmark. In every year for which we have data the benchmark retail operating costs in the Victorian Default Offer was higher than the weighted average of retailers’ actual costs.

**Our benchmark accounts for retailers’ bad debt costs**

Retailers submitted that higher bad debt provisions will be a material cost driver across the year.107 Three stakeholders noted that bad debts are linked to retailers’ income.108 They expected bad debt provisions to increase due to rising cost-of-living pressures.

The Australian Energy Council recommended monitoring the size of bad debts compared to the remaining retail operating costs and suggested applying bad debts as a percentage of income. Simply Energy stated increases in bad debt provisions would not flow through until two years after the period. Powershop stated that the bad debt information of publicly listed retailers does not reflect high bad debt levels of smaller retailers given the scale of the publicly listed retailers and their ability to smooth debt over a larger group of customers.

As we noted in our draft decision, any changes in the costs of bad and doubtful debt expenses in the future will be accounted for in retailers’ cost data and thus be included in our benchmark. We have regard to the publicly listed retailer information and use it as a cross-check against our data. However, when setting our benchmark, we use actual bad debt costs of Victorian retailers.

Although our benchmark reflects retailers’ average bad debt costs in the most recent period, the benchmark will differ to the costs faced by individual retailers. Some retailers will have higher costs and others will have lower costs.

**Stakeholders recommended applying the change in approach over several periods**

Momentum Energy recommended scaling the change in approach from our previous benchmark to the current benchmark over several years to reduce the sudden impact of a reduction in the retail operating cost allowance.109 Similarly, the Australian Energy Council, while supporting the use of retailers’ actual costs, suggested applying the change in approach in a glidepath manner.110

---

107 Powershop submission to draft decision, April 2023, p. 2; Australian Energy Council submission to draft decision, April 2023, p. 3; Simply Energy submission to draft decision, April 2023, pp. 1-3; Energy Locals Pty Ltd submission to draft decision, April 2023, p. 2.


109 Momentum Energy submission to draft decision, April 2023, p. 2

110 Australian Energy Council submission to draft decision, April 2023, p. 3
The information before us suggests that using the customer weighted average of retailers’ actual retail operating costs better reflects the efficient costs of the sale of electricity by a retailer than our previous approach. Phasing in the change in approach over several regulatory periods would mean that we would be adopting a benchmark that is less reflective of efficient costs. This would not be in the long term interests of Victorian consumers.

**Impact of Consumer Data Right and other regulatory obligations**

The Consumer Data Right is a reform enacted by the Australian Government designed to allow consumers greater access and control over their data, to improve consumers’ ability to compare and switch between products and services.\(^{111}\) This reform applied to tier 1 electricity retailers from November 2022 and will apply to large electricity retailers with over 10,000 customers from November 2023.

Momentum Energy and Powershop raised concerns regarding the impact of costs related to the Consumer Data Right.\(^{112}\) Momentum submitted that any costs associated with the Consumer Data Right should be recovered through an increase in the retail operating costs. Powershop recommended that the commission should consider retailers’ costs associated with the implementation of the Consumer Data Right. The Australian Energy Council also recommended including a cost allowance for Consumer Data Right implementation.\(^{113}\)

Costs from regulatory obligations such as the Consumer Data Right are reflected in the cost data used to set the benchmark. Our benchmark includes cost data for financial year 2021–22 from retailers who were required to comply with the Consumer Data Right by November 2022.

Depreciation expenses associated with capital costs, such as the costs of implementing the Consumer Data Right are recovered through the retail operating margin. Our retail operating margin is an earnings before interest, taxes, depreciation and amortization margin, so it covers the cost of depreciation.

**Acquisition costs and retail operating costs are treated differently in the pricing order**

EnergyAustralia noted the inconsistency in using retailers’ actual cost data to determine the retail operating cost benchmark while not using that same data to determine the acquisition costs.\(^{114}\)

---

111 Competition and Consumer (Consumer Data Right) Amendment Rules (No. 2), 2021 (Cwth).
112 Powershop submission to draft decision, April 2023, pp. 2-3; Momentum Energy submission to draft decision, April 2023, p. 3.
113 Australian Energy Council submission to draft decision, April 2023, p. 3.
114 EnergyAustralia submission to draft decision, April 2023, pp. 2-4.
The pricing order treats retail operating costs differently to customer acquisition and retention costs. Customer acquisition costs are required to be ‘modest’.\textsuperscript{115}

**Customer acquisition and retention costs**

- Our final decision is to keep our approach to estimating customer acquisition and retention costs (acquisition costs). This leads to a benchmark of $43.89 for the 2023-24 Victorian Default Offer.
- Acquisition costs represent about 2.5 per cent of costs for the average domestic bill (averaged across the five distribution zones).
- Due to inflation our decision means acquisition costs in the cost stack will slightly increase compared to those in the 2022–23 Victorian Default Offer.
- Acquisition costs will be higher than the allowance included in our draft decision by one per cent.

The pricing order requires us to include modest costs for customer acquisition and retention costs (acquisition costs) in making our Victorian Default Offer determinations. These costs include:

- the cost of acquisition channels (such as third-party comparison websites or telemarketing)
- the cost of retention teams
- marketing costs targeted at driving customer acquisition or retention.

**Our final decision is to maintain our approach to acquisition costs**

For our final decision, we have set a modest benchmark for acquisition costs of $44 excluding GST. This is based on a 2013–14 benchmark of $38 based on cost levels from the Australian Competition and Consumer Commission’s retail and electricity pricing inquiry, adjusted for inflation. This approach is consistent with all past determinations for the Victorian Default Offer. As we update this benchmark for inflation, we maintain the value of the benchmark in real terms over time.

We consider that our approach continues to reflect modest customer acquisition and retention costs. This is supported by a recent review of the Victorian Default Offer pricing order. The review found our interpretation of the term ‘modest’ appears to be operating satisfactorily to balance stakeholder interests.\textsuperscript{116}

\textsuperscript{115} Clause 12(4)(d) of the pricing order.

\textsuperscript{116} Department of Environment, Land, Water, and Planning 2022, Review of the Victorian Default Offer Order in Council, Final decision, October 2022, p. 26-27
Our benchmark still sits within the range of actual acquisition costs reported to us by retailers for 2021–22, but the customer weighted average acquisition costs ($54) are still higher than our acquisition cost benchmark.

We chose the 2013–14 benchmark of $38 in 2019 as it was the most robust data available for modest acquisition costs. Acquisition costs increased significantly between 2013–14 and 2019.

Some expenditure on acquisition costs is efficient. It serves to make customers aware of the offers available to them. However, beyond a point it ceases to provide any customer benefit.

Retailers have an incentive to grow their market share by spending more and more on acquisition costs. Retailers that grow their market share in this manner benefit from higher acquisition costs, but the benefits provided to customers are unclear. Some customers that receive special acquisition deals may benefit, but overall customers are likely to be worse off as total costs increase.

We are of the view that the acquisition cost benchmark from 2013–14 is likely to include fewer of the unbenefficial acquisition costs than more recent acquisition cost amounts.

**We have considered stakeholder submissions on acquisition costs**

We received two submissions on our approach to acquisition costs.

Consumer Action Law Centre supported retaining our current benchmark for acquisition costs as it represents ‘modest’ expenditure on acquisition costs.\(^\text{117}\) Alinta Energy supported our approach to acquisition costs and noted that it supports retail market competition.\(^\text{118}\)

**Other costs**

- Our final decision is to set a benchmark for other regulatory costs that are based on the latest available market information. These costs include:
  - market intervention costs
  - Australian Market Operator fees
  - ancillary fees
  - Reliability and Emergency Reserve Trader costs
  - Essential Services Commission licence fees.

---

\(^{117}\) Consumer Action Law Centre submission to draft decision, April 2023, p. 3

\(^{118}\) Alinta Energy submission to draft decision, April 2023, p. 2
• Other costs make up around slightly less than one per cent of total costs for a representative customer (averaged across the five distribution zones).

• Our final decision would increase the amount included for these costs compared to those in the 2022–23 Victorian Default Offer by $8. This is primarily due to the inclusion of market intervention costs.

• Our final decision has increased by $4 compared to our draft decision. This is mainly driven by an increase in Australian Energy Market Operator fees for 2023–24.

This section outlines regulatory costs which are incurred by electricity retailers that are specific and discrete to their obligations and requirements to operate as an electricity retailer. These regulatory costs are generally minor, relative to the total cost stack (less than one per cent) but are a relevant factor in our estimation of the efficient cost of the sale of electricity by a retailer.\textsuperscript{119}

Our final decision is to pass through the regulatory costs that electricity retailers incur. These costs include:

• market intervention costs
• Australian Energy Market Operator fees
• ancillary fees
• Reliability and Emergency Reserve Trader costs
• Essential Services Commission licence fees.

Since our draft decision, we have updated our estimates with more recent information.

**Market intervention costs**

Wholesale electricity prices increased significantly in early 2022. Following this, the Australian Energy Market Operator took temporary steps to stabilise the market in June 2022. These included introducing an Administered Price Cap on wholesale electricity prices and suspending the wholesale market and directing generators to supply as required.\textsuperscript{120} Generators incurred costs because of these actions.

Electricity generators who were financially disadvantaged during these events can make compensation claims. If the claims are successful, the value of the costs successfully claimed are

\textsuperscript{119} Clause 12(4)(f) of the \textit{pricing order}.

\textsuperscript{120} For more information on the June 2022 market event see: \textit{AEMO Guide to Market Suspension in the NEM}.
then passed on to electricity retailers. The process for these claims is set out in the National Energy Rules.\textsuperscript{121}

The total cost that electricity retailers will face because of the Australian Energy Market Operator’s intervention are made up of:

- directions compensation
- suspension pricing compensation
- administered pricing compensation
- Reliability and Emergency Reserve Trader payments.

**Directions and suspension pricing compensation**

Directions compensation and suspension pricing compensation are administered by the Australian Energy Market Operator. These forms of compensation allow generators to recover costs above the wholesale electricity price, at the time they were directed to supply (directions compensation) or during the period of market suspension (suspension pricing compensation).

The Australian Energy Market Operator assessed directions and suspension pricing compensation for electricity generators in two tranches (provisional and revision amounts) across the last half of 2022. On 6 January 2023, the Australian Energy Market Operator determined $113.1 million for directions and suspension pricing compensation to be recovered from the national energy market, with $28.9 million allocated to Victoria.\textsuperscript{122}

**Administered pricing compensation**

Administered pricing compensation is administered by the Australian Energy Market Commission. This allows generators to recover their costs when they are higher than the revenue they receive under the Administered Price Cap. This form of compensation can be claimed for both direct costs and opportunity costs.

Electricity generators can submit a claim for compensation relating to the administered pricing to the Australian Energy Market Commission for assessment and decision. The Australian Energy Market Commission has decided on six claims as of April 2023 including three since we released our draft decision.\textsuperscript{123}

---

\textsuperscript{121} For more information see: AEMC National Electricity Rules - Rule 3.14 Administered Price Cap and Market Suspension, accessed 18 May 2023.

\textsuperscript{122} AEMO compensation update shows a regional summary of $28 million allocated to Victoria, we confirmed with AEMO that some additional fees were allocated to account for independent experts and other services directions being apportioned. Australian Energy Market Operator June 2022 NEM Events: Compensation Update (6 January 2023), accessed 18 May 2023.

\textsuperscript{123} For more information see: AEMC Administered pricing compensation claims relating to June 2022 event, accessed 18 May 2023.
The compensation amounts finally determined in relation to these claims were referred to the Australian Energy Market Operator to be recovered from the national energy market according to the demand of relevant electricity retailers for energy at the time of the event. Of the six finalised claims the Australian Energy Market Operator has allocated $0 to Victoria, this includes three claims determined since our draft decision and means the amounts included in our draft decision are unchanged.\(^{124}\)

**Reliability and Emergency Reserve Trader payments**

The Reliability and Emergency Reserve Trader scheme is a mechanism that the Australian Energy Market Operator can use to maintain power system reliability. During the June 2022 event, this scheme was not activated in Victoria, so there will be no costs to pass through from this event.\(^{125}\)

**Our final decision is to include known market intervention costs**

Our final decision is to include the costs known to be incurred by energy retailers because of market intervention events in the 2023–24 Victorian Default Offer. These costs are unavoidable for energy retailers and passing through these costs will allow retailers to recover their efficient costs. This approach is consistent with the requirement in the pricing order to base Victorian Default Offer prices on efficient costs.\(^{126}\)

Our final decision is for market intervention costs to be included as a variable cost (not a fixed cost) and to reflect compensation amounts known as of 28 April 2023.\(^{127}\) Any market intervention event that has occurred but the impacts have not been finalised by the market operator, or may occur during the regulatory period, will be considered in the next Victorian Default Offer review. Our final decision calculates the determined and allocated market intervention costs as of 28 April 2023 by dividing the market intervention costs by the 2023–24 forecast electricity customers’ usage.\(^{128}\)

The known market intervention costs included in our final decision for the 2023–24 Default Offer are **$0.80 per megawatt hour**.\(^{129}\)

---


\(^{125}\) Reserves were contracted for Victoria on Friday 17 June with a duration between 3 to 5 hours but not activated in Victoria. [Australian Energy Market Operator, Reliability and Emergency Reserve (RERT) End of Financial Year 2021-22 Report](https://www.energymarket.gov.au), August 2022 pp. 4-6.

\(^{126}\) Clause 12(3) of the pricing order.

\(^{127}\) 28 April 2023 was the latest possible date to finalise inputs for our final decision modelling.


\(^{129}\) Final figures confirmed by the Australian Energy Marker Operator to the commission via email on 14 April 2023.
Retailers were concerned about the potential costs yet to be determined

In response to our draft decision, we received five submissions from energy retailers who supported the inclusion of costs resulting from market intervention in the Victorian Default Offer.\textsuperscript{130}

However, some energy retailers were concerned that compensation claims yet to be determined may expose them to additional costs without a benchmark for capital to fund these costs.\textsuperscript{131} One energy retailer suggested a proxy amount should be estimated for compensation claims and included in the Victorian Default Offer.\textsuperscript{132}

Administered pricing compensation claims that are yet to be determined by the Australian Energy Market Commission and allocated to the national energy market are not included in this decision. Due to the lack of public information on the timing of claims that are yet to be determined by the Australian Energy Market Commission we do not consider there is a reliable approach to estimating the remaining compensation claims. We also note the determinations on six claims for compensation as of April 2023 have resulted $0 being allocated to Victoria.\textsuperscript{133}

We will not include a specific variation mechanism for market intervention costs

In response to our draft decision, we received one submission from an energy retailer who supported our variation mechanism as set out in clause 6 of the 2022–23 Victorian Default Offer price determination remaining unchanged.\textsuperscript{134} This submission also supported a variation to the 2023–24 Victorian Default Offer determination only if material. Another energy retailer considered the cost per customer of known market intervention costs is relatively low and residual costs may not justify a variation to the price determination.\textsuperscript{135}

Our final decision is to retain our variation of price determination mechanism specified in clause 6 of the current 2022–23 Victorian Default Offer price determination. This has been included in our 2023–24 Victorian Default Offer price determination.

\begin{footnotesize}
\begin{enumerate}
\item Simply Energy submission to draft decision, April 2023, p. 3, EnergyAustralia submission to draft decision, April 2023, p. 4, Alinta Energy submission to draft decision, April 2023, p. 1-2, Energy Locals submission to draft decision, April 2023, p. 1, AGL submission to draft decision, April 2023, p. 2.
\item Momentum Energy submission to draft decision, April 2023, p. 2, Red Energy and Lumo Energy submission to draft decision, April 2023, p. 2, Alinta Energy submission to draft decision, April 2023, p. 2, Energy Locals submission to draft decision, April 2023, p. 2, Origin Energy submission to draft decision, April 2023, p. 3.
\item Alinta Energy submission to draft decision, April 2023, p. 2.
\item For more information on Administered Pricing compensation claims see Australian Energy Market Commission decisions, accessed 18 May 2023.
\item Powershop submission to draft decision, April 2023, p. 2.
\item Simply Energy submission to draft decision, April 2023, p. 3.
\end{enumerate}
\end{footnotesize}
Australian Energy Market Operator fees

Fees are charged to electricity retailers by the Australian Energy Market Operator (market operator) to recover the costs of market operation. We include a range of charges and fees that the market operator allocates to market participants (electricity retailers). These include:

- general National Energy Market fees
- National Transmission Planner fees
- Distributed Energy Resources Integration Program costs
- IT and 5MS/GC compliance costs
- Energy Consumers Australia fees
- Full Retail Contestability operations fees.

We have based our estimate of Australian Energy Market Operator fees in our final decision on its draft 2023–24 budget fees and charges provided to us by the operator.136

The market operator’s fee structure was reviewed and determined in 2021 resulting in a change to the allocation of fees between market participants and a rebalancing of charges from 1 July 2023.137

Previously market customers (energy retailers) faced a usage charge. From 1 July 2023, half of the fees and costs will be collected through a usage charge and the other half through a fixed charge. This tariff rebalancing results in an increase in Australian Energy Market Operator fees in our final decision for domestic customers.

The total cost recoverable for the market operators’ fees for the average domestic customer in our final decision for 2023–24 is $9.98. This is an increase of $3.87 from the $6.11 in our draft decision driven by the market operator’s tariff rebalancing.

Ancillary fees

Ancillary services are used by the market operator to manage the power system safely, securely, and reliably, for frequency, voltage, and system restart processes. The market operator provides these ancillary services separately for each market that they operate. Unlike other charges, the

---


market operator’s ancillary service fees differ across these different markets, and so are not included in the Australian Energy Market Operator fees.

The relevant charges depend on the amount of service required at any particular time, which means the costs will vary from period to period. To estimate Victorian ancillary charges, we used an average of the past 52 weeks (ending 16 April 2023) of ancillary service payments in Victoria. This results in an average ancillary service payment of $0.48 per megawatt hour in our final decision for the 2023-24 Victorian Default Offer. This is an increase of 13 cents per megawatt hour from the 2022–23 Victorian Default Offer determination and an increase of six cents per megawatt hour compared to $0.42 per megawatt hour in our draft decision.

**Essential Services Commission licence fees**

Electricity retailers are charged an annual licence fee by the Essential Services Commission to sell electricity to Victorian consumers. Licence fees are based on the costs we incur in performing our regulatory functions. The specific fee for each retailer is contingent on the number of customers served by that retailer.

We used a market wide total of all retailer licence fees for 2022–23 divided by the total number of customers for the same period in estimating the cost of a licence fee per customer for the 2023–24 Victorian Default Offer. The latest approved licence fees are for 2022–23. Adjusting this data for inflation results in a benchmark of $2.26 per customer per year for our 2023-24 Victorian Default Offer final decision. This is an increase of $0.03 per customer from $2.23 from our draft decision due to applying a more recent inflation measure.

**Retail operating margin**

- Our final decision is to lower the retail operating margin to 5.3 per cent.
- The retail operating margin represents 5.3 per cent of costs for the representative user.
- Our final decision means that the dollar value of the retail operating margin in the domestic cost stack will increase by 17 per cent ($12 on average across Victoria’s five distribution zones) relative to the amount in the 2022–23 Victorian Default Offer. This is 11 per cent ($10) lower than the amount in our draft decision for the 2023–24 Victorian Default Offer.
- For this review we have continued to use a regulatory benchmarking approach to set the retail margin benchmark. As part of our next review of the Victorian Default Offer, we will consult with stakeholders on potential alternatives for assessing the retail margin.
The pricing order requires us to have regard to the retail operating margin when making a Victorian Default Offer price determination.\(^\text{138}\)

The retail operating margin is expressed as a percentage of the cost stack.\(^\text{139}\) The retail operating margin represents the operating profit margin required to compensate investors for the capital they provide retailers. It covers a number of things including:

- systematic risk (non-diversifiable)
- tax
- depreciation and amortisation.

The pricing order notes that risks accounted for in other components of the cost stack (such as wholesale electricity market risk) must not be included in the retail operating margin.\(^\text{140}\) We are also not required to base retail operating margins on actual retailer operating margins.\(^\text{141}\)

**We have reduced the retail operating margin to 5.3 per cent**

For the 2023–24 Victorian Default Offer, we have revised our benchmarking approach and reduced the retail operating margin to 5.3 per cent. Following stakeholder submissions we have reconsidered the available evidence and concluded that the retail operating margin should decrease. In particular:

- since 2020, most retailers have offered market offers below, and sometimes well below, the Victorian Default Offer
- retail margins set by other regulators have decreased
- additional retailers have sought to enter the market
- 5.3 per cent is within the range of retail margins produced by the expected returns approach
- on average, retailers’ reported retail margins have decreased

Apart from the Australian Energy Regulator, other regulators have set margins between 3.9 and 5.3 per cent. Reducing the margin to 5.3 per cent brings our benchmark closer to the margins adopted by most other Australian regulators. This is also still within the range of margins produced by the expected returns approach.\(^\text{142}\)

---

138 Clause 12(4)(e) of the pricing order.
139 The term margin is used as an estimate of profit divided by sales. Holding the percentage earnings before interest, taxes, depreciation and amortization margin constant means that if energy, network and operating costs rise over time, the dollar margin will also rise, reflecting an increase in the required capital in dollar terms.
140 Clause 12(7) of the pricing order.
141 Clause 12(9) of the pricing order.
142 Frontier Economics, Retail costs and margin, a report for the Essential Services Commission, April 2019, p. 29.
While current evidence suggests that the margin should be lowered, we accept that there is some circularity if regulators continue to use regulatory benchmarks, from other regulators, to set margins. As part of our next review, we will consult with stakeholders on potential alternative approaches we could consider to set the retail margin.

**Market offer prices for electricity tend to be below Victorian Default Offer prices**

Using Victorian Energy Compare data, we have been able to compare market offer prices and VDO prices between 2019 and 2023. In general, since 2020, more than three quarters of market offers have been below the Victorian Default Offer. This can be seen in figure 7 below. This is also supported by data on prices actually paid by consumers.¹⁴³ In general, the prices consumers have paid retailers have been below the Victorian Default Offer prices. This suggests that overall, a margin of 5.7 per cent may be too high.

**Other regulators’ margins have decreased**

When we first recommended the margin be 5.7 per cent in 2019, all other regulators in Australia used margins of 5.7 per cent.¹⁴⁴ All of the regulators setting retail electricity prices at that time have since lowered them. All else equal, this would suggest that margins should be lower.

**Table 3: Comparison of regulated retail margins across time¹⁴⁵**

<table>
<thead>
<tr>
<th>Regulator</th>
<th>Last decision on retail margin in 2019</th>
<th>Margin for 2022-23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Energy Regulator a</td>
<td>N/A</td>
<td>6%-25%</td>
</tr>
<tr>
<td>Independent Competition and Regulatory Commission</td>
<td>5.7%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Office of the Tasmanian Economic Regulator</td>
<td>5.7%</td>
<td>5.25%</td>
</tr>
<tr>
<td>Queensland Competition Authority b</td>
<td>5.7%</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

a: Under part 3 of the *Competition and Consumer (Industry Code—Electricity Retail) Regulations 2019* the Australian Energy Regulator must determine a reasonable per-customer annual price for supplying electricity. We are required to base Victorian Default Offer tariffs on the efficient costs of the sale of electricity by a retailer.

b: The Queensland Competition Authority no longer sets a separate retail margin. We have calculated an implied margin using retail costs for the Energex from the Australian Energy Regulator’s Default Market Offer 2023-24 draft decision.


Figure 7 Comparison of Victorian Default Offer and market offer prices for each quarter between 2019-20 and 2022-23

Source: Victorian Energy Compare Data and ESC Analysis
Higher competition decreases retail margins

As markets become more competitive, in general profit margins should decrease. As the number of competitors in the market increases, consumers generally have more options to choose from, and firms face stronger pressures to lower their prices or offer better value to remain competitive. This increased competition leads to lower average profit margins for all firms in the market.

This is supported by some empirical evidence from the United States. Brennan and Palmer found that the introduction of retail competition led to lower profit margins for incumbent utilities.\textsuperscript{146} Similarly, Joskow found that the introduction of retail competition in the electricity market led to increased price competition and lower profit margins for generators.\textsuperscript{147}

Over the last decade, the number of retailers in the Victorian electricity industry has increased. Table 4 below shows that the number of active retailers since 2019 has increased and the market share of the largest retailers in the residential and small business segments has decreased.

Table 4: Number of active electricity market retailers and market share 2019 to 2022

<table>
<thead>
<tr>
<th></th>
<th>30-June-2019</th>
<th>30-June-2020</th>
<th>30-June-2021</th>
<th>30-June-2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of active retailers\textsuperscript{148}</td>
<td>28</td>
<td>28</td>
<td>30</td>
<td>34\textsuperscript{149a}</td>
</tr>
<tr>
<td>Domestic customers market share\textsuperscript{150}</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large retailers</td>
<td>84%</td>
<td>78%</td>
<td>78%</td>
<td>77%</td>
</tr>
<tr>
<td>Medium retailers</td>
<td>15%</td>
<td>21%</td>
<td>19%</td>
<td>19%</td>
</tr>
<tr>
<td>Small retailers</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: Compliance and Performance Reporting Guideline data.


\textsuperscript{148} Active retailers are retailers with at least one small business or domestic customer.

\textsuperscript{149} Since 30 June 2022, two active retail electricity retailers have had their retail electricity licences revoked in Victoria.

\textsuperscript{150} Values in the table do not sum to exact total due to rounding.
The increase in the number of retailers has also led to a downward trend in the Herfindahl-Hirschman index\textsuperscript{151} as seen in figure 8 below.\textsuperscript{152}

The increase in retailers, decreasing market share of large retailers, and decreasing market concentration suggests that over time the Victorian electricity industry is becoming more competitive. Where we see increased competition we would generally expect to see lower margins.

**Figure 8: HHI index for Victorian Electricity Retail markets (2009-10 to 2021-22)**

![HHI Index Chart](image)

Source: Compliance and Performance Reporting Guideline data.

### 5.3 per cent is still within the range of margins from the expected returns approach

When we recommended Victorian Default Offer prices in 2019, we engaged Frontier Economics to provide a report on retailers’ retail operating margins. This report included two approaches: the regulatory benchmarking approach and the expected returns approach. In 2019 we based our advice to government on the 2019 Victorian Default Offer prices on the regulatory benchmarking approach. However, the resulting margin of 5.7 per cent was also supported by the expected returns approach.

In 2019 the expected returns approach provided estimates of the retail operating margin ranging from 4.8 to 6.1 per cent.\textsuperscript{153} Given other evidence that suggests retail margins have decreased

---

\textsuperscript{151} The Herfindahl-Hirschman Index (HHI) is a measure of market concentration that is calculated by summing the squared market shares of all firms competing in a market. A decrease in HHI over time indicates a decrease in market concentration and a more competitive market. HHI decreases both as the number of firms in a market increases and the disparity in size between those firms decreases.


\textsuperscript{153} Frontier Economics, Retail costs and margin, a report for the Essential Services Commission, April 2019, p. 29.
since 2019, this supports our final decision to reduce the retail margin to 5.3 per cent for the 2023 – 24 Victorian Default Offer.

For the final decision, we undertook an analysis of the cost of capital parameters that we asked Frontier to use in 2019. Our analysis showed that the cost of capital was still broadly in line with those from 2019. This suggests that the range of expected returns results produced by Frontier in 2019 is still broadly applicable in 2023.

**Retailers’ actual margins have decreased since 2019**

As shown in figure 9 below, the average retail margin across Victorian retailers has decreased from $189 per residential customer in 2018–19 to $115 per customer in 2021–22.\(^\text{154}\) This corresponds to a decrease of 39 per cent in real terms since the introduction of the Victorian Default Offer. When expressed as a percentage of total revenue, the average retail margin, denoted by their earnings before interest, taxes, depreciation and amortization, has decreased from 4.8 per cent for the 2020–21 financial year to 1.5 per cent for the 2021–22 financial year. This suggests that a retail operating margin lower than the one we set in 2019 might be appropriate.

**Figure 9 Average retail margins (as earnings before interest, tax, depreciation and amortization) per customer, real $2021-22**

![Average EBITDA per customer](chart)

Source: ESC analysis of cost data from retailers.

\(^{154}\) Noting that this retail margin is for all retailers’ customers. As a result, it will be higher than the retail margin for domestic customers, but lower than the margin for small business customers.
Stakeholders’ submissions on the retail operating margin were mixed

Consumer advocates, including the Brotherhood of St Laurence, the Consumer Action Law Centre and the Victorian Council of Social Service, all called for a lower retail operating margin.155 The Consumer Action Law Centre noted that during a period of elevated supply costs, we would expect to see retailer margins decrease. The centre also recommended that we use actual retailer data to set the retail operating margin. The Brotherhood of St Lawrence and Victorian Council of Social Service note our draft decision on the retail margin benchmark was at the upper end of the range compared to other Australian regulators.156

In contrast, some energy retailers, including EnergyAustralia and Simply Energy, in general supported the current retail operating margin at 5.7 per cent.157 Some other retailers contended that the current level of the retail operating margin may be insufficient.158

The wholesale cost benchmark accounts for wholesale cost risk

Energy Locals and Powershop noted the high-risk environment and higher funding costs retailers still face despite the evidence about declining retail margins across the National Electricity Market.159

We acknowledge that the retail operating margin covers, among other things, remuneration for systematic risk. However, we do not agree that the margin should increase.

The increased wholesale cost risk is covered by the wholesale cost benchmark. Our wholesale electricity cost benchmark is based on a conservative hedging position and covers the vast majority of wholesale cost risk.

Our margin accounts for depreciation costs

EnergyAustralia submitted that the retail margin must allow larger retailers to recover the depreciation and amortisation resulting from significant levels of capital investment and depreciation of their IT assets.160

155 Brotherhood of St Lawrence submission to draft decision, April 2023, p. 2; Consumer Action Law Centre submission to draft decision, April 2023, p. 3-4; Victorian Council of Social Service submission to draft decision, April 2023, p. 4-5.

156 Brotherhood of St Lawrence submission to draft decision, April 2023, p. 2; Victorian Council of Social Service submission to draft decision, April 2023, p. 5.

157 EnergyAustralia submission to draft decision, April 2023, p. 4; Simply Energy submission to draft decision, April 2023, p. 3.

158 Energy Locals submission to draft decision, April 2023, p. 3; Powershop submission to draft decision, April 2023, p. 1.

159 Energy Locals submission to draft decision, April 2023, p. 3; Powershop submission to draft decision, April 2023, p. 1.

160 EnergyAustralia, submission to draft decision, April 2023, p. 4.
We analysed actual retail depreciation and amortisation costs from the cost data submitted by Victorian retailers. Depreciation costs were on average comfortably covered by our retail margin.

With higher wholesale electricity costs the margin will increase to cover finance costs

Energy Locals stated that the projected 30 per cent increase in electricity costs will lead to a comparable rise in working capital requirements, which in turn, will raise their funding needs. They do not think this is accurately represented in the increase of the retail margin.\(^{161}\)

In preparing our draft decision we undertook some analysis of the increase in credit support requirements associated with increasing wholesale costs. This analysis indicated that increases in the dollar value of the retail margin, associated with higher wholesale costs, covers the increased cost of credit support requirements. This analysis was also supported by analysis from the Queensland Competition Authority and its consultant.\(^{162}\) Energy Locals did not provide evidence to support its claim. In the absence of contrary evidence we have maintained our initial position.

We will review alternative methods to estimate the retail margin

Momentum Energy suggested that we should review of the retail margin at distinct timings, such as every five years. Momentum submits that a regular review of the retail margin outside of the normal regulatory cycle will provide certainty to retailers and investors and ensure an ongoing sustainable market.\(^{163}\)

We consider the retail margin as part of each Victorian Default Offer review. As discussed earlier in this section, as part of our next review we will engage with stakeholders to further consider alternative methods, beyond the regulatory benchmarking and expected returns approaches, to set the retail margin.

---

\(^{161}\) Energy Locals submission to draft decision, April 2023, p. 3.

\(^{162}\) Queensland Competition Authority interim consultation paper: Regulated retail electricity prices for 2023–24 Interim Consultation Paper, December 2022, p. 9.

\(^{163}\) Momentum Energy submission to draft decision, April 2023, p. 2.
Request for comment papers

Our final decision for the 2023–24 Victorian Default Offer, is to begin our public consultations on Victorian Default Offer decisions by releasing a ‘request for comment’ paper. This will be a short notice asking for submissions on matters stakeholders consider we should investigate as part of our next review. We will then be able to consider these submissions in preparing our draft decision paper. We will only publish a consultation paper, outlining our proposed position on a matter or matters prior to a draft decision, if we are considering significant changes to our approach to setting the Victorian Default Offer prices. This is the approach we proposed in our draft decision.

Stakeholder submissions supported ‘request for comment’ papers

The proposals we received were mostly in favour of publication of request for comment papers. Reasons for this include:

- Given the dynamic nature of the sector at this time, such forward planned and public consultation is important
- During times of economic volatility, more frequent consultation may be of benefit
- It will retain the important opportunity for comment, while allowing for efficiency in decision-making.

One consumer submitted that we should consider advertising our reviews more broadly to receive feedback from a greater range of stakeholders. We note that we received submissions on our draft decision from a wide range of different stakeholder types including: consumers, consumer advocates, energy retailers, peak bodies, embedded network operators and energy experts. Nonetheless, we will consider options for how to reach even more stakeholders as part of our next review.

---

164 Australian Energy Council, Submission to draft decision, 11 April 2023; EnergyAustralia, Submission to draft decision, 11 April 2023; Powershop, Submission to draft decision, 11 April 2023; Energy Locals, Submission to draft decision, 11 April 2023; AGL, Submission to draft decision, 14 April 2023; Alinta Energy, Submission to draft decision, 11 April 2023.

165 Aaron McGlade, Submission to draft decision, 7 April 2023.
Calculating tariffs and the maximum annual bill

Our final decision for the 2023–24 Victorian Default Offer is to use the same approach to setting standing offer tariffs as we did in our 2022–23 Victorian Default Offer price determination. Under this approach, once we have determined the cost of providing a retail electricity service, we turn the costs into prices for the Victorian Default Offer using three different methods:

- **Flat tariffs** - for standing offers with flat tariffs
- **Two-period time of use tariffs** – for standing offers with two-period time of use tariffs
- **The compliant maximum annual bill** – for standing offers with non-flat tariffs, other than two-period time of use tariffs (the compliant maximum annual bill is based on the two-period time of use tariffs).

This is the same approach we proposed in our draft decision for the 2023–24 Victorian Default Offer. Our view remains that this approach best meets the objectives of the pricing order.

The flat tariffs and two-period time of use tariffs helps ensure that the Victorian Offer is a reasonably priced option. The flat tariffs and two-period time of use tariffs reflect the underlying networks costs that retailers face for most customers.

The compliant maximum annual bill ensures that the safeguard provided by the Victorian Default Offer extends to customers on all network tariff types.

**Tariff structure**

Because of underlying network charges, almost all tariffs contain a fixed (daily supply) charge and a variable (per kilowatt hour) charge.

The variable charge can be structured in different ways. Under a flat or anytime usage tariff, the variable charge does not change based on the time of consumption. In contrast, time of use tariffs and other non-flat tariffs have different variable charges for electricity used at different times. Under a time of use tariff structure, using energy during times of peak demand is generally more expensive.

**Flat tariffs**

Under this approach, we align the tariff structures with the underlying flat network tariffs in each distribution zone.
Flat tariff cost allocation

Daily supply charge (fixed costs) =
(retail operating costs including customer acquisition and retention + fixed network costs +
per customer ‘other costs’ + feed in tariff social cost of carbon) x (1 + retail operating margin)

Usage charge (variable costs) =
(wholesale electricity costs + environmental program costs + variable ‘other costs’ +
electricity network losses + variable network costs) x (1 + retail operating margin)

Two-period time of use tariffs

Under this approach, we align the tariff structures with the underlying two-period time of use
network tariffs.

Cost allocation

To set the rates for the two-period time of use tariffs, we must identify how costs should be
allocated within that structure.

As with the flat tariffs, we use a simple and logical method to allocate costs. Fixed costs are
contained in the daily supply charge. Any costs that vary with usage go into the variable, per
kilowatt hour charge component of the tariffs. The variable cost components for peak and off-peak
usage charges are the same except for network costs. We use the Australian Energy Regulator’s
approved two-period time of use network tariffs and apply them accordingly.

Cost allocation two-period time of use tariffs

Daily supply charge (fixed costs) =
(retail operating costs, including customer acquisition and retention + fixed network costs +
per customer ‘other costs’ + feed in tariff social cost of carbon) x (1 + retail operating margin)

Peak usage charge (variable costs) =
(wholesale electricity costs + environmental program costs + variable ‘other costs’ +
electricity network losses + variable network costs for peak period) x (1 + retail operating
margin)

Off peak usage charge (variable costs) =
Calculating tariffs and the maximum annual bill

Essential Services Commission Victorian Default Offer 2023–24

(wholesale electricity costs + environmental program costs + variable ‘other costs’ + electricity network losses + variable network costs for off-peak period) x (1 + retail operating margin)

The compliant maximum annual bill

In addition to setting the flat and two-period time of use tariffs described we regulate all other standing offers (for example, non-standard time of use and demand tariffs) through a compliant maximum annual bill (maximum bill). The maximum bill amount is calculated based on the two-period time of use tariffs.

Retailers offering non-flat standing offer tariffs must make sure their tariffs do not result in a bill above the maximum bill at a specific usage amount determined by the commission. The maximum bill helps to ensure that all standing offer customers are covered by the Victorian Default Offer, without removing the option of other non-flat standing offer tariffs.

Annual reference consumption amount

The annual reference consumption amount used to determine the maximum bill amount is as follows:

- For domestic customers: there are five maximum annual bills (one for each distribution zone), calculated for a representative customer consumption of 4,000 kWh per year.
- For small business customers: there are five maximum annual bills (one for each distribution zone), calculated for a representative customer consumption of 20,000 kWh per year.

For the purposes of calculating the compliant annual maximum bill amount, the amount of electricity used by customers is assumed to be the same on each day of the year.

Representative usage profiles and related usage allocations

We have not updated the usage profiles for calculating the compliant maximum annual bill amounts for the 2023–24 Victorian Default Offer determination. We have examined changes in the share of load but there have not been significant changes since 2020–21.

We used manually read interval meter data provided by the Australian Energy Market Operator to calculate these profiles.
Calculating tariffs and the maximum annual bill

Essential Services Commission Victorian Default Offer 2023–24

Table 5: Domestic – usage profile for maximum bill calculation

<table>
<thead>
<tr>
<th>Customer class</th>
<th>Peak period</th>
<th>Off peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time period window</td>
<td>3.00 pm–9.00 pm every day</td>
<td>All other times</td>
</tr>
<tr>
<td>Usage profile</td>
<td>0.33</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Table 6: Small business – usage profile for maximum bill calculation

<table>
<thead>
<tr>
<th>Customer class</th>
<th>Peak period</th>
<th>Off peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time period window</td>
<td>9.00 am–9.00 pm weekdays</td>
<td>All other times</td>
</tr>
<tr>
<td>Usage profile</td>
<td>0.49</td>
<td>0.51</td>
</tr>
</tbody>
</table>

Calculating the maximum bill amount

The maximum bill amount for other non-flat standing offers is calculated using the relevant:

- annual reference consumption amount
- usage profiles as specified in tables 5 and 6
- domestic and small business two-period time of use tariffs determined by the commission for each distribution zone.

Retailers must show they comply with the maximum bill amount

If offering non-standard tariffs (standing offer tariffs that are not the flat or two-period time of use tariffs) a retailer must show those tariffs do not result in a total annual electricity bill that exceeds the relevant maximum bill amount determined by the commission. In determining non-standard tariffs, the retailer must use its own representative usage profile, or relevant usage allocations, which reflects a reasonably representative estimate of consumption for the applicable group of customers over a 365-day period.

A retailer’s estimated annual electricity bill for a non-standard tariff must be calculated using the relevant annual reference consumption amount determined by the commission, apportioned according to the retailer’s relevant published representative usage profile and multiplied by the retailer’s relevant non-standard tariffs.
Appendix A: Our legislative considerations

The pricing order provides the commission’s power to make a Victorian Default Offer price determination and imposes some constraints on that power. This appendix explains the requirements for, and matters we must have regard to, in making the determination.

The commission’s power to determine the Victorian Default Offer

The Victorian Default Offer price determination is a determination for purposes of section 33 of the Essential Services Commission Act 2001 (ESC Act). In making a Victorian Default Offer price determination we must adopt an approach and methodology in accordance with section 33(2) of the ESC Act, and the pricing order.\(^{166}\) Taken together, this means we must adopt an approach and methodology we consider will best meet the objectives specified in the ESC Act, the commission’s objectives under the Electricity Industry Act 2000 (EI Act) and the objective of the Victorian Default Offer.\(^{167}\)

The pricing order gives the commission discretion to decide the approach and methodology to be used for making this Victorian Default Offer price determination.\(^{168}\) This is however subject to the requirement that the Victorian Default Offer price determination must be based on the efficient costs of the sale of electricity by a retailer,\(^{169}\) having regard to:\(^{170}\)

- wholesale electricity costs
- network costs
- environmental costs
- retail operating costs, including only modest costs of customer acquisition and retention\(^ {171}\)
- retail operating margin\(^ {172}\)
- any other costs, matters or things we consider appropriate or relevant.

---

\(^{166}\) Clause 12(1) of the pricing order.

\(^{167}\) Best meeting the objective of the Victorian Default Offer is a requirement of clause 12(2) of the pricing order.

\(^{168}\) Clause 10(3) of the pricing order read with section 33(5) of the Essential Services Commission Act 2001.

\(^{169}\) Clause 12(3) of the pricing order. Further, clause 12(8) affirms that the pricing order does not require the commission to determine tariffs based on the actual costs of a retailer.

\(^{170}\) Clause 12(4) of the pricing order.

\(^{171}\) Clause 12(6) of the pricing order specifies that this is to be an amount determined by the commission in its discretion.

\(^{172}\) Clause 12(7) of the pricing order specifies that this is to be an amount determined by the commission in its discretion, and in doing so regard must be had to (without limitation) the principle that the margin must not compensate retailers for risks that are compensated elsewhere in the costs. Clause 12(9) of the pricing order affirms that the commission is not required to determine tariffs based on the actual retail operating margin of a retailer.
The pricing order also specifies that we must not include headroom.\(^{173}\)

**Our objectives in setting the Victorian Default Offer**

The objective of the commission under the ESC Act is to promote the long-term interests of Victorian consumers, having regard to the price, quality and reliability of essential services.\(^{174}\)

As objectives of the EI Act, the commission must adopt an approach which promotes protections for customers, the development of full retail competition and a consistent regulatory approach between the electricity and gas industries (noting there is currently no framework for the regulation of prices for retail gas services).\(^{175}\)

The objective of the Victorian Default Offer under the pricing order is to provide a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the electricity retail market.\(^{176}\)

As mentioned, when making a Victorian Default Offer price determination, the approach and methodology adopted by the commission must be one that best meets all of these objectives.

**Other matters the commission must have regard to when determining tariffs**

Section 8A of the ESC Act provides that in seeking to achieve the commission's objective under the ESC Act to promote the long-term interests of Victorian consumers, the commission must have regard to the following matters to the extent that they are relevant in any particular case:

- efficiency in the industry and incentives for long term investment
- the financial viability of the industry
- the degree of, and scope for, competition within the industry, including countervailing market power and information asymmetries
- the relevant health, safety, environmental and social legislation applying to the industry
- the benefits and costs of regulation (including externalities and the gains from competition and efficiency) for consumers and users of products or services (including low income and vulnerable consumers) and regulated entities

---

\(^{173}\) Clause 12(10) of the pricing order; ‘headroom’ being defined in clause 4(1) as ‘an allowance that does not reflect an efficient cost borne by firms operating in the market.’


\(^{175}\) Electricity Industry Act 2000, s 10.

\(^{176}\) Clause 3 of the pricing order sets out the objective of the Victorian Default Offer.
• consistency in regulation between States and on a national basis
• any matters specified in the empowering instrument (that is, the pricing order)

Section 33(3) of the ESC Act specifies that in making a price determination under section 33 of the ESC Act, the commission must have regard to:

• the particular circumstances of the regulated industry (that is, retail electricity market) and the prescribed goods and services (that is, standing offers) for which the determination is being made
• the efficient costs of producing or supplying regulated goods or services and of complying with relevant legislation and relevant health, safety, environmental and social legislation applying to the regulated industry
• the return on assets in the regulated industry
• any relevant interstate and international benchmarks for prices, costs and return on assets in comparable industries
• any other factors that the commission considers relevant.

In addition, section 33(4)(b) of the ESC Act provides that in making a determination, the commission must ensure that the determination takes into account and clearly articulates any trade-offs between costs and service standards.177

177 Under clause 12(11) of the pricing order, section 33(4)(a) does not apply to a Victorian Default Offer determination.
Appendix B: Order in Council

Essential Services Commission Victorian Default Offer 2023–24
Appendix B: Order in Council

Essential Services Commission Victorian Default Offer 2023–24
VDO compliant maximum annual bill has the meaning given it in clause 10(2).
VDO price determination means a price determination pursuant to clause 10.

2. Despite subclause (1), in:
(a) clause 6;
(b) clause 7;
(c) clause 10(2)(a)(i);
(d) schedule 1; and
(e) schedule 2,
the following definitions instead apply:
(f) domestic customer means a domestic customer within the meaning of the definition of ‘domestic or small business customer’ in the Act; and
(g) small business customer means a small business customer within the meaning of that definition.

Notes:
1. The following terms are defined in section 3 of the Act:
   Commission;
   domestic or small business customer;
   distribution company;
   electricity bill;
   regulated tariff standing offer;
   retailer;
   standing offer
2. As at the date of the commencement of this Order, the Order in Council made under section 35 of the Act and published in the Government Gazette No. S 313 on 25 November 2008 applies for the purposes of the definition of ‘domestic or small business customer’ in the Act.
3. ‘Price determination’ is defined in section 13(6) of the Act.

5. Declaration of Prescribed Customers
   The following customers are declared, pursuant to section 13(5) of the Act, to be prescribed customers:
   (a) a domestic or small business customer;
   (b) a former franchise customer who is a party to a deemed contract under section 37 of the Act; and
   (c) a relevant customer who is a party to a deemed contract under section 39 of the Act.

6. Victorian Default Offer Tariffs
   1. A retailer’s standing offer tariffs for sale of electricity to prescribed customers must comply with this clause.
   2. During the period from 1 July 2019 to 31 December 2019, the standing offer tariffs a retailer may charge to a domestic customer, in respect of the distribution zone specified in column 1 of the table in Schedule 1, are fixed at the amounts specified in columns 2, 4 and 5 of the table for the tariff components specified in those columns.
   3. During the period from 1 July 2019 to 31 December 2019, the standing offer tariffs a retailer may charge to a small business customer, in respect of the distribution zone specified in column 1 of the table in Schedule 2, are fixed at the amounts specified in columns 2 and 4 of the table for the tariff components specified in those columns.
   4. Subclauses (2) and (3) do not apply to standing offer tariffs other than:
      (a) a flat tariff; or
      (b) a flat tariff with a controlled load tariff.
5. During any regulatory period commencing on or after 1 January 2020, a retailer’s standing offer tariffs for sale of electricity to prescribed customers must comply with any VDO price determination made by the Commission that is in force.

   Note: The VDO price determination will be in respect of both standing offer tariffs that are flat tariffs and standing offer tariffs that are not flat tariffs. See also clause 10.

7. Retailer must make Victorian default offer

   1. A retailer’s regulated tariff standing offer for sale of electricity to prescribed customers must include (specified as the ‘Victorian default offer in respect of flat tariffs’):
      (a) one flat tariff that is available to each domestic customer;
      (b) one flat tariff with a controlled load tariff that is available to each domestic customer with a controlled load, and
      (c) one flat tariff that is available to each small business customer, which tariffs must be:
      (d) for the period from 1 July 2019 to 31 December 2019, those fixed in accordance with clause 6(2) and clause 6(3);
      (e) for any regulatory period commencing on or after 1 January 2020, standing offer tariffs complying with the VDO price determination in respect of that regulatory period.

2. In addition, for any regulatory period commencing on or after 1 January 2020 and in the case of standing offer tariffs that:
   (a) are not flat tariffs, or
   (b) are any combination of a flat tariff and a tariff that is not a flat tariff, a retailer’s regulated tariff standing offer must include standing offer tariffs and terms and conditions (both specified as the ‘Victorian default offer in respect of the VDO compliant maximum annual bill’) that ensure the retailer’s compliance with the VDO price determination in respect of that regulatory period.

8. Information about the VDO on electricity bills

   1. This clause applies until such time as the amendments to the Energy Retail Code required by clause 16(2)(b) come into force.
   2. A retailer’s electricity bill issued to a prescribed customer on or after 1 October 2019 must include information about how the customer may access the Victorian default offer from the retailer.
   3. The information required by subclause (2) must be in plain and clear English and prominent on the electricity bill.

9. Conferment of functions and powers on the Commission

   1. For the purposes of Part 3 of the ESC Act and section 12(1)(b) of the Act, the supply or sale of electricity under the Act is specified as prescribed goods and services in respect of which the Commission has the power to regulate prices.
   2. The Commission must not make a price determination regulating tariffs for the supply or sale of electricity under the Act except as contemplated under this Order.

   Note: See section 12 in Part 3 of the ESC Act. This Order is an empowering instrument, for the purposes of Part 3 of the ESC Act, see paragraph (d) of the definition of ‘empowering instrument’ in section 3 of the ESC Act.

10. Commission to make VDO price determination

    1. At least 37 days before the commencement of a regulatory period, the Commission must make a price determination in respect of the regulatory period that determines, for each distribution zone in Victoria:
Appendix B: Order in Council

Essential Services Commission Victorian Default Offer 2023–24
Appendix B: Order in Council

Essential Services Commission Victorian Default Offer 2023–24

retention:
(c) retail operating margin; and
(f) subject to subclause (10), any other costs, matters or things the Commission, in the exercise of its discretion, considers appropriate or relevant.

Note: Section 33(1)(e) of the ESC Act similarly requires the Commission to have regard to any other factors that it considers relevant.

5. The VDO compliant maximum annual bill must be based on:
   (a) the standing offer tariffs that the Commission determines are to apply in respect of flat tariffs; and
   (b) the prescribed customer’s electricity usage.

6. For the purposes of subclause (4)(d), the Commission must, in the exercise of its discretion, determine the amount of modest costs of customer acquisition and retention.

7. For the purposes of subclause (4)(e), the Commission must, in the exercise of its discretion, determine a maximum retail operating margin, and in doing so must have regard to (without limitation) the principle that the margin must not compensate retailers for risks that are compensated elsewhere in the costs.

8. Subclauses (3), (4), (5) and (6) do not require the Commission to determine tariffs based on the actual costs of a retailer.

9. Subclause (7) does not require the Commission to determine tariffs based on the actual retail operating margin of a retailer.

10. In making a VDO price determination the Commission must not include headroom.

11. Section 33(4)(a) of the ESC Act does not apply to the making of a VDO price determination.

12. Otherwise, section 33 of the ESC Act applies to the making of a VDO price determination only to the extent that the section is not contrary to this Order.

Notes:
1. This Order, as an ‘empowering instrument’ in terms of the ESC Act, can modify the application of section 33 of the ESC Act: see section 33(1) of the ESC Act.
2. Pursuant to section 33(3)(d) of the ESC Act, the Commission must have regard to relevant interstate and international benchmarks for prices, costs and returns on assets in comparable industries.

13. Variation of VDO price determinations

1. Before or during a regulatory period, the Commission may, on its own initiative, vary a VDO price determination in respect of the regulatory period.

2. The Commission must specify, in a VDO price determination, the circumstances under which the Commission will consider, and the basis on which the Commission will decide on, a proposed variation and (subject to subclauses (4) and (5)) the processes to be followed to enable the Commission to make such a variation.

3. Without limiting subclause (1), the Commission may vary a VDO price determination:
   (a) if an event has occurred or will occur that was uncertain or unforeseen by the Commission at the time of making the VDO price determination; or
   (b) to correct a clerical error, miscalculation, misdescription or other deficiency.

4. Before making a variation, the Commission must consult in accordance with clause 14.

5. Subclause (4) does not apply if:
   (a) the variation is not sufficiently material to warrant consultation in accordance with clause 14; or
   (b) the need for the variation is sufficiently urgent to warrant consultation in accordance with clause 14 not being undertaken.
6. If, as a result of a variation of a VDO price determination, a retailer is or will be required to vary the retailer’s standing offer tariffs, the Commission must ensure the retailer is given adequate notice before the variation to the VDO price determination takes effect.

14. Consultation

1. The Commission may decide the nature and extent of stakeholder consultation it will undertake when making a VDO price determination or a decision to vary a VDO price determination.

2. For the purposes of subclause (1), the Commission must have regard to its Charter of Consultation and Regulatory Practice (as amended from time to time) developed and published under section 14 of the ESC Act.

15. Victorian default offer tariffs to be the reference tariffs for discounts

1. This clause applies until such time as the amendments to the Energy Retail Code required by clause 16(2)(a) come into force.

Provided that, if those amendments do not provide for any matter provided for in this clause, then this clause continues to apply in respect of that matter.

2. A retailer that offers a discount to a domestic customer or a small business customer must:

(a) if the discount is in respect of the period from 1 July 2019 to 31 December 2019, disclose how the discount is calculated as against the tariffs in Schedule 1 or Schedule 2 (as the case may be), and what (in percentage or dollar terms) the reduction in tariff is in terms of those tariffs, and

(b) if the discount is in respect of a regulatory period, disclose how the discount is calculated as against the flat tariffs determined by the Commission pursuant to the VDO price determination that applies in respect of that period, and what (in percentage or dollar terms) the reduction in tariffs is in terms of those tariffs.

3. For the purposes of subclause (2), the reduction in tariffs is to be expressed as the difference between the estimated annual cost of the Victorian default offer for the customer type and distribution zone, and the estimated annual cost of the offer to which the discount relates after the discount is applied, using the annual reference consumption.

4. For the purposes of subclause (3):

(a) the estimated annual cost of the Victorian default offer is:
   i. during the period from 1 July 2019 to 31 December 2019, determined by applying Schedule 3;
   ii. during a regulatory period, determined by applying Schedule 3 or any other approach or methodology determined by the Commission; and

(b) the retailer must determine the estimated annual cost of the retailer’s offer to which the discount relates:
   i. if the tariff is a flat tariff or a flexible tariff (in either case, with or without a controlled load), by applying Schedule 2;
   ii. otherwise, based on a reasonable estimate having regard to any relevant information available to the retailer; and
5. The annual reference consumption is:
   (a) during the period from 1 July 2019 to 31 December 2019:
      i. for domestic customers without a controlled load – 4,000 kWh general usage per annum;
      ii. for domestic customers with a controlled load – 4,000 kWh general usage plus 2,000 kWh controlled load usage per annum;
      iii. for small business customers (with or without a controlled load) – 20,000 kWh general usage per annum.
   (b) during a regulatory period:
      i. the consumption amount determined by the Commission (if any); or
      ii. if no amount is determined by the Commission pursuant to subclause (5)(b)(i), the amount specified in subclause (5)(a).

6. For the purposes of subclause (5), the amount of electricity consumed is assumed to be the same on each day of the year.

7. Any percentage or dollar amount disclosed pursuant to this clause must be expressed as a whole percentage or dollar, rounded to the nearest percentage or dollar.

8. Otherwise, Division 2 of Part 2A (Customers entitled to clear advice) of the Energy Retail Code applies to the disclosures required by this clause.

16. **Direction to the Commission pursuant to section 13(3)(b) of the Act**

1. The Commission must, as soon as practicable after the commencement of this Order, amend the Energy Retail Code and any other instrument of the Commission to give effect to the Victorian default offer and this Order.

2. Without limiting subclause (1), the Commission must amend the Energy Retail Code (and any other instrument of the Commission) so that the Code:

   (a) provides for tariffs determined by the Commission pursuant to the VDO price determination being the reference tariffs for discounts and for the methodology of that comparison; and
   
   (b) requires a retailer’s electricity bill to include information about how the customer may access the Victorian default offer from the retailer.

3. For the purposes of subclause (2)(a), the Commission must have regard to the following principles:

   (a) There must be a consistent methodology for comparison of tariffs that applies to:
      i. all offers of discounts by retailers; and
      ii. the advertising in respect of these discounts.

   (b) The methodology must apply in respect of flat tariffs and tariffs that are not flat tariff;

   (c) The methodology must (without limitation) readily allow, in respect of a regulatory period, a comparison between:
      i. the discounted tariffs offered by a retailer; and
      ii. the tariffs determined by the Commission pursuant to the VDO price determination in respect of that period; and

   (d) Any actual comparison in accordance with the methodology must be readily understandable by a prescribed customer.
4. Subclause (3) does not limit:
   (a) the matters the Commission may have regard to; or
   (b) the matters the Commission may provide for by way of the amendments required by subclause (2).

17. Review of the operation of this Order
The Minister must cause a review of the operation and effectiveness of this Order to be undertaken before the third anniversary of the Order coming into operation.
### SCHEDULE 1
Victorian default offer tariffs for period from 1 July 2019 to 31 December 2019 – domestic customers

Charges are inclusive of GST.

<table>
<thead>
<tr>
<th>Distribution zone</th>
<th>Supply charge ($ per day)</th>
<th>Usage charge structure</th>
<th>Usage charge (not controlled load) ($ per kWh)</th>
<th>Usage charge: controlled load ($ per kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AusNet Services</td>
<td>$1.1368</td>
<td>Block 1 (up to 1020 kWh during a quarter) Block 2 (&gt; 1020 kWh during a quarter)</td>
<td>$0.2763</td>
<td>$0.2024</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$0.3113</td>
<td></td>
</tr>
<tr>
<td>CitiPower</td>
<td>$1.1055</td>
<td>Anytime</td>
<td>$0.2325</td>
<td>$0.1809</td>
</tr>
<tr>
<td>Jemena</td>
<td>$1.0037</td>
<td>Anytime</td>
<td>$0.2547</td>
<td>$0.1618</td>
</tr>
<tr>
<td>Powercor</td>
<td>$1.2333</td>
<td>Anytime</td>
<td>$0.2403</td>
<td>$0.1561</td>
</tr>
<tr>
<td>United Energy</td>
<td>$0.9115</td>
<td>Anytime</td>
<td>$0.2620</td>
<td>$0.1873</td>
</tr>
</tbody>
</table>
SCHEDULE 2
Victorian default offer tariffs for period from 1 July 2019 to 31 December 2019 – small business customers
Charges are inclusive of GST.

<table>
<thead>
<tr>
<th>Distribution zone</th>
<th>Supply charge ($ per day)</th>
<th>Usage charge structure</th>
<th>Usage charge ($ per kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AusNet Services</td>
<td>$1.1368</td>
<td>Block 1 (up to 1020 kWh during a quarter)</td>
<td>$0.3154</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block 2 (&gt;1020 kWh during a quarter)</td>
<td>$0.3605</td>
</tr>
<tr>
<td>CitiPower</td>
<td>$1.2972</td>
<td>Anytime</td>
<td>$0.2464</td>
</tr>
<tr>
<td>Jemena</td>
<td>$1.1450</td>
<td>Anytime</td>
<td>$0.2682</td>
</tr>
<tr>
<td>Powercor</td>
<td>$1.3611</td>
<td>Anytime</td>
<td>$0.2394</td>
</tr>
<tr>
<td>United Energy</td>
<td>$0.9691</td>
<td>Anytime</td>
<td>$0.2717</td>
</tr>
</tbody>
</table>
1. **Estimated annual cost for flat tariff offers**

The estimated annual cost for an offer for the supply or sale of electricity under a flat tariff is to be calculated as follows:

\[ EAC = SC \times 365 + UC \times ARC \]

where:
- \( EAC \) is the estimated annual cost of the offer;
- \( SC \) is the supply charge;
- \( UC \) is the general usage charge; and
- \( ARC \) is the annual reference consumption for general usage.

2. **Estimated annual cost for flexible tariff offers**

The estimated annual cost for an offer for the supply or sale of electricity under a flexible tariff is to be calculated as follows:

\[ EAC = SC \times 365 + ARC \times UC_{p} + UA_{p} + ARC \times UC_{s} \times UA_{s} + ARC \times UC_{o} \times UA_{o} \]

where:
- \( EAC \) is the estimated annual cost of the offer;
- \( SC \) is the supply charge; and
- \( ARC \) is the annual reference consumption for general usage.

and where, in respect of the relevant tariff type specified in column 1 of Table 1:
- \( UC_{p} \) is the retailer's peak usage charge;
- \( UA_{p} \) is the peak usage allocation specified in column 2 of Table 1;
- \( UC_{s} \) is the retailer's shoulder usage charge;
- \( UA_{s} \) is the shoulder usage allocation specified in column 3 of Table 1;
- \( UC_{o} \) is the retailer's off-peak usage charge; and
- \( UA_{o} \) is the off-peak usage allocation specified in column 4 of Table 1.

3. **Estimated annual cost for offers that include a controlled load tariff**

The estimated annual cost for an offer for the supply or sale of electricity that includes a controlled load tariff is to be calculated as follows:

\[ EAC = EAC_{cl} + UC_{cl} \times ARC_{cl} \]

where:
- \( EAC \) is the estimated annual cost of the offer;
- \( EAC_{cl} \) is the estimated annual cost of the offer for general usage only, calculated in accordance with clause 1 or 2 of this Schedule 3 (as the case may be);
- \( UC_{cl} \) is the usage charge for controlled load usage; and
- \( ARC_{cl} \) is the annual reference consumption for controlled load usage.
### Table 1 – Usage allocation for flexible tariffs

<table>
<thead>
<tr>
<th>Tariff type</th>
<th>Peak</th>
<th>Shoulder</th>
<th>Off-peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible price (3 part time of use)</td>
<td>0.25</td>
<td>0.45</td>
<td>0.30</td>
</tr>
<tr>
<td>5-day time of use</td>
<td>0.52</td>
<td>0.00</td>
<td>0.48</td>
</tr>
<tr>
<td>7-day time of use (small business customers only)</td>
<td>0.74</td>
<td>0.00</td>
<td>0.26</td>
</tr>
<tr>
<td>5-day time of day 9 pm off peak (United Energy</td>
<td>0.25</td>
<td>0.20</td>
<td>0.55</td>
</tr>
<tr>
<td>distribution zone only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-day time of day (United Energy distribution zone only)</td>
<td>0.32</td>
<td>0.20</td>
<td>0.48</td>
</tr>
</tbody>
</table>

Dated 28 May 2019
Responsible Minister
HON. LILY D’AMBROSIO MP
Minister for Energy, Environment and Climate Change

PIETA TAVROU
Clerk of the Executive Council
Appendix B: Order in Council

Essential Services Commission Victorian Default Offer 2023–24
than the tariff that would have applied to the customer had the customer purchased the electricity and related services:

(a) on or immediately prior to 27 May 2019;
(b) from the licensee who, on 27 May 2019, was the local retailer for electricity supplied in the electricity distribution area in which the supply point for the supply of electricity to the customer is located (relevant licensee); and
(c) pursuant to the licensee standing offer determined by that relevant licensee under section 38(1) of the Act and published in Government Gazette No. 553 on 30 November 2018.

(2) In this clause, local retailer means:

(a) AGL Sales Pty Limited (ABN 88 090 538 337) where the supply point for the supply of electricity to the customer is located in the area in which Jemena Electricity Networks (Vic.) Ltd (ABN 82 064 651 083) was licensed to distribute electricity on 27 May 2019;
(b) Origin Energy Electricity Limited (ACN 071 052 287) where the supply point for the supply of electricity to the customer is located in the area in which Citipower Pty Ltd (ACN 064 651 056) (previously trading as Citipower Pty) was licensed to distribute electricity on 27 May 2019;
(c) EnergyAustralia Pty Ltd (ABN 99 086 014 568) (previously trading as TRUenergy Pty Ltd) where the supply point for the supply of electricity to the customer is located in the area in which AusNet Electricity Services Pty Ltd (ABN 91 064 651 118) (previously trading as SPI Electricity Pty Ltd) was licensed to distribute electricity on 27 May 2019;
(d) Origin Energy Electricity Limited (ACN 071 052 287) where the supply point for the supply of electricity to the customer is located in the area in which Powercor Australia Ltd (ACN 064 651 109) was licensed to distribute electricity on 27 May 2019; or
(e) AGL Sales Pty Limited (ABN 88 090 538 337) where the supply point for the supply of electricity to the customer is located in the area in which United Energy Distribution Pty Limited (ACN 064 651 029) was licensed to distribute electricity on 27 May 2019.

Dated 28 May 2019

Responsible Minister
HON. LILY D’AMEROSIO MP
Minister for Energy, Environment and Climate Change

PIETA TAVRIOU
Clerk of the Executive Council
Appendix B: Order in Council

Essential Services Commission Victorian Default Offer 2023–24
Appendix C: Network tariffs in the cost stack

Table C.1: Single network tariff categories

<table>
<thead>
<tr>
<th>Distribution zone</th>
<th>Domestic tariff</th>
<th>Small business tariff</th>
</tr>
</thead>
<tbody>
<tr>
<td>AusNet Services</td>
<td>Small residential single rate, NEE11</td>
<td>Small business single rate, NEE12</td>
</tr>
<tr>
<td>CitiPower</td>
<td>Residential single rate, C1R</td>
<td>Non-residential single rate, C1G</td>
</tr>
<tr>
<td>Jemena</td>
<td>Single rate, A100/F100</td>
<td>Small business, A200/F200</td>
</tr>
<tr>
<td>Powercor</td>
<td>Residential single rate, D1</td>
<td>Non-residential single rate, ND1</td>
</tr>
<tr>
<td>United Energy</td>
<td>Low voltage small 1 rate, LVS1R</td>
<td>Low voltage medium 1 rate, LVM1R</td>
</tr>
</tbody>
</table>

Table C.2: Two period time of use network tariff categories

<table>
<thead>
<tr>
<th>Distribution zone</th>
<th>Domestic tariff</th>
<th>Small business tariff</th>
</tr>
</thead>
<tbody>
<tr>
<td>AusNet Services</td>
<td>Small residential time of use, NAST11</td>
<td>Small business time of use, NAST12</td>
</tr>
<tr>
<td>CitiPower</td>
<td>Residential TOU, CRTOU</td>
<td>Small business TOU, CGTOU</td>
</tr>
<tr>
<td>Jemena</td>
<td>Residential time of use, A120/F120</td>
<td>Time of use weekdays, A210/F210</td>
</tr>
<tr>
<td>Powercor</td>
<td>Residential TOU, PRTOU</td>
<td>Small business TOU, NDTOU</td>
</tr>
<tr>
<td>United Energy</td>
<td>Residential TOU, URTOU</td>
<td>Small business TOU, LVTOU</td>
</tr>
</tbody>
</table>
### Table C.3: Controlled load network tariff categories

<table>
<thead>
<tr>
<th>Distribution zone</th>
<th>Domestic controlled load or dedicated circuit tariff code</th>
</tr>
</thead>
<tbody>
<tr>
<td>AusNet Services</td>
<td>NEE13</td>
</tr>
<tr>
<td>CitiPower</td>
<td>CDS</td>
</tr>
<tr>
<td>Jemena</td>
<td>A180</td>
</tr>
<tr>
<td>Powercor</td>
<td>DD1</td>
</tr>
<tr>
<td>United Energy</td>
<td>LVDed</td>
</tr>
</tbody>
</table>

### Table C.4: Metering configurations used to calculate metering costs for each DNSP

<table>
<thead>
<tr>
<th>Distributor</th>
<th>Meter Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ausnet Services</td>
<td>Single phase single element</td>
</tr>
<tr>
<td>Ausnet Services</td>
<td>Single phase, two element with contactor</td>
</tr>
<tr>
<td>Ausnet Services</td>
<td>Multiphase</td>
</tr>
<tr>
<td>Ausnet Services</td>
<td>Multiphase, direct connected with contactor</td>
</tr>
<tr>
<td>Ausnet Services</td>
<td>Multiphase Current Transformer connected meter</td>
</tr>
<tr>
<td>CitiPower</td>
<td>Single Phase</td>
</tr>
<tr>
<td>CitiPower</td>
<td>Three phase direct connected meter</td>
</tr>
<tr>
<td>CitiPower</td>
<td>Three phase CT connected meter</td>
</tr>
<tr>
<td>Jemena</td>
<td>Single phase single element meter</td>
</tr>
<tr>
<td>Jemena</td>
<td>Single phase single element meter with contactor</td>
</tr>
<tr>
<td>Jemena</td>
<td>Three phase direct connected meter</td>
</tr>
<tr>
<td>Jemena</td>
<td>Three phase current transformer connected meter</td>
</tr>
<tr>
<td>Powercor</td>
<td>Single Phase</td>
</tr>
<tr>
<td>Powercor</td>
<td>Three phase direct connected meter</td>
</tr>
<tr>
<td>Powercor</td>
<td>Three phase CT connected meter</td>
</tr>
<tr>
<td>United Energy</td>
<td>Single phase single element meter</td>
</tr>
<tr>
<td>United Energy</td>
<td>Single phase single element meter with contactor</td>
</tr>
<tr>
<td>United Energy</td>
<td>Three phase direct connected meter</td>
</tr>
<tr>
<td>United Energy</td>
<td>Three phase current transformer connected meter</td>
</tr>
</tbody>
</table>
Appendix D: Calculation of the cost stack

This appendix provides a summary of the key figures required to understand our final decision on the cost stack we use to determine the Victorian Default Offer tariffs and maximum bill.

Wholesale electricity costs

We engaged Frontier Economics to estimate wholesale electricity costs for 2023–24 using the method described in the chapter on cost components. This methodology produces an estimate based on a 12-month trade weighted average of future contract prices, assuming hedging strategies that minimise the level of risk and an adjustment for volatility.

These costs vary across Victoria because of different customer load profiles in each distribution zone. Financial year 2023–24 estimates of the wholesale electricity price and volatility adjustment for each zone are displayed in table D.1.

Table D.1: Wholesale electricity forecasts for 2023–24 ($/MWh, nominal, GST exclusive)

<table>
<thead>
<tr>
<th>Distribution zone</th>
<th>Domestic Wholesale price</th>
<th>Domestic Volatility adjustment</th>
<th>Small business Wholesale price</th>
<th>Small business Volatility adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>AusNet Services</td>
<td>$155.07</td>
<td>$0.76</td>
<td>$127.99</td>
<td>$0.57</td>
</tr>
<tr>
<td>CitiPower</td>
<td>$136.36</td>
<td>$0.63</td>
<td>$125.82</td>
<td>$0.67</td>
</tr>
<tr>
<td>Jemena</td>
<td>$152.23</td>
<td>$0.76</td>
<td>$129.59</td>
<td>$0.62</td>
</tr>
<tr>
<td>Powercor</td>
<td>$152.94</td>
<td>$0.77</td>
<td>$124.84</td>
<td>$0.64</td>
</tr>
<tr>
<td>United Energy</td>
<td>$149.75</td>
<td>$0.72</td>
<td>$129.75</td>
<td>$0.63</td>
</tr>
</tbody>
</table>


Network losses

When transporting electricity through transmission and distribution networks, some electricity is lost in the process. The percentage lost overall is the total loss factor and represents the additional amount retailers must purchase when serving the consumption needs of their customers. These loss factors are also applied to the Large-scale Renewable Energy Target, Small-scale Renewable Energy Scheme and Victorian Energy Upgrades obligations of retailers.
We calculated the loss factors based on the 2023–24 distribution loss factors and the 2023–24 marginal loss factors published by Australia Energy Market Operator (see table D.2).¹⁷⁸

**Table D.2: Network losses for 2023–24**

<table>
<thead>
<tr>
<th>Distribution zone</th>
<th>Distribution loss factor (DLF)</th>
<th>Marginal loss factor (MLF)</th>
<th>Total loss factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>AusNet Services</td>
<td>1.0810</td>
<td>1.0041</td>
<td>8.54%</td>
</tr>
<tr>
<td>CitiPower</td>
<td>1.0450</td>
<td>1.0000</td>
<td>4.50%</td>
</tr>
<tr>
<td>Jemena</td>
<td>1.0447</td>
<td>1.0006</td>
<td>4.54%</td>
</tr>
<tr>
<td>Powercor</td>
<td>1.0736</td>
<td>0.9980</td>
<td>7.14%</td>
</tr>
<tr>
<td>United Energy</td>
<td>1.0483</td>
<td>0.9987</td>
<td>4.69%</td>
</tr>
</tbody>
</table>


**Network costs**

Electricity retailers must pay network costs including distribution, transmission and jurisdictional costs. To pay for these costs, electricity distribution businesses charge retailers by way of a network tariff, generally comprised of a fixed daily charge and a per kilowatt usage charge, and an annual per customer metering charge.

Tables D.3 and D.4 show the Australian Energy Regulator approved flat network tariffs for the period 1 July 2023 to 30 June 2024 for the purposes of our final decision.

**Table D.3: Domestic electricity network charges, flat tariff, 2023–24 (GST exclusive)**

<table>
<thead>
<tr>
<th>Distribution zone</th>
<th>Daily charge ($ per year)</th>
<th>Variable charge structure</th>
<th>Variable charge ($ per kWh)</th>
<th>Controlled load ($ per kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AusNet Services</td>
<td>$132.87</td>
<td>Block 1 Block 2</td>
<td>$0.1310</td>
<td>$0.0464</td>
</tr>
<tr>
<td>CitiPower</td>
<td>$90.26</td>
<td>Anytime</td>
<td>$0.0737</td>
<td>$0.0221</td>
</tr>
<tr>
<td>Jemena</td>
<td>$96.85</td>
<td>Anytime</td>
<td>$0.0898</td>
<td>$0.0370</td>
</tr>
<tr>
<td>Powercor</td>
<td>$140.36</td>
<td>Anytime</td>
<td>$0.0877</td>
<td>$0.0246</td>
</tr>
<tr>
<td>United Energy</td>
<td>$90.22</td>
<td>Anytime</td>
<td>$0.0854</td>
<td>$0.0244</td>
</tr>
</tbody>
</table>


Appendix D: Calculation of the cost stack

Essential Services Commission Victorian Default Offer 2023–24
Table D.4: Small business electricity network charges, flat tariff, 2023–24 (GST exclusive)

<table>
<thead>
<tr>
<th>Distribution zone</th>
<th>Daily charge ($ per year)</th>
<th>Variable charge structure</th>
<th>Variable charge ($ per kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AusNet Services</td>
<td>$132.87</td>
<td>Block 1 Block 2</td>
<td>$0.1867 $0.2062</td>
</tr>
<tr>
<td>CitiPower</td>
<td>$150.43</td>
<td>Anytime</td>
<td>$0.0815</td>
</tr>
<tr>
<td>Jemena</td>
<td>$147.86</td>
<td>Anytime</td>
<td>$0.1183</td>
</tr>
<tr>
<td>Powercor</td>
<td>$180.47</td>
<td>Anytime</td>
<td>$0.0981</td>
</tr>
<tr>
<td>United Energy</td>
<td>$140.36</td>
<td>Anytime</td>
<td>$0.0939</td>
</tr>
</tbody>
</table>


Tables D.5 and D.6 show the Australian Energy Regulator approved two-period network tariffs for the period 1 July 2023 to 30 June 2024.

Table D.5: Domestic electricity network charges, two-period time of use network tariffs 2023–24 (GST exclusive)

<table>
<thead>
<tr>
<th>Distribution zone</th>
<th>Daily charge ($ per year)</th>
<th>Peak variable charge ($ per kWh)</th>
<th>Off-peak Variable charge ($ per kWh)</th>
<th>Controlled load ($ per kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AusNet Services</td>
<td>$132.87</td>
<td>$0.2241</td>
<td>$0.0464</td>
<td>$0.0464</td>
</tr>
<tr>
<td>CitiPower</td>
<td>$90.26</td>
<td>$0.1467</td>
<td>$0.0367</td>
<td>$0.0221</td>
</tr>
<tr>
<td>Jemena</td>
<td>$96.85</td>
<td>$0.1477</td>
<td>$0.0431</td>
<td>$0.0370</td>
</tr>
<tr>
<td>Powercor</td>
<td>$140.36</td>
<td>$0.1714</td>
<td>$0.0429</td>
<td>$0.0246</td>
</tr>
<tr>
<td>United Energy</td>
<td>$90.22</td>
<td>$0.1668</td>
<td>$0.0416</td>
<td>$0.0244</td>
</tr>
</tbody>
</table>

Table D.6: Small business electricity network charges, two-period time of use network tariffs 2023–24 (GST exclusive)

<table>
<thead>
<tr>
<th>Distribution zone</th>
<th>Daily charge ($ per year)</th>
<th>Peak variable charge ($ per kWh)</th>
<th>Off-peak variable charge ($ per kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AusNet Services</td>
<td>$132.87</td>
<td>$0.1964</td>
<td>$0.0474</td>
</tr>
<tr>
<td>CitiPower</td>
<td>$150.43</td>
<td>$0.1327</td>
<td>$0.0295</td>
</tr>
<tr>
<td>Jemena</td>
<td>$265.79</td>
<td>$0.1510</td>
<td>$0.0323</td>
</tr>
<tr>
<td>Powercor</td>
<td>$180.47</td>
<td>$0.1746</td>
<td>$0.0388</td>
</tr>
<tr>
<td>United Energy</td>
<td>$140.36</td>
<td>$0.1541</td>
<td>$0.0343</td>
</tr>
</tbody>
</table>


Table D.7 shows a mass market weighted average of the Australian Energy Regulator approved network metering charges from 1 July 2023 to 30 June 2024, used in the final decision.

Table D.7: Network metering charges, 2023–24 (GST exclusive)

<table>
<thead>
<tr>
<th>Distribution business</th>
<th>Annual metering charge ($ per customer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AusNet Services</td>
<td>$81.10</td>
</tr>
<tr>
<td>CitiPower</td>
<td>$69.33</td>
</tr>
<tr>
<td>Jemena</td>
<td>$60.01</td>
</tr>
<tr>
<td>Powercor</td>
<td>$65.76</td>
</tr>
<tr>
<td>United Energy</td>
<td>$46.96</td>
</tr>
</tbody>
</table>


Environmental scheme costs

Large-scale Renewable Energy Target costs

Under the Large-scale Renewable Energy Target scheme, the Clean Energy Regulator has set the 2023 renewable power percentage (18.96 per cent). We calculate the 12-month average of forward market prices for financial year 2023–24 large-scale generation certificates.\(^{179}\) We include a true-up to account for the difference between the 2022 renewable power percentage used in the 2022 – 23 Default Offer and the midpoint renewable power percentage of 2022 and 2023.

Small-scale Renewable Energy Scheme costs

We used the mid-point between the 2023 binding and 2024 non-binding small-scale technology percentage to calculate the liability for this decision.180 Historically, spot prices for certificates under the Small-scale Renewable Energy Scheme have been at or close to the clearing house price of $40. For this reason, the price per certificate is assumed to be $40. We include a true-up to account for the difference in the non-binding and binding 2023 small-scale technology percentage, allowing an adjustment for the difference between the 2022–23 Default Offer and this final decision.

Victorian Energy Upgrades costs

For the cost of complying with the Victorian Energy Upgrades program, we use the relevant greenhouse gas reduction rate for electricity for the calendar year 2023 (0.1631).181 The cost of Victorian energy efficiency certificates under the Victorian Energy Upgrades program is estimated from the trade-weighted average of 12-month historic spot market prices. Based on the information available on 4 April 2023, we estimated an average price of $68.56 per certificate for the final decision. Our benchmark of the per megawatt hour Victorian Energy Upgrade Costs for the final decision is $11.18.

Feed-in Tariff (social cost of carbon)

For the final decision, the impact of the feed-in tariff on retailer costs is based on total small-scale renewable exports in the most recently available calendar year182 multiplied by the social cost of carbon (2.5 cents per kWh for 2023–24). The resulting figure is divided by the total average domestic and small business customer numbers in the same period.

---


182 Total renewable exports from 1 January 2022 to 31 December 2022. Renewable export data is provided to us by distribution network service providers. We used renewable export data for financial year 2021–22 for one distribution network service provider due to its lack of updated calendar year renewable export data at the time of making our final decision.
Table D.8: Cost of complying with environmental schemes (GST exclusive):

<table>
<thead>
<tr>
<th>Environmental scheme</th>
<th>Certificate price, $/MWh</th>
<th>Scheme liability, %</th>
<th>Cost, $/MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large-scale Renewable Energy Target</td>
<td>$54.83</td>
<td>18.96</td>
<td>$10.40</td>
</tr>
<tr>
<td>Small-scale Renewable Energy Scheme</td>
<td>$40.00</td>
<td>17.14</td>
<td>$6.86</td>
</tr>
<tr>
<td>Victorian Energy Upgrades</td>
<td>$68.56</td>
<td>16.31</td>
<td>$11.18</td>
</tr>
<tr>
<td>Feed-in Tariff (social cost of carbon)</td>
<td></td>
<td></td>
<td>$16.95/customer</td>
</tr>
<tr>
<td>Small-scale Renewable Energy Scheme true up adjustment (GST inclusive)</td>
<td></td>
<td></td>
<td>-$1.49</td>
</tr>
<tr>
<td>Large-scale Renewable Energy Target true up adjustment (GST inclusive)</td>
<td></td>
<td></td>
<td>$0.07</td>
</tr>
</tbody>
</table>


Retail costs and margin

We describe our benchmarking approach to retail costs and margin in the chapter on cost components. These costs are fixed and apply equally across each distribution zone.

Retail operating costs

Our benchmark for the final decision is $132.03 excluding GST for retail operating costs.

Customer acquisition and retention costs

Our benchmark for the final decision is $43.89 excluding GST for customer acquisition and retention costs.

Retail margin

We applied a retail margin of 5.3 per cent of total revenue.

Table D.9: Retail costs and margin (GST exclusive)

<table>
<thead>
<tr>
<th>Retail costs and margin</th>
<th>Annual benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail operating costs</td>
<td>$132.03</td>
</tr>
<tr>
<td>Customer acquisition and retention costs</td>
<td>$43.89</td>
</tr>
<tr>
<td>Retail margin</td>
<td>5.3%</td>
</tr>
</tbody>
</table>
Other costs

Retailers incur other costs through fees for market operations and ancillary services. Information about these costs has been gathered primarily from the Australian Energy Market Operator’s draft Budget and Fees and compensation updates. The estimate of our licence fee is a market-wide average based on the approved fees for the year 2022–23, which is the latest available information. We adopted a forecast of ancillary charges based on analysis of the past 12 months of ancillary service cost data.

Table D.10: Other costs (GST exclusive)

<table>
<thead>
<tr>
<th>Charge</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential Services Commission licence fee</td>
<td>$2.26/customer</td>
</tr>
<tr>
<td><strong>Australian Energy Market Operator fees</strong></td>
<td></td>
</tr>
<tr>
<td>National Electricity Market fees - fixed</td>
<td>$4.61/customer</td>
</tr>
<tr>
<td>National Electricity Market fees - variable</td>
<td>$0.28/MWh</td>
</tr>
<tr>
<td>Full retail contestability</td>
<td>$1.31/customer</td>
</tr>
<tr>
<td>National Transmission Planner</td>
<td>$0.00/MWh</td>
</tr>
<tr>
<td>IT Upgrade and Five-minute and global settlement compliance fees - fixed</td>
<td>$1.63/customer</td>
</tr>
<tr>
<td>IT Upgrade and Five-minute and global settlement compliance fees - variable</td>
<td>$0.10/MWh</td>
</tr>
<tr>
<td>Distributed energy resources integration program fees - fixed</td>
<td>$0.19/customer</td>
</tr>
<tr>
<td>Distributed energy resources integration program fees - variable</td>
<td>$0.01/MWh</td>
</tr>
<tr>
<td>Energy Consumers Australia</td>
<td>$0.66/customer</td>
</tr>
<tr>
<td>Ancillary services</td>
<td>$0.48/MWh</td>
</tr>
<tr>
<td>Reliability and Emergency Reserve Trader</td>
<td>$0.00/customer</td>
</tr>
<tr>
<td>Market suspension - usage</td>
<td>$0.68/MWh</td>
</tr>
<tr>
<td>Directions - usage</td>
<td>$0.12/MWh</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administered price cap - usage</td>
<td>$0.00/MWh</td>
</tr>
<tr>
<td>Total per MWh:</td>
<td>$1.68/MWh</td>
</tr>
<tr>
<td>Total per customer:</td>
<td>$10.66/customer</td>
</tr>
</tbody>
</table>

\(^{184}\) Values in the table do not sum to exact total due to rounding.
Appendix E: How we assessed the Victorian Default Offer

Appendix A sets out the requirements for and matters we must have regard to in making a Victorian Default Offer price determination. This appendix summarises how we considered these matters.

Our approach to this review

In coming to our final decision on the 2023–24 Victorian Default Offer, we have built on our 2022–23 price determination, assessed developments in the retail electricity market (since we made our last final decision) and analysed the costs of providing retail electricity services, among other matters. We consider this approach and methodology best meets our legislative objectives and requirements.

Our review has used largely the same methodology as we did in our 2022–23 price determination. As part of this review, the estimates included in the cost stack were updated to reflect changes in the market and new data that is now available. Our approach helped us establish the cost estimates that best meet our legislative objectives, including our obligation that the price determination be based on the efficient costs of the sale of electricity by a retailer, in light of the matters we must have regard to (see appendix A).

We analysed the efficient costs of electricity retailers

Through issuing notices under our compulsory information gathering powers, we have collected cost data from electricity retailers. This information allowed us to understand the types of costs electricity retailers incur and elements of the efficient costs of supplying electricity to customers. The analysis of the cost data has informed our assessment of costs in our final decision for the 2023-24 Victorian Default Offer.

We sought advice from independent consultants on forecasting retailers’ wholesale electricity costs and retailers’ costs of complying with environmental programs for 2023–24.

Our approach and methodology include these elements to estimate the efficient costs of the sale of electricity by a retailer.\(^\text{185}\)

---

\(^{185}\) Clauses 12(3) and 12(4) of the pricing order.
• wholesale electricity costs – based on the price for wholesale electricity futures contracts (we also account for the cost of electricity lost when it is transported)
• network costs – which are directly taken from tariffs approved by the Australian Energy Regulator
• environmental costs – using available market data on the expected future costs of meeting renewable energy schemes and the Victorian Energy Upgrades program
• retail operating costs – based cost data from retailers
• other costs – taken directly from published reports from industry bodies
• retail operating margin – based on a benchmark from a comparable regulatory decision and the expected returns approach.

Some elements of the cost-stack are estimated using market data such as wholesale electricity purchase costs. We updated estimates of these elements in our final decision to account for any changes in market data that occurred since our draft decision. The data provided by retailers was used to set the retail operating cost benchmark, as a cross check of our cost stack and allowed us to compare the cost stack elements across different segments of the retail market. We also used findings from other regulators (such as decisions on the retail operating margin) in assessing the cost stack.

The Victorian Default Offer amounts may differ from the actual costs of retailers. We have sought to estimate the efficient costs of retailers, which at times and for some retailers may diverge from actual costs. In addition, as required by the pricing order, we have not included headroom in our cost stack.

We considered changes to the capital expenditure of retailers

In considering efficient costs, we may consider any other costs additional to those identified in the pricing order, or other matters or things we, in the exercise of our discretion, consider appropriate or relevant.186

Among other things, our review has taken into consideration the treatment of the capital expenditure due to regulatory changes in the market. We have also considered how retailers’ depreciation costs have changed over time.

At a high level, our analysis of cost data provided to us by retailers obtained through our formal information gathering powers following our draft decision, suggests the retail margin benchmark we adopted provides a reasonable opportunity for a retailer to recover efficient costs. In considering

186 Clause 12(4)(f) of the pricing order.
this information we have had regard to our statutory objectives, including the financial viability of the retail energy market and promoting full retail competition.

**We considered our approach to the compliant maximum annual bill**

Our price determination framework also includes a compliant maximum annual bill. While our first determination was required to use a maximum bill to regulate non-flat standing offer tariffs, the requirements for subsequent decisions (including this one) allow us to decide on the best approach. In this decision we continue to include a two-period time of use that will cover most non-flat standing offers. We also continued to include a compliant maximum annual bill so that all standing offer customers can enjoy the protection of the Victorian Default Offer.

In taking this approach we had regard to the objective of the Victorian Default Offer to provide a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the electricity retail market.\(^{187}\) We also consider this arrangement provides a framework that does not impose unreasonable costs on retailers.\(^{188}\) As with other elements of our methodology, we also had regard to the approaches adopted by other regulators including the Australian Energy Regulator’s Default Market Offer.\(^{189}\)

**Our assessment approach helps us meet our legislative requirements**

**Our assessment approach helps us meet our objectives**

In deciding our approach and methodology for setting the Victorian Default Offer, and in making the Victorian Default Offer price determination 2023-24 our objectives are to:

- promote the long-term interests of Victorian consumers, having regard to the price, quality and reliability of essential services \(^{190}\)
- promote protections for customers, promote the development of full retail competition and to adopt a consistent regulatory approach between the electricity and gas industries (noting there is currently no framework for the regulation of prices for retail gas services).\(^{191}\)

\(^{187}\) Clause 3 of the pricing order.

\(^{188}\) Essential Services Commission Act 2001, s 8A(1)(e).

\(^{189}\) Essential Services Commission Act 2001, s 8A(1)(f).

\(^{190}\) Essential Services Commission Act 2001, s8 and s 8A.

\(^{191}\) Electricity Industry Act 2000, s 10.
• provide a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the electricity retail market.192

Having regard to the relevant matters under section 8A and section 33 of the ESC Act

In seeking to achieve our objectives in making our determination, we must have regard to a number of matters to the extent that they are relevant.193 We have had regard to all of these matters in coming to our final decision.

Efficiency

Efficiency is an important consideration for our decision.194 Our approach helped us establish the tariffs that reflect the efficient costs of the sale of electricity by a retailer, including a retail operating margin.195 Our review used largely the same approach as our 2022–23 price determination.

Financial viability

A related matter is the consideration of long-term incentives for investment and financial viability.196 As our decision on the Victorian Default Offer reflects our estimates of efficient costs we consider that it helps promote the financial viability of the industry.

Competition within the industry

In relation to the scope for competition in the market we note setting prices at efficient costs is consistent with competition and does not preclude innovation that may lead to customers accepting market contracts that offer a better deal for them than the Victorian Default Offer. Likewise, it does not prevent retailers, who can lower their costs, from attracting customers by making cheaper market offers available.197

The relevant legislation applying to the industry

We considered other legislation that affects the efficient costs of a retailer.198 Among other things, we considered costs associated with regulatory requirements on retailers (such as the Large-scale Renewable Energy Target, Small-scale Renewable Energy Scheme, Victorian Energy Upgrades, 192 Clauses 3 and 12(2) of the pricing order. Also consistent with section 10(c), Electricity Industry Act.
194 Essential Services Commission Act 2001, ss 8A(1)(a) and 33(3)(b).
195 Clause 12(4)(e) of the pricing order.
196 Essential Services Commission Act 2001, s 8A(1)(b).
197 Essential Services Commission Act 2001, s 8A(1)(c).
and consumer data right). We also note that our benchmarks of retailer operating costs, customer acquisition and retention costs and retail operating margin reflect the costs and margins of Victorian retailers complying with regulatory and legislative requirements.

The benefits and costs of regulation

The Victorian Default Offer was introduced as part of an independent review of the gas and electricity markets in Victoria. The Victorian Default Offer is a simple, trusted and reasonably priced electricity option that safeguards customers unable to engage in the electricity retail market.199 In formulating the Victorian Default Offer we are not required to revisit the costs and benefits of implementing the Victorian Default Offer.200

Consistency in regulation between States and on a national basis and any relevant interstate and international benchmarks in comparable industries

We looked at regulation of retail electricity prices on a national basis and considered relevant benchmarks from other jurisdictions. In considering benchmarks from other jurisdictions, we also had regard to the different policy intent of the relevant legislation.201

The particular circumstances of the regulated industry

As part of this review, the estimates included in the cost stack have been updated to reflect changes in the market and new data that is now available.202 We also had regard to actual cost data from retailers. We also considered the broader economic environment including the impact of wholesale electricity market intervention compensation and increased debt finance costs on retailers.

Accounting for trade-offs between costs and service standards

We must ensure that the determination takes into account and clearly articulates any trade-offs between costs and service standards.203 In terms of quality and reliability of services, retailers are required to offer the Victorian Default Offer under the regulated terms and conditions for standard

---


200 Under clause 12(11) of the pricing order, section 33(4)(a) of the Essential Services Commission Act 2001 does not apply to a Victorian Default Offer price determination.

201 Essential Services Commission Act 2001, ss 8A(1)(f) and 33(3)(d).

202 Essential Services Commission Act 2001, s 8A(1)(e).

retail contracts. We consider the prices provided to retailers under the Victorian Default Offer will be sufficient for retailers to ensure the quality of service experienced by customers to at least continue to meet these regulated terms and conditions.

**Other relevant matters under clause 12 of the pricing order**

Clause 12 of the pricing order provides for certain further matters we must have regard to when adopting our approach and methodology for making a Victorian Default Offer price determination. We considered these matters in making our final decision. These are the wholesale electricity costs, network costs, environmental costs, retail operating costs, including only modest costs of customer acquisition and retention, retail operating margin, and any other costs, matters or things we consider appropriate or relevant.

The commission has had regard to these matters and they are dealt with in the body of our decision including the cost stack chapter.
Appendix F: Stakeholder submissions on draft decision paper

<table>
<thead>
<tr>
<th>Name of organisation</th>
<th>Date received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anonymous 1</td>
<td>15 March 2023</td>
</tr>
<tr>
<td>Susan Taylor</td>
<td>15 March 2023</td>
</tr>
<tr>
<td>Anonymous 2</td>
<td>15 March 2023</td>
</tr>
<tr>
<td>Michael Bethune</td>
<td>15 March 2023</td>
</tr>
<tr>
<td>Anonymous 3</td>
<td>17 March 2023</td>
</tr>
<tr>
<td>Momentum Energy</td>
<td>5 April 2023</td>
</tr>
<tr>
<td>Energy Consumers Australia</td>
<td>5 April 2023</td>
</tr>
<tr>
<td>Consumer Action Law Centre</td>
<td>5 April 2023</td>
</tr>
<tr>
<td>Good Shepherd</td>
<td>6 April 2023</td>
</tr>
<tr>
<td>Aaron McGlade</td>
<td>7 April 2023</td>
</tr>
<tr>
<td>Simply Energy</td>
<td>11 April 2023</td>
</tr>
<tr>
<td>COTA Victoria</td>
<td>11 April 2023</td>
</tr>
<tr>
<td>EnergyAustralia</td>
<td>11 April 2023</td>
</tr>
<tr>
<td>Brotherhood St. Laurence</td>
<td>11 April 2023</td>
</tr>
<tr>
<td>Alinta Energy</td>
<td>11 April 2023</td>
</tr>
<tr>
<td>Australian Energy Council</td>
<td>11 April 2023</td>
</tr>
<tr>
<td>Red Energy Lumo Energy</td>
<td>11 April 2023</td>
</tr>
<tr>
<td>Powershop</td>
<td>11 April 2023</td>
</tr>
<tr>
<td>Victorian Council of Social Service</td>
<td>11 April 2023</td>
</tr>
<tr>
<td>Energy Locals</td>
<td>11 April 2023</td>
</tr>
<tr>
<td>Network Energy Services</td>
<td>11 April 2023</td>
</tr>
<tr>
<td>Stakeholder</td>
<td>Date</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Energy and Water Ombudsman Victoria</td>
<td>13 April 2023</td>
</tr>
<tr>
<td>Victorian Energy Policy Centre</td>
<td>13 April 2023</td>
</tr>
<tr>
<td>Origin Energy</td>
<td>13 April 2023</td>
</tr>
<tr>
<td>AGL</td>
<td>18 April 2023</td>
</tr>
</tbody>
</table>
## Appendix G: Changes to cost benchmarks

Table G.1 shows how our cost stack has changed compared to our draft decision for the 2023–24 Victorian Default Offer.

### Table G.1: Changes between 2023–24 Victorian Default Offer draft and final decisions

<table>
<thead>
<tr>
<th>Item</th>
<th>2023–24 Victorian Default Offer draft decision</th>
<th>2023–24 Victorian Default Offer final decision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Victorian Default Offer costs</strong></td>
<td>12-month trade weighted contract price is calculated from the daily settlement price for each day in the period except the date that options contracts are exercised (21 November 2022). Final reading last Friday of April.</td>
<td>Same approach, but we removed peak swap contracts from our wholesale cost benchmark. This better reflects retailers’ actual approach to building their hedgebooks.</td>
</tr>
<tr>
<td>Wholesale electricity costs</td>
<td>We used indicative network tariffs from the pricing proposals of network businesses adjusted for inflation by the consumer price index. Metering costs based on customer weighted average of current metering costs adjusted for inflation.</td>
<td>Australian Energy Regulator’s approved network tariffs were available. So these tariffs were used.</td>
</tr>
<tr>
<td>Network costs</td>
<td></td>
<td>Australian Energy Regulator’s approved network tariffs were available. So these tariffs were used.</td>
</tr>
<tr>
<td>Environmental costs</td>
<td>No change in approach but updated with most recent data.</td>
<td>No change in approach but updated with most recent data.</td>
</tr>
<tr>
<td>Large-scale Renewable Energy Target</td>
<td>No change in approach but updated with most recent data.</td>
<td>No change in approach but updated with most recent data.</td>
</tr>
<tr>
<td>Small-scale Renewable Energy Scheme</td>
<td>No change in approach but updated small-scale technology percentage to reflect the midpoint of the 2023 binding and 2024 non-binding percentages.</td>
<td>No change in approach. Draft decision data is still the most recent available.</td>
</tr>
<tr>
<td>Victorian Energy Upgrades</td>
<td>No change in approach but used 2023 greenhouse reduction rate.</td>
<td>No change in approach but updated with most recent data.</td>
</tr>
<tr>
<td>Minimum feed-in tariff (social costs of carbon)</td>
<td>No change in approach but used renewable exports and average total domestic and small-business customers for financial year 2021-22</td>
<td>No change in approach but updated with most recent data.</td>
</tr>
<tr>
<td>Item</td>
<td>2023–24 Victorian Default Offer draft decision</td>
<td>2023–24 Victorian Default Offer final decision</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Retail operating costs</td>
<td>Estimated based on a benchmark set by taking the customer weighted average of retailers’ actual operating cost data from financial year 2020-21. This benchmark was adjusted for the change in consumer price index since June 2021.</td>
<td>Estimated based on a benchmark set by taking the customer weighted average of retailers’ actual operating cost data from financial year 2021-22. This benchmark was adjusted for the change in consumer price index since June 2022.</td>
</tr>
<tr>
<td></td>
<td>This will be updated to reflect 2021-22 cost data in our final decision.</td>
<td></td>
</tr>
<tr>
<td>Customer acquisition and retention costs</td>
<td>No change in approach.</td>
<td>No change in approach.</td>
</tr>
<tr>
<td>Other costs</td>
<td>Included amounts for known market intervention compensations amounts for directions, suspension pricing (provisional and revision amounts) and administered pricing compensations claims as of 6 January 2023.</td>
<td>No change in approach but updated with most recent data.</td>
</tr>
<tr>
<td></td>
<td>Australian Energy Market Operator fees based on draft 2023–24 budget fees including allocation change effective 1 July 2023 and portion of fixed and variable fees.</td>
<td>Australian Energy Market Operator fees based on draft 2023–24 budget fees including allocation change effective 1 July 2023 and portion of fixed and variable fees.</td>
</tr>
<tr>
<td></td>
<td>Used market intervention compensation amounts known as of 28 April 2023.</td>
<td>Used market intervention compensation amounts known as of 28 April 2023.</td>
</tr>
<tr>
<td>Retail operating margin</td>
<td>No change in approach, set at 5.7% of cost stack</td>
<td>Set at 5.3% of cost stack having regard to benchmarks set by other regulators and the expected returns model.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This better reflects current market conditions.</td>
</tr>
<tr>
<td>Other matters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tariffs and structure</td>
<td>No change in approach</td>
<td>No change in approach</td>
</tr>
<tr>
<td>Regulatory period</td>
<td>No change in approach</td>
<td>No change in approach</td>
</tr>
<tr>
<td>Consultation papers</td>
<td>Replace with request for comment papers.</td>
<td>Replace with request for comment papers.</td>
</tr>
</tbody>
</table>
Table G.2: Changes in average Victorian Default Offer domestic cost benchmarks, $ nominal (flat tariff average across all five Victorian distribution zones).

<table>
<thead>
<tr>
<th>Item</th>
<th>2022–23 final</th>
<th>2023–24 draft</th>
<th>2023–24 final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale electricity costs</td>
<td>$340</td>
<td>$665</td>
<td>$636</td>
</tr>
<tr>
<td>Network costs</td>
<td>$527</td>
<td>$579</td>
<td>$549</td>
</tr>
<tr>
<td>Environmental costs</td>
<td>$138</td>
<td>$131</td>
<td>$132</td>
</tr>
<tr>
<td>Retail operating costs (including acquisition costs)</td>
<td>$187</td>
<td>$178</td>
<td>$176</td>
</tr>
<tr>
<td>GST</td>
<td>$127</td>
<td>$167</td>
<td>$160</td>
</tr>
<tr>
<td>Retail operating margin</td>
<td>$73</td>
<td>$95</td>
<td>$85</td>
</tr>
<tr>
<td>Other costs</td>
<td>$10</td>
<td>$14</td>
<td>$18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,403</strong></td>
<td><strong>$1,829</strong></td>
<td><strong>$1,755</strong></td>
</tr>
</tbody>
</table>