ESSENTIAL SERVICES COMMISSION

Victorian Default Offer 2022–23

Draft decision

15 March 2022

An appropriate citation for this paper is:

Essential Services Commission 2022, Victorian Default Offer 2022–23: Draft decision, 15 March

Copyright notice

Contents

Our draft decision would slightly increase the Victorian Default Offer

- Our draft decision results in slightly higher prices than current Victorian Default Offer prices.
- The average annual bill for residential customers on the Victorian Default Offer will be one per cent higher.
- The average annual bill for small business customers on the Victorian Default Offer will also be one per cent higher.
- The change in prices is largely due to a forecast increase in wholesale electricity prices.
- We are seeking feedback on our draft decision by 12 April, to be considered for our final decision which will be made by 24 May 2022.

The Victorian Default Offer was introduced by the Victorian Government on 30 May 2019 to regulate standing offer prices for electricity in Victoria.

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 further contract
- moved into a new address and uses electricity without entering into a contract or
- specifically asked for a standing offer.

Although prices for standing offers are regulated, electricity retailers can and do supply electricity under market offers with prices that are different to standing offers.

In addition to setting the price for standing offers, the Victorian Default Offer must be used as a reference price, against which all discounts advertised for market offers must be compared. This makes it easier for customers to compare offers between different retailers.

We must review prices before the end of each regulatory period

The pricing order issued under the Electricity Industry Act 2000 gives us the role of setting the prices for standing offers.[1]

On 25 November 2021, we set Victorian Default Offer prices for the regulatory period 1 January to 30 June 2022. We refer to this regulatory period as the 1 January 2022 Victorian Default Offer.

Under the pricing order, we must make a new determination for the Victorian Default Offer tariffs to apply from 1 July 2022 (2022-23 Victorian Default Offer). We must do so by 24 May 2022.

The objective of the Victorian Default Offer and who it applies to

The Victorian Default Offer's objective is to provide a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the electricity market.

The Victorian Default Offer is a set of prices that applies to all types of standing offers. Since 1 September 2020 the Victorian Default Offer has also applied as a maximum price for most embedded network customers.[2] The Victorian Default Offer is also a reference price to help consumers compare market offers.

The Victorian Default Offer is generally available to domestic and small business customers. Around 200,000 households and 50,000 small businesses are on standing offers. This represents seven per cent of households and 16 per cent of small business customers. Victorian Default Offer prices also operate as a price cap for roughly 140,000 customers in embedded networks.

Customers may be able to get a better deal than the Victorian Default Offer

For most customers, the Victorian Default Offer will not be the best offer available. Retailers must regularly tell customers whether they are on the retailer's best energy plan, and how much the customer could save by switching. Embedded networks may also offer prices below the Victorian Default Offer.

The Victorian Default Offer would increase by about one per cent

Under our draft decision, on average across all five distribution zones, bills for residential and small business customers on the Victorian Default Offer would increase by about one per cent. The

[1] Order in Council made under section 13 of the Electricity Industry Act 2000 and published in the Victorian Government Gazette No. S 208 on Thursday 30 May 2019. An amendment to schedule 1 was ordered in the Victorian Government Gazette, No. S 216 Tuesday 4 June 2019 (updating controlled load charges).

[2] Embedded networks supply electricity for many customers in apartment buildings or caravan parks, for example Residential and small business customers, consuming no more than 40 megawatt hours of electricity per year, within embedded networks will be set at the level of the Victorian Default Offer. Source: Essential Services Commission, Maximum prices for embedded networks and other exempt sellers: Final decision, July 2020, p. ii.

average annual bill for residential customers under the 1 January 2022 Victorian Default Offer was $1,342; this will increase to $1,361 under our draft decision (figure 1). The average annual bill for a small business would rise from around $5,350 to $5,423 (figure 2).

Across the Victorian Default Offer cost stack, the main reason for the increase is our forecast for higher wholesale electricity costs (particularly during the early morning and evening), and to a lesser extent, increases in environmental and retail operating costs (the latter due to inflation). These offset a decrease in network costs.

Figure 1: change in Victorian Default Offer annual bills for residential customers

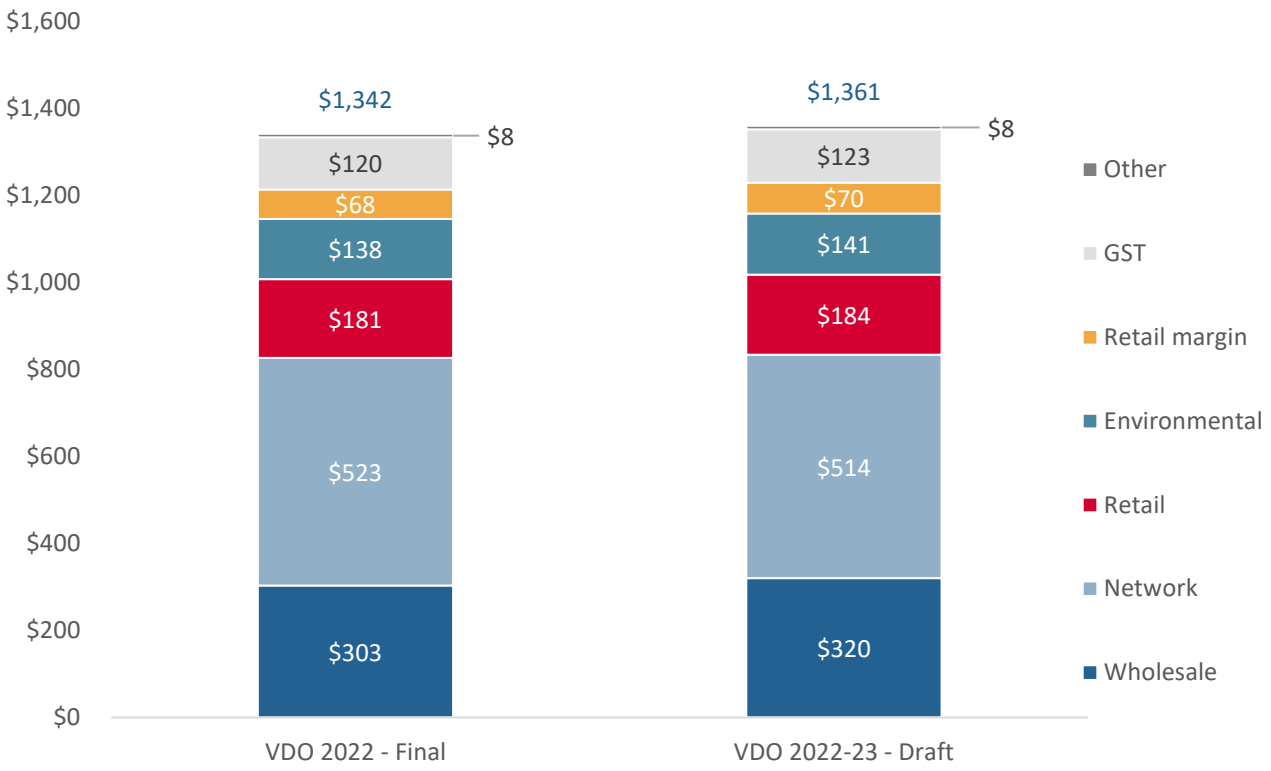
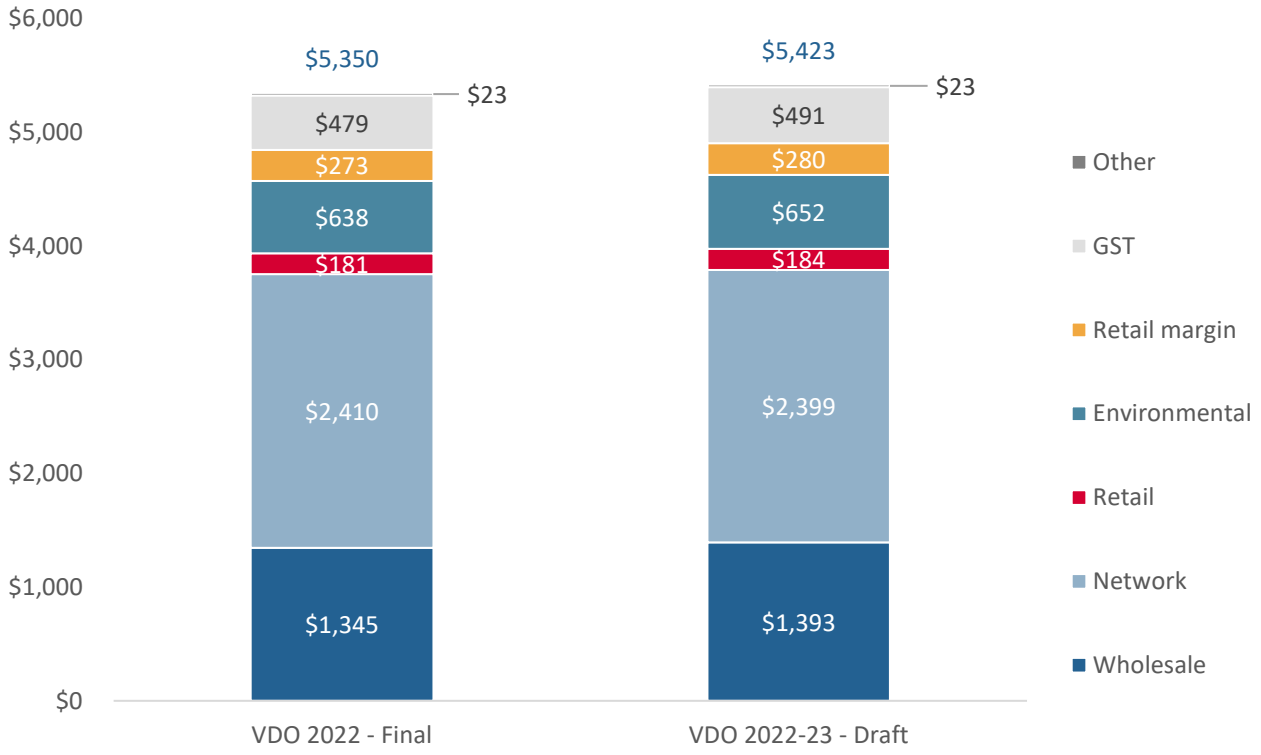


Figure 2: Change in Victorian Default Offer annual bills for small business customers



We propose to keep our approach largely unchanged

We consider that using largely the same approach as we did in our 1 January 2022 Victorian Default Offer price determination will best meet our legislative objectives (set out at Appendix A). We have made this decision after considering all matters raised by stakeholders, and all relevant provisions and matters we must have regard to under the Essential Services Commission Act 2001 (ESC Act), Electricity Industry Act 2000 (EI Act) and the pricing order (provided at Appendix B).

Some updates to our methodology proposed in our draft decision are summarised in table 1.

Table 1: Proposed updates to our approach

Cost item	Past approach	Proposed approach
Wholesale electricity	We used five years of historical data to estimate electricity demand which is used to calculate the wholesale cost forecasts.	We propose to use the three most recent years of data to estimate electricity demand/load. This is to reflect the changed pattern of electricity demand resulting from investment in rooftop solar. More information is available on pages 10–11. This has an impact of less than $3.13 on the average residential Victorian Default Offer bill.
Metering	We used the cheapest meter configuration to	We propose to use a customer weighted average approach to calculate metering costs.

	calculate metering costs.	The change is to better estimate the efficient costs associated with metering. More information is available from pages 14–15. This has an impact of around $3.25 on the average residential Victorian Default Offer bill.

When we released our final decision for the 1 January 2022, we sought stakeholders' feedback on matters we should consider in the 2022–23 Victorian Default Offer review. We received submissions from seven retailers. We have considered their submissions in making our draft decision. See the chapter on the Victorian Default Offer cost components for details.

We are seeking stakeholders' views

We invite stakeholders to give us feedback on this draft decision paper.

Submissions should be made by **5 pm on 12 April 2022**. We may not be able to consider, or may not give the same weight to, submissions received after this date.

To make a submission on this paper please go to Engage Victoria's website: www.engage.vic.gov.au. Otherwise, please email us at VDO@esc.vic.gov.au to discuss other options for making a submission.

All submissions come under the commission's submissions policy. Submissions will be made available on the commission's website, except for any information that is commercially sensitive or confidential. Submissions should clearly identify which information is sensitive or confidential.

To help stakeholders plan how to take part in this review, table 2 provides indicative timeframes for consultation on the 2022-23 Victorian Default Offer.

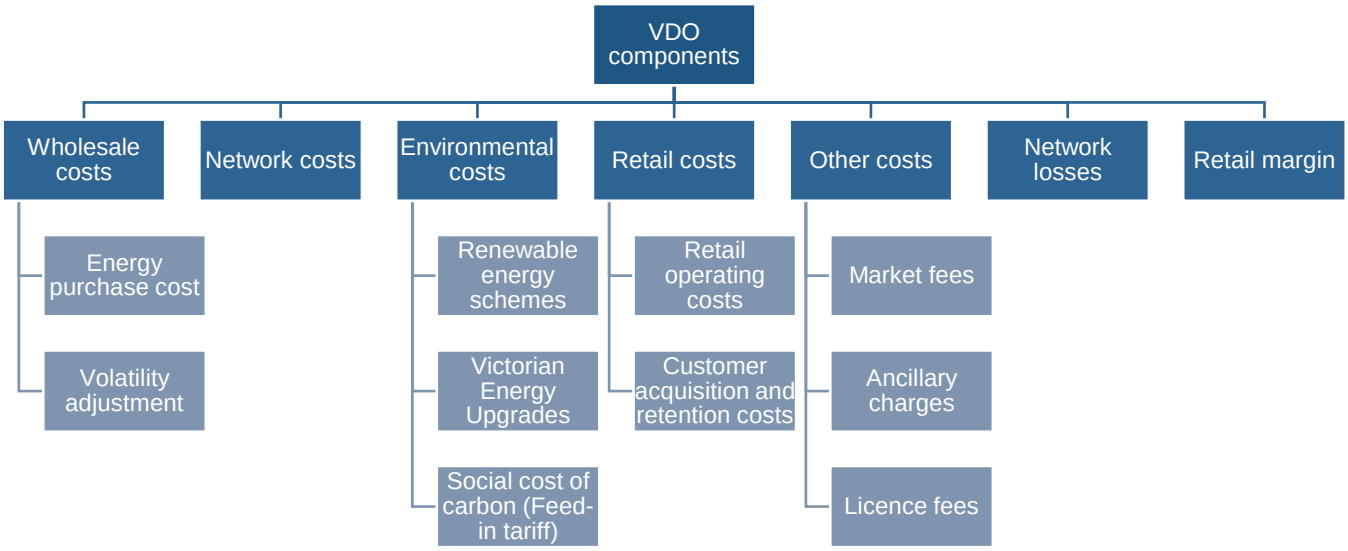
Table 2: Timeframes for the 2022-23 Victorian Default Offer review

Key milestones	Indicative date
Draft decision	15 March 2022
Draft decision – public forum	late March/early April 2022
Submissions on draft decision close	12 April 2022
Final decision and final determination	24 May 2022
Victorian Default Offer takes effect	1 July 2022

Victorian Default Offer cost components

We must base the Victorian Default Offer tariffs on the efficient costs of the sale of electricity by a retailer.[3] We are also required to have regard to a number of cost components in setting tariffs.[4]

Figure 3: Cost items included in the Victorian Default Offer cost stack



A summary of our approaches to estimating the amount each item makes up in the total Victorian Default Offer costs is as follows:

- 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 benchmarks from previous regulatory decisions
- other 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.

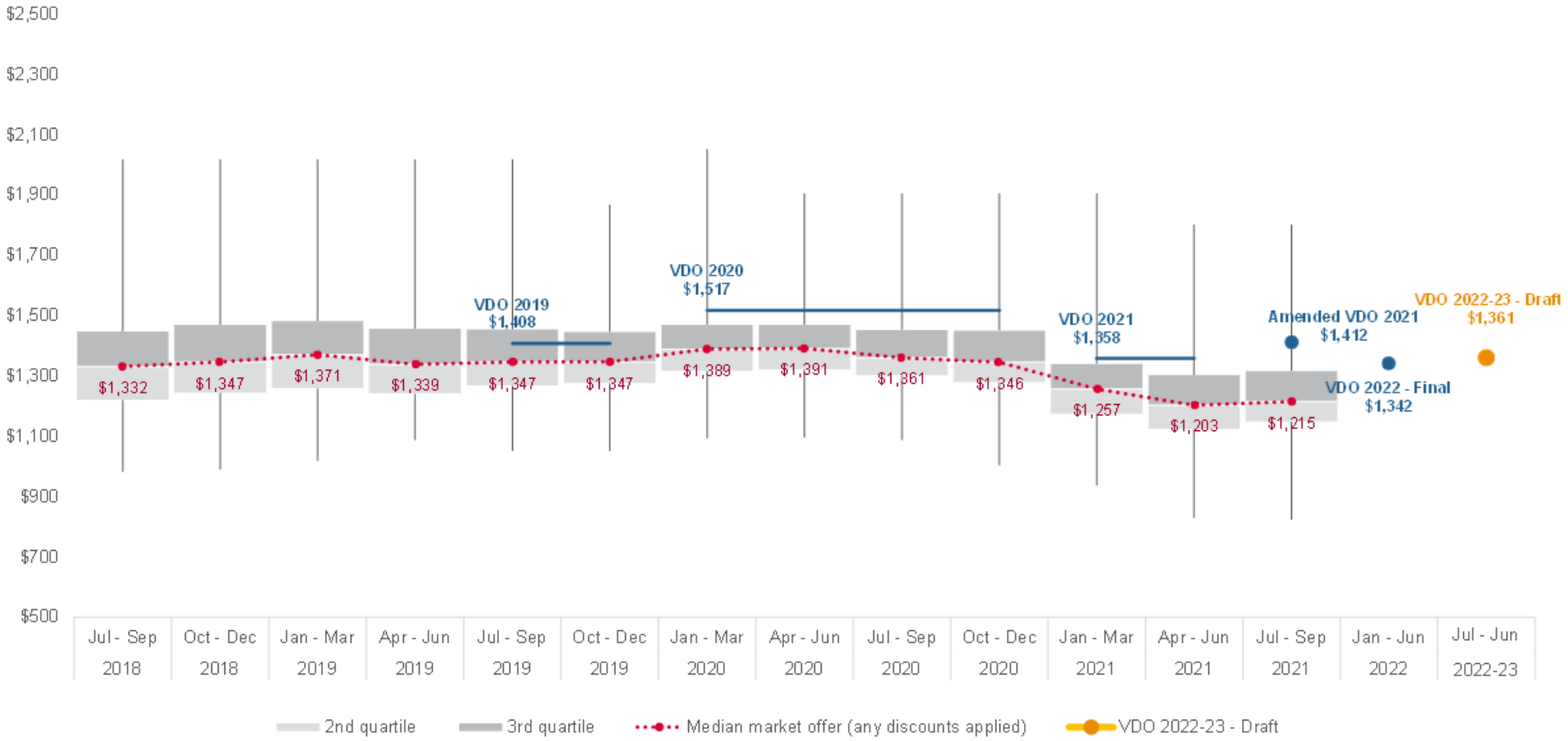
As part of this review, we updated the estimates included in the cost stack to reflect the most up to date information available. We will update these again prior to the final decision.

As shown in figure 4, the average 2022–23 Victorian Default Offer bill remains above most market offers. This suggests it allows retailers a reasonable opportunity recover at least efficient costs.

[3] Pricing Order clause 12(3).

[4] Pricing Order clause 12(4).

Figure 4: Annual residential Victorian Default Offer bill compared to market offer bills (4,000 kWh/year)



Note: The VDO figure included here is the average residential bill across all five Victorian distribution zones. We also note there are different ways to visualise the information presented in figure 4 depending on the purpose of the report. For example, all offers for each retailer within a distribution zone at a given time could be displayed to show differences in retailers' price offerings at a given time.

Wholesale electricity costs

- Our draft decision is to use forecasts of wholesale electricity prices based on futures prices from ASX Energy. This was our approach in the 1 January 2022 Victorian Default Offer price determination.
- Wholesale electricity purchase costs make up around 24 per cent of an annual residential bill (averaged across the five distribution zones).
- Wholesale electricity costs in our draft decision are 6 per cent higher than those in the 1 January 2022 Victorian Default Offer cost stack for residential users.

We forecast energy purchase costs will be higher

Energy purchase costs are incurred by retailers when they purchase electricity from the wholesale market to meet demand from their customers. The pricing order requires us to have regard to the efficient costs of providing retail electricity services, including wholesale electricity purchase costs.[5] We have used a futures market approach to estimate a benchmark energy purchase cost for 2022–23. The futures market approach is based on an estimate of the costs that a retailer would face in supplying electricity to their customers using financial hedging products purchased on ASX Energy. We used this approach in previous Victorian Default Offer determinations.

Our draft decision forecast for wholesale electricity costs is 6 per cent higher than the benchmark adopted for the 1 January 2022 Victorian Default Offer. The main driver for the change is increased wholesale electricity contract prices.[6] We will update our forecasts for our final decision, noting the current global uncertainty and volatility in fuel prices could mean the wholesale cost benchmark adopted in our final decision is substantively different to the one adopted in our draft decision.

Retailers buy energy in the wholesale market

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 electricity. Some retailers own generators, but many buy electricity directly from generators on the spot market.[7] Buying electricity from the spot market exposes retailers to the risk that electricity

[5] Clauses 12(3) and 12(4) of the pricing order.

[6] Frontier, Wholesale electricity costs for 2022-23: A draft report for the Essential Services Commission, February 2022, pp. 27-31.

[7] 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, accessed 23 February 2022, https://www.aemc.gov.au/energy-system/electricity/electricity-market/spot-and-contract-markets.

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, the price it pays for electricity is set in advance or capped. Retailers can hedge by either contracting directly with a generator, or through a financial market transaction on ASX Energy, or with another financial intermediary.

Futures prices are transparent as they are publicly traded. Also, anyone can access contracts available through ASX energy.

Frontier Economics estimated wholesale electricity purchase costs

We engaged Frontier Economics to estimate wholesale electricity purchase costs. We have considered their approach and accept Frontier Economics' recommendations reflect an appropriate benchmark of the efficient wholesale electricity purchase costs for estimating Victorian Default Offer prices. A full description of Frontier Economics' methodology, including data sources, is included in its report.[8] A summary is provided below.

Frontier forecasts demand using Monte Carlo simulations

To forecast demand and the relationship between price and demand, Frontier Economics began by analysing 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 the Frontier 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.[9] Each simulated year is normalised in order 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 2022-23, subtracting a contract premium.[10] These simulations give a range of possible outcomes for demand and the relationship between price and demand for 2022-23.

Frontier then selects an efficient hedging position using its STRIKE model

With this range of possible demand conditions Frontier then estimates the hedging position a prudent retailer would adopt. To estimate the cost of financial hedging, we asked Frontier to use

---

[8] Frontier, Wholesale electricity costs for 2022-23: A draft report for the Essential Services Commission, February 2022.

[9] 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).

[10] The assumed contract premium is five per cent on the underlying prices.

12-month trade-weighted hedging contract prices from ASX Energy (base swaps, peak 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.

Our approach is consistent with the approach we used in the 1 January 2022 Victorian Default Offer except that Monte-Carlo simulations to estimate demand are based on data from the most recent three years available (2019 to 2021) instead of all available years.

In recent years we have seen record levels of investment in rooftop solar. This has altered the pattern of demand for and supply of electricity. These changes mean that data from earlier years on demand and the relationship between demand and prices no longer reflect what is currently happening in the energy market. Frontier Economics noted that there is:

> … increasing evidence that patterns of load and patterns of prices are exhibiting a trend, with load and prices both tending to be lower during the day. While the evidence of this trend is still somewhat mixed for load (given that we are considering load for two customer types and 5 DNSPs), the evidence of this trend is clearer at this stage for pricing patterns.[11]

Frontier Economics recommended using the three most recent years of data in the Monte Carlo simulations as it would provide more accurate forecasts of demand than using all of the years available.[12]

We agree with Frontier Economics' recommendation as it will lead to more accurate wholesale cost forecasts. Using only the three most recent years of price and demand data will increase wholesale cost forecasts by less than one per cent.

While we have used the three most recent years of data for this decision, in future price reviews, we may use a different number of years. We will continue to monitor trends in demand and price and use historical data that best reflects current and expected market conditions. This will ensure that the wholesale electricity cost forecasts are as accurate as possible. See Frontier Economics' report for details.[13]

---

[11] Frontier, Wholesale electricity costs for 2022-23: A draft report for the Essential Services Commission, February 2022, p.18.

[12] Frontier, Wholesale electricity costs for 2022-23: A draft report for the Essential Services Commission, February 2022, p.19.

[13] Frontier, Wholesale electricity costs for 2022-23: A draft report for the Essential Services Commission, February 2022.

Retailers highlighted this issue on the change in load profile in the 1 January 2022 Victorian Default Offer decision.[14] In that decision, Frontier Economics calculated the load premium for past years to see if the relationship between price and demand was significantly different between earlier years and the most recent market data available. The calculations suggested that the load premium for 2020-21 was consistent with the load premium for earlier years. For this reason, Frontier recommended using five years of load data for our 1 January 2022 Victorian Default Offer Decision. However, Frontier Economics' analysis for this decision notes that the load premium now appears to be moving further from where it was in earlier years.[15]

Why are wholesale costs in the Victorian Default Offer and feed-in tariffs different?

Wholesale electricity cost forecasts for the Victorian Default Offer are higher than the forecasts for the Minimum Feed-in Tariff. This is because wholesale prices during the day, when most solar energy is generated, have decreased significantly more than wholesale prices at other times of the day. To illustrate this, forecast wholesale costs across all times of the day have decreased by 49 per cent since 2019-20.[16] However, forecast wholesale prices weighted for the times that solar power is generated have decreased by 72 per cent over the same period.

Additionally, the forecasts for the Victorian Default Offer include hedging costs. These are not included in the forecasts for the Feed-in Tariff.

We factored network losses into our draft decision

When electricity is transported through transmission and distribution networks, some of it is lost in the process. Electrical losses occur because of electrical resistance in the wires, converting some electricity to heat. 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.

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

[14] Essential Services Commission, 1 January 2022 Victorian Default Offer: Final decision, November 2021, p. 15.

[15] Frontier, Wholesale electricity costs for 2022-23: A draft report for the Essential Services Commission, February 2022, p.19.

[16] Wholesale Price Forecasts for Calculating Minimum Feed-In Tariff: Final Report for the Essential Services Commission, 27 January 2022, p. 7; Wholesale Price Forecasts for Calculating Minimum Feed-In Tariff: A Report for the Essential Services Commission, 4 February 2019, p. 15.

Our draft decision for distribution loss factors is to 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 zones.[17]

In calculating the marginal loss factor, we take a simple average of the relevant regional reference node factor for each distribution zone.[18] We remove some transmission nodes as they 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.

Our approach is consistent with the approach we used in the 1 January 2022 Victorian Default Offer.

Stakeholder feedback on forecasting wholesale electricity costs

Momentum Energy, AGL and GloBird made submissions about wholesale electricity costs in response to our call for submissions on the 2022-23 Victorian Default Offer.

Wholesale forecasting period

Momentum Energy supported the use of a 12-month average period to wholesale costs for the 2022-23 Victorian Default Offer.[19]

AGL also supported the continued use of the same approach for consistency and transparency for future reviews. However, it suggested that a one-off adjustment of wholesale electricity costs would be required to account for under-recovery resulting from the transition from a calendar year to financial year regulatory cycle.[20]

The commission is in the process of changing the regulatory period for the Victorian Default Offer from calendar years to financial years. The first financial year regulatory period will apply from 1 July 2022. This change to financial years required a six-month regulatory period for the 1 January 2022 Victorian Default Offer. We used a 12-month weighted average wholesale price for that six-month regulatory period.

AGL considers that continuing to use a 12-month average will not adequately reflect the wholesale energy costs for an efficient retailer over the combined periods of 18 months (6 months for the 1 January 2022 Victorian Default Offer and 12 months for the 2022–23 Victorian Default Offer).

---

[17] Australian Energy Market Operator, Distribution Loss Factors for the 2021-22 Financial Year, July 2021, p. 13. We will update network losses in our final decision paper to account for the most recent information.

[18] Australian Energy Market Operator, Marginal Loss Factors for the 2021-22 Financial Year, July 2021, pp. 24-29.

[19] Momentum Energy, Victorian Default Offer 2022-23, submission received 3 February 2022, p. 1.

[20] AGL, Victorian Default Offer 2022-23, submission received 3 February 2022, pp. 1-3.

Consistent with our final decision on the 1 January 2022 Victorian Default Offer, we consider that retaining our current approach to forecasting wholesale electricity costs best meets our objectives, including consideration of the financial viability of the retail electricity sector, and is in the long term interests of Victorian consumers.[21] The consistent use a 12-month average of estimated wholesale costs will allow retailers to recover their efficient costs over the long term. It should also support greater price stability for customers.

Option expiry dates

GloBird submitted that Frontier Economics' recommendations do not include the most recent annual option expiry date for the ASX energy futures market in their trade weighted data.[22] GloBird believes that not including the data for this day skews the results as this day has the highest volume of trades. It suggested that the determination could be postponed until data from that day can be included in the modelling of forecast wholesale prices or alternatively, a true-up mechanism could be used.

Consistent with our approach in previous Victorian Default Offer reviews, we are using the latest available data having regard to our statutory deadline.

Network costs

- Our draft decision is to keep using a cost pass through approach for network costs.
- For our draft decision on these network costs, we have used the network tariffs approved by the Australian Energy Regulator for the 2021–22 financial year.
- The approved 2022-23 tariffs are not yet available. We intend to update the network tariffs in time for our final decision.
- We propose to change our approach to estimating annual metering charges. For our draft decision we have used a weighted average of meter costs for mass market customers.
- Network costs represent about 38 per cent of the average residential bill (averaged across the five distribution zones).
- Although we are using the same network tariffs as we did for the 1 January 2022 Victorian Default Offer Network costs have decreased by 2 per cent. This is because the 1 January

[21] Essential Services Commission, 1 January 2022 Victorian Default Offer: Final decision, November 2021, p. 12.

[22] GloBird, Victorian Default Offer 2022-23, submission received 3 February 2022, p. 2.

2022 Victorian Default Offer included a true-up for unrecovered network costs from July and August 2021.

Network costs represent the costs of building, operating and expanding the electricity distribution and transmission networks. We are required to have regard to network costs in estimating efficient costs.[23]

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 on an annual basis.

For all domestic and small business electricity customers, there are three main elements associated with each network tariff:

- distribution charges – for the use of the distribution network
- transmission charges – for the use of the transmission network
- jurisdictional charges – for the payments distributors are required to make.

Our draft decision is to keep our approach to network tariffs

We propose to keep our past approach for calculating network costs. This is a cost pass through approach using the network tariffs approved by the Australian Energy Regulator for each distribution zone (see appendix C). This approach has been supported by stakeholders during our previous Victorian Default Offer reviews.[24]

Network costs are generally structured in one of two ways:

- a daily supply charge and a flat usage charge (flat network tariffs) or
- a daily supply charge and peak usage and off-peak usage charge (two-period time of use network tariffs).[25]

We also include metering charges for each distribution zone, and a controlled load option for domestic customers where applicable.

For our draft decision on these network costs, we have used the network tariffs approved by the Australian Energy Regulator for 2021-22. Network tariffs for 2022-23 are scheduled to be finalised

[23] Clauses 12(4)(b) of the order.

[24] Essential Services Commission, 1 January 2022 Victorian Default Offer: Final decision, November 2021, p. 18; Essential Services Commission, 1 January 2021 Victorian Default Offer: Final decision, November 2020, p. 18; Essential Services Commission, 1 January 2020 Victorian Default Offer: Final decision, November 2019, p. 33; Essential Services Commission, 1 July 2019 Victorian Default Offer: Final decision, May 2019, p. 39.

[25] We introduced a two-period time of use tariff Victorian Default Offer when we amended the 2021 Victorian Default Offer price determination in July 2021.

by the Australian Energy Regulator in early May. We intend to update the Victorian Default Offer to reflect the finalised tariffs in our final decision.

We have considered stakeholder submissions on network costs

In previous reviews we have estimated annual metering costs assuming that all customers use the cheapest meter configuration. EnergyAustralia considered this understates the efficient costs of servicing customers. EnergyAustralia proposed that we instead calculate metering costs using the customer weighted average costs of metering.

New information we have received from EnergyAustralia[26] and the Australian Energy Regulator[27] suggests that market offer and standing offer customers are often not on the cheapest possible metering option.

With this new information we consider that it is appropriate to change our approach to metering costs. Using the average cost of all residential and small business meters, weighted by customer numbers, will more accurately reflect costs. As a result, our draft decision is to use the customer weighted average of metering costs in each distribution zone.

Based on the Australian Energy Regulator approved 2021-22 network tariffs[28], using a weighted average approach would increase the annual metering cost benchmark by $9.20 per customer in the Ausnet services zone. In the other four distribution zones, the impact of the change in approach would be substantially lower, ranging from $0.89 to $3.11 per customer.

We seek further submissions on our proposed change of approach on metering costs.

Environmental costs

- Environmental costs represent about 10 per cent of the average residential bill (averaged across the five distribution zones).
- Our draft decision is to maintain our current approach for estimating the Small-scale Renewable Energy scheme costs, Large-scale renewable energy target, Victorian Energy Upgrade costs and the minimum feed-in tariff.
- Our draft decision means the dollar value of environmental costs in the cost stack will increase by two per cent ($3 per customer) compared to the amount in the 1 January 2022

[26] Energy Australia, Victorian Default Offer 2022-23 (public version), submission received 3 February 2022, p. 5.

[27] Numbers are from the 2021-22 ACS Tariff Approval Models for each distributor found at: Pricing proposals & tariffs | Australian Energy Regulator (aer.gov.au).

[28] Numbers are from the 2021-22 ACS Tariff Approval Models for each distributor found at: Pricing proposals & tariffs | Australian Energy Regulator (aer.gov.au).

Victorian Default Offer. This is mainly driven by increases in costs associated with the Victorian Energy Upgrades program.

Under the pricing order, we are required to have regard to environmental costs. There are four main environmental costs faced by Victorian electricity retailers:

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

Our draft decision amount for environmental costs is higher than the benchmark included in the 1 January 2022 Victorian Default Offer. For residential and small business customers, the benchmark for environmental costs has increased by around two per cent. This is largely because of increases to the price of Victorian energy efficiency certificates used to calculate Victorian Energy Upgrade costs.

For the purposes of calculating environmental costs for the draft decision, we used the most up-to date information available. Information will be updated again for our final decision, including for market-based data, where required.

Our draft decision keeps our approach to environmental costs

Our draft decision on how to calculate these components of the Victorian Default Offer is as follows:

- Small-scale Renewable Energy Scheme – the mid-point between the 2022 binding and the 2023 non-binding small-scale technology percentage will be multiplied by the clearing house price ($40). A true-up will be included to account for the difference between the forecast small-scale technology percentage used in the 1 January 2022 Victorian Default Offer decision and the 2022 binding percentage.
- Large-scale Renewable Energy Target – The 2022 renewable power percentage will be multiplied by the financial year 2022-23 futures market price for large-scale generation certificates. We will include a true-up to account for the differences between the 2022 default percentage used in the 1 January 2022 Victorian Default Offer decision and the actual renewable power percentage for 2022.
- Victorian Energy Upgrades – The 12 month trade-weighted average of Victorian energy efficiency certificates is multiplied by the 2022 greenhouse gas reduction rate.
- The above costs will be multiplied by network loss factors.
- Minimum feed-in tariff (social costs of carbon) – total renewable exports in the most recent 12 month period will be multiplied by the social cost of carbon (2.5 cents). The resulting figure will

then be divided by the total average number of domestic and small-business customers in the previous 12 months.

We have kept our approach to the Small-scale Renewable Energy Scheme

The Small-scale Renewable Energy Scheme places an obligation on retailers to purchase small-scale technology certificates. The Clean Energy Regulator sets a binding small-scale technology percentage every year which sets the amount of small-scale technology certificates retailers must buy.

Our draft decision is to use a similar approach to calculating the cost of the small-scale renewable energy scheme as was used in previous Victorian Default Offer decisions. For this Victorian Default Offer decision we will use the mid-point of the 2022 binding and 2023 non-binding small-scale technology percentage, multiplied by the clearing house price ($40). For our draft decision we have included a true-up to account for the difference between the forecast percentage used in the 1 January 2022 Victorian Default Offer decision and the actual 2022 small-scale technology percentage determined by the Clean Energy Regulator.

The binding percentage for 2022 and the non-binding 2023 small-scale technology percentage set by the Clean Energy Regulator are lower than both the binding for 2021 and forecast percentage used in the 1 January 2022 Victorian Default Offer decision. This has led to a decrease in small-scale renewable energy scheme costs.

There were no stakeholder submissions regarding our approach to calculating the costs for the small-scale renewable energy scheme. We consider our current methodology continues to reflect an appropriate benchmark for small-scale renewable energy scheme costs.

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

The Large-scale Renewable Energy Target is a Federal Government policy designed to reduce emissions in the electricity sector and encourage additional generation from sustainable and 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 large-scale generation certificates for every megawatt hour of power they generate. Electricity retailers buy certificates to meet their legally binding renewable energy obligations. Electricity retailers then surrender the certificates to the Clean Energy Regulator based on the renewable power percentage the regulator sets each year.

To estimate the per megawatt benchmark cost for the Large-Scale Renewable Energy target, we start with the 2022 renewable power percentage calculated by the Clean Energy Regulator. We then multiply the renewable power percentage by the average future market price for 2022-23 large-scale generation certificates. For our draft decision, we have included a true-up to account

for the difference between the renewable power percentage used in the 1 January 2022 Victorian Default Offer decision and the actual 2022 percentage. Under current targets, from 2022 onwards the renewable power percentage will remain at 18.64 per cent for the duration of the program.

To meet their obligations, retailers buy large-scale generation certificates from the futures market or enter into power purchasing agreements. As such, our approach to calculating Large-Scale Renewable Energy Target costs using future market prices for certificates provides a transparent estimate of the efficient costs of complying with the program.

We propose not to change our approach to 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 for the state, 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 annual targets set in Victorian legislation.

We acknowledge Momentum Energy's and Globird Energy's concern about increasing Victorian energy efficiency certificate prices. However, we do not propose to change our approach of using a 12 month trade-weighted average of Victorian energy efficiency certificates in setting the benchmark cost for the Victorian Energy Upgrades. Over the long run, our method will ensure that the Victorian Default Offer reflects efficient costs.

The benchmark cost for the Victorian Energy Upgrades program is estimated by multiplying the 12 month trade-weighted average of Victorian energy efficiency certificates with the 2022 greenhouse gas reduction rate. In our draft decision we have calculated a certificate price of $74.14, which using the 2022 greenhouse gas reduction rate of 0.16113 gives a Victorian Energy Upgrades cost of $11.95 per megawatt hour.

We will update our data for the final decision and take the 12 month trade weighted average of certificate prices at that time. If Victorian energy efficiency certificate prices remain above the amount forecast in the draft decision the forecast amount in our final decision will rise.

We have considered stakeholder feedback on Victorian Energy Upgrade costs

Momentum Energy submitted that Victorian energy efficiency certificate prices have risen significantly, regardless of changes introduced to the scheme.[29] Momentum submitted that factors such as property access issues resulting from the coronavirus pandemic and a decrease in readily available sites for less complex certificate activities have contributed to increased costs for

[29] Momentum Energy, Victorian Default Offer 2022-23, submission received 3 February 2022, p.2.

certificate providers. Momentum Energy therefore considers that the price of Victorian energy efficiency certificates used to calculate Victorian Energy Upgrades costs in the Victorian Default Offer should increase significantly.

GloBird Energy shared a similar view, stating the cost of complying with the Victorian Energy Upgrades program has increased significantly in recent years.[30] It is of the view that lockdowns due to the coronavirus pandemic have reduced the supply of certificates which has caused price to rise. GloBird submits that the additional cost of the program works out to be $8 per customer resulting from the 2021 calendar year Victorian Default Offer price. It suggests the inclusion of a true-up to give retailers the opportunity to fully recover the true cost of the Victorian Energy Upgrades program in 2021.

We have carefully considered all stakeholder feedback and propose not to change our approach as discussed above.

We have kept our approach to the cost of the minimum feed-in tariff

The minimum feed-in tariff is the rate that energy retailers must pay solar customers for electricity exported to the grid. This feed-in tariff includes the social cost of carbon which is the value of lowering 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.[31] 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 draft 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 take the total renewable exports for the 2020-21 financial year and multiply this by the social cost of carbon. The resulting figure is then divided by the total average number of domestic and small-business customers in the 2020-21 financial year.

We will update the data for the final decision to cover the most recent 12 month period. To minimise the regulatory burden on distribution service providers we have decided to only request new renewable export data for the final Victorian Default Offer decision. For the final decision the total renewable exports for the previous 12 months will be multiplied by the social cost of carbon, with the resulting figure divided by the average number of total domestic and small-business customers over the most recent 12 month period. As the Victorian Default Offer regulatory period

[30] Globird Energy, Victorian Default Offer 2022-23, submission received 3 February 2022, p.1.

[31] Victorian Government 2017, Victoria Government Gazette No. S 36, Tuesday 21 February 2017, Order specifying a methodology and factors for the determination of the avoided social cost of carbon.

moves from calendar year to financial year, we believe using the most recent 12 month period provides the most up-to date calculation of the minimum feed-in tariff costs.

We believe this approach is transparent and is easily replicable. It also allows retailers to recover the efficient costs of paying for solar exports.

We have considered stakeholder feedback on minimum feed-in tariff costs

GloBird Energy submitted that our current approach to minimum feed-in tariffs greatly understates the cost to retailers.[32] Globird noted spot prices are often negative during the period when solar volume peaks. Globird submits that the gap between the feed-in tariff retailers must pay and that accounted for in the 2.5 cents (social cost of carbon) is greater than what is calculated for in the Victorian Default Offer.

We have recently reviewed the feed-in tariff and our decision is that the minimum feed-in tariff currently reflects the true value of solar, see our 2022-23 feed-in tariff final decision paper for more detailed information.[33] The feed-in tariff is based on the relationship between demand and price observed in the market, including peaks in solar demand and negative prices. However, as our forecast is based on the average outcomes for the whole of Victoria, the amount that individual retailers pay out through the feed-in tariff will differ.

Retail operating costs

- Our approach is to continue to use a benchmarking approach to set retail operating costs. This is consistent with the approach used in our final decision on the 1 January 2022 Victorian Default Offer.
- Retail operating costs represent about 11 per cent of costs in the average residential bill (averaged across the five distribution zones).
- The retail operating costs in our draft decision are slightly higher than the amount included in our 1 January 2022 determination.

Retail operating costs reflect a range of costs incurred by an electricity retailer in conducting its business, this includes billing and revenue collection systems, information technology systems, call

[32] Globird Energy, Victorian Default Offer 2022-23, submission received 3 February 2022, p. 2.

[33] Essential Services Commission, Feed-in tariff 2022-23: Final decision, February 2022.

centre costs, corporate overheads, energy trading costs, provision for bad and doubtful debts and regulatory compliance costs.[34]

Our draft decision is to keep our approach to retail operating costs

The 2022-23 benchmark for retail operating costs per customer is based on an amount of $121.07 set by the Independent Competition and Regulatory Commission in its 2017 final decision for retail electricity prices in the Australian Capital Territory. Consistent with the approach taken in previous reviews, we adjusted this benchmark for the change in the consumer price index (CPI) since 2017 which leads to an annual benchmark of $132.66.

In addition to this benchmark, we have set an annual amount for additional regulatory costs and Victoria specific operating costs of $10. This amount reflects the costs related to operating in Victoria that are not covered by the Independent Competition and Regulatory Commission benchmark, including those associated with the Payment Difficulty Framework.[35] Our draft decision also continues to include a small annual amount ($0.84) for the ongoing operating expenditure associated with five-minute settlement.

Our draft decision annual benchmark of $143.50 per customer is higher than the current (1 January 2022 Victorian Default Offer) benchmark of $141.75. This reflects the effect of inflation on our benchmark.

The benchmark approach is transparent and based on efficient costs

Our approach to calculating a benchmark for retail operating costs represents a transparent and simple approach. It is replicable and based on public information. This is consistent with the methodology we used in the 1 January 2022 Victorian Default Offer.

The level of our benchmark remains appropriate as it has been updated for inflation. We have also cross checked it with actual data provided by Victorian retailers. During the 1 January 2022 Victorian Default Offer review, we examined combined cost to serve and bad debt costs reported by retailers and found a customer weighted average of $136. Our benchmark falls close to this customer weighted average. We also note that while retailer's have reported a range of operating costs given differences in business scope, model and structure, our analysis shows that the benchmark we have set falls within the range of costs reported by retailers.[36]

---

[34] Clause 12(4)(d) of the pricing order requires we have regard to retail operating costs, including modest customer acquisition and retention costs, as an element in developing the efficient costs of the sale of electricity by a retailer. We address customer acquisition and retention costs in the next section.

[35] Based on the analysis of Victorian specific costs in the Australian Competition Consumer Commission's Retail Electricity Pricing Inquiry final report completed in our final advice to government. For more detail see Essential Services Commission 2019, Victorian Default Offer to apply from 1 July 2019: Advice to Victorian Government, 3 May, p. 64.

[36] Essential Services Commission 2021, 1 January 2022 Victorian Default Offer: Final decision, 25 November, p.30.

Stakeholder feedback on the retail operating cost benchmark

We received three submissions on our approach to setting a benchmark for retail operating costs.

AGL submitted that our current approach to setting a benchmark for retail operating costs, which is based on the benchmark set by the Independent Competition and Regulatory Commission in 2017, is outdated and does not include all the costs of running a retail business. AGL stated that there are several new costs for retailers that have emerged since 2017 that are not included in our benchmark.[37] It submits these costs include: billing systems upgrades and digitising customers' experiences and business operations, and new costs to meet industry and regulatory requirements.

As previously noted, we consider that our benchmark remains appropriate. This is supported by our most recent analysis of retailer actual retail operating costs (which include data up to financial year 2020) which showed our benchmark comfortably sits within the range of observed costs. As for new regulatory requirements we have considered a number of regulatory changes as part of our Victorian Default Offer reviews and where necessary increased our benchmark to reflect those changes.

Red and Lumo Energy supported the commission retaining its benchmarking approach to retail operating costs.[38] It also stated the commission should continue to draw on market data and objective information, and on well-established and understood benchmarks that are supported by retailers' responses to the commission's data requests. Red and Lumo Energy considered departures from this approach should only occur when there is clear and quantifiable evidence of broad changes in cost items across the entire retail sector.

Red and Lumo Energy also submitted the Victorian Energy Fairness Plan will result in an increase in compliance costs, given uncertainty around how the commission will administer its powers.[39] Red and Lumo Energy also consider that we should base our default offer price determination on objective and quantifiable evidence.

If the introduction of the Energy Fairness Plan has increase retailer's regulatory and compliance costs, we encourage retailers to provide us with detailed information on these costs, as we work to make our final decision in May 2022.

---

[37] AGL, Victorian Default Offer 2022-23, submission received 3 February 2022, p.3.

[38] Red and Lumo Energy, Victorian Default Offer 2022-23, submission received 3 February 2022, p.2.

[39] Red and Lumo Energy, Victorian Default Offer 2022-23, submission received 3 February 2022, p.2.

Globird Energy submitted that cost to serve has increased by almost 20 per cent due mainly to wage and salary increases, and that this cost pressure will persist into the future.[40]

We have not changed our retail cost benchmark for the Consumer data right

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.[41] This reform will apply to tier 1 electricity retailers from November 2022, and large electricity retailers with over 10,000 customers from November 2023.

For our draft decision we have not included an adjustment for ongoing operating costs associated with complying with the consumer data right legislation. Our decision is based on estimated cost information produced by Commonwealth Treasury and provided to the Office of Best Practice Regulation, which suggests the ongoing costs of complying with the consumer data right lies within the range of 4 to 7 cents per customer for the retailers that must be compliant with consumer data right legislation by November 2022 (this is tier 1 retailers).[42] [43] We consider this is likely to be accommodated within the benchmark proposed above for retail operating costs.

Consistent with our 1 January 2022 Victorian Default Offer final decision on five-minute settlement costs, we note that any capital costs associated with implementing the consumer data right are to be recouped through the existing retail operating margin.

Stakeholder submissions on consumer data right

We received two submissions on the impact of the consumer data right on retailers' costs.

Momentum Energy provided us with an estimate of costs it will incur during the 2022-23 Victorian Default Offer period to meet its consumer data right obligations, and that such costs should be included in the Victorian Default Offer determination for the upcoming period.[44]Red and Lumo Energy submitted that the commission should note that retailers have commenced the implementation of the consumer data right and that it is a considerable cost for retailers. Red and Lumo energy state that retailers will be able to provide more rigorous estimates in the coming months.[45]

---

[40] Globird Energy, Victorian Default Offer 2022-23, submission received 3 February 2022, p.1.

[41] Competition and Consumer (Consumer Data Right) Amendment Rules (No. 2), 2021 (Cwth)

[42] Meghan Quinn, Letter from Federal Treasury to the Office of Better Practice of Regulation, 27 October 2021.

[43] Submissions to the Federal Treasury during its most recent consultation on consumer data right legislation can be found here.

[44] Momentum Energy, Victorian Default Offer 2022-23, submission received 3 February 2022, pp. 2-3.

[45] Red and Lumo Energy, Victorian Default Offer 2022-23, submission received 3 February 2022, p.2.

An adjustment for bad debts associated with the pandemic is not required

Bad debts occur when customers cannot pay their electricity bills. Retailers may be able to recover some of these costs from customers, but some customers may never pay their debts. In our final decision for determining efficient retail operating costs for the first half of 2022, we removed the temporary adjustment for bad debts from the Victorian Default Offer cost stack.

During the 1 January 2022 Victorian Default Offer price review we identified information that suggested the economic outlook for 2022 would be positive and the bad debt adjustment would not be needed in future reviews.

Our draft decision on the 2022-23 Victorian Default Offer maintains our position. We propose not to include an adjustment for bad debts after considering the following information:

- Economic forecasts that point to a strong economic recovery and record job growth for 2022-23 – including the latest economic outlook in Victoria's Budget update[46], the Commonwealth Treasury's mid-year economic and fiscal outlook[47] and recent Reserve Bank of Australia's governor statement on monetary policy.[48]
- Governments have indicated that there will be fewer restrictions in 2022 than there were in 2021.
- Analysis of the most recent half-year financial results from AGL and Origin Energy suggests bad debts as a share of revenue are stable or decreasing.[49]
- Information collected from Victorian energy retailers on average arrears for residential and small business customers during the pandemic show no clear trend in customer arrears.[50]

Stakeholder feedback on bad debts

Origin Energy considers that the extent of economic recovery is still uncertain given the emergence of Omicron variant of coronavirus, along with the potential for future variants to emerge. Origin stated that relying on financial statements to determine future bad debts does not take into account these uncertainties.[51] Origin suggested that we base our assessment of coronavirus related debts

---

[46] Victoria 2021/22 Budget Update, Presented by Tim Pallas MP, Treasurer of the State of Victoria for the information of Honourable Members, October 2021, pp 7- 16.

[47] The Commonwealth of Australia, Mid-Year Economic and Fiscal Outlook 2021-22, pp. 25-42.

[48] RBA, Statement by Philip Lowe, Governor: Monetary Policy Decision, 7 December 2021, p.1.

[49] AGL, Half Year Report, 10 February 2022, p. 14.

Origin Energy, 2022 Half Year Report, 17 February 2022, p. 20.

[50] The commission receives voluntary information from retailers on energy customers receiving support to pay their bills during the coronavirus pandemic. It is available on our website.

[51] Origin Energy, Victorian Default Offer 2022-23, submission received 3 February 2022, p.2.

on the 90 plus day debt levels, supplemented with the broader financial and economic indicators as appropriate.[52]

We maintain that considering the full range of information available to us remains the best approach to determining whether an adjustment for bad debts associated with the coronavirus pandemic is appropriate. We will continue to monitor market conditions.

Customer acquisition and retention costs

- Our draft decision is to keep our approach to estimating customer acquisition and retention costs (acquisition costs)
- Acquisition costs represent about 3 per cent of costs for the average residential bill (averaged across the five distribution zones).
- Our decision means customer acquisition and retention costs (acquisition costs) in the cost stack will slightly increase due to inflation.

The pricing order requires us to consider modest acquisition costs in making our Victorian Default Offer price determination.[53] Our benchmark reflects the costs of competing for customers in a contestable retail market. These costs include the cost of acquisition channels (such as third-party comparison websites and service providers), the cost of retention teams, and marketing costs targeted at driving customer acquisition or retention.

We have kept our approach to acquisition costs

We have set a modest benchmark for acquisition costs of $40.15. The benchmark is based on cost levels from the Australian Competition and Consumer Commission's retail and electricity pricing inquiry final report.[54] We have updated the benchmark for inflation.

It is not appropriate to use retailers' actual acquisition costs. Cost data from retailers suggests that the expenditure for retailers in Victoria on acquisition costs, including costs relating to marketing, acquisition channels and retention teams, continue to be above a modest level.[55] Spending on acquisition benefits retailers that are able to grow their market share. But it is unclear how spending above the level of our benchmark benefits consumers as a group. As a result, we have

[52] Origin Energy, Victorian Default Offer 2022-23, submission received 3 February 2022, p.2.

[53] Clauses 12(3) and 12(4) of the pricing order.

[54] Australian Competition and Consumer Commission, Retail Electricity Pricing Inquiry: Final report, July 2018.

[55] The cost data submitted by retailers to the commission from 2018 to 2020 shows acquisition costs are still higher, on average, than the benchmark we set.

decided to keep using our current modest benchmark as this best serves the long term interests of Victorian consumers.

We have considered stakeholder submissions on acquisition costs

In its submission, AGL noted that customer acquisition and retention costs continue to increase, and that our benchmark is lower than actual acquisition and retention costs. AGL suggested that we consider whether the customer acquisition and retention benchmark needed to increase.

As we noted in our 1 January 2022 Victorian Default Offer final decision, it is not clear how spending above the benchmark benefits consumers as a group. With this in mind, we are not proposing to change our approach.

Retaining our current benchmark for the current review was also supported by Red and Lumo Energy in its submission. It stated that it would be too early to make substantial adjustments to the acquisition costs benchmark following the commencement of the Victorian Government's Energy Fairness Plan.[56]

Other costs

- Our draft decision is to set a benchmark for other regulatory costs that are based on the latest available market information.
- Other costs make up around one per cent of total costs for a representative customer (averaged across the five distribution zones).
- Our draft decision would marginally increase the amount included for these costs compared with the current Victorian Default Offer.

Other regulatory costs include a range of discrete and specific costs that retailers incur outside of costs to serve. They 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 costs for the sale of electricity by a retailer.[57]

Australian Energy Market Operator fees

These fees are charged to retailers by the Australian Energy Market Operator (market operator) to recover the costs of market operation.

[56] Red and Lumo, Victorian Default Offer 2022-23, submission received 3 February 2022, p. 2.

[57] Clause 12(4)(f) of the pricing order.

The market operator's budget and fees report contains budgeted fees and charges for 2021–22 but does not include forecast estimates for 2022–23.[58] We have based our estimate of the market operator's fees in our draft decision on the 2021-22 budgeted fees and charges. We do not expect the market operator's 2022-23 report to be available until August 2022. In our final decision, we will use the budgeted fees and charges for 2022–23.

We note that we have only included the portion of market operator fees that are levied on retailers.

We also note the recent National Electricity Rule change request by Energy Networks Australia, allowing Transmission Network Service Providers to recover the cost of the market operator's participant fees. The portion of participant fees to which the rule change relates will not be charged to Transmission Network Service Providers until 1 July 2023, so we do not expect the rule change request to affect the 2022-23 Victorian Default Offer final decision. However, we will continue to monitor how the rule change affects retailer's costs in the future.[59]

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. We have completed analysis of market operator data to estimate Victorian ancillary charges in the regulatory period beginning 1 July 2022. We intend to use an average of the past 52 weeks (ending 20 February 2022) of ancillary service payments in Victoria. This results in an average ancillary service payment of $0.35/MWh.

We will update this with the most recent data when we make our final decision.

Reliability and Emergency Reserve Trader costs

The Reliability and Emergency Reserve Trader is a function conferred on the market operator to maintain system reliability and system security using reserve contracts. The market operator publishes annual and quarterly reports when their reliability and emergency reserve trader functions have been activated. The latest published report was the Australian Energy Market Operator Reliability and Emergency Reserve Trader End of Financial Year Report 2020–21, which

[58] Australian Energy Market Operator, 2021-22 Consolidated budget and fees report, 14 October 2021.

[59] Australian Energy Market Operator, ENA Rule change request: Recovering the cost of AEMO's participant fees, June 2021.

showed no activations of the reserve function in Victoria. As such, our draft decision does not include an amount for reserve trader costs.[60]

Essential Services Commission licence fees

Electricity retailers are charged an annual licence fee 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 propose to use a market wide total of all retailer licence fees divided by the total number of customers in estimating the cost of a licence fee per customer for the Victorian Default Offer. The latest available data on licence fees is from 2020–21. Adjusting this data for inflation results in a benchmark of $2.18 per customer. If newer data on the licence fees becomes available, we will include it in our final decision.

Retail operating margin

- Our draft decision is to continue to use the benchmarking approach to the retail operating margin we used in our last Victorian Default Offer decision.
- Retail operating margin represents 5.7 per cent of costs for the representative user.
- Our draft decision means that the dollar value of the retail operating margin in the cost stack will slightly increase.

The pricing order requires us to have regard to retail operating margin when making a Victorian Default Offer price determination.[61]

The retail operating margin provides retailers incentives to invest

Retail operating margin represents the operating profit margin required to compensate investors for the capital provided to operate a retail service. It includes the cost of capital, and the systematic (non-diversifiable) risk associated with investment.[62] The retail operating margin is expressed as a percentage of the cost stack.[63] The pricing order notes that risks accounted for in other

[60] Australian Energy Market Operator, RERT End of Financial Year 2020-21 Report, August 2021.

[61] Clause 12(4)(e) of the pricing order.

[62] Non-diversifiable risks are considered to be unavoidable and are typically attributable to market factors that affect all firms.

[63] The retail margin represents the return that an electricity retailer requires, over and above its costs, in order to attract the capital needed to provide a retailing service. The term margin is used as an estimate of profit (EBITDA) divided by sales. Holding the percentage EBITDA 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.

components of the cost stack (such as wholesale electricity market risk) must not be included in the retail operating margin[64], and that we are not required to base retail operating margins on actual retailer operating margins.[65]

We have kept the retail operating margin at 5.7 per cent

In our last review, we kept the regulatory benchmarking approach used in our previous decisions. This approach uses regulatory decisions by Australian regulators to set a benchmark for a retail operating margin. We investigated the current margins and the methodologies adopted in other jurisdictions. We found the range of retail margins set by Australian regulators in their latest regulatory decisions was between 5.4 to 5.7 per cent.

In response to our initial consultation on the 2022–23 Victorian Default Offer, AGL submitted that the retail operating margin benchmark should be higher than 5.7 per cent.[66] It noted significant industry and regulatory changes in wholesale and retail energy markets since the 2013 IPART review (on which our benchmark was originally based). AGL considers this has created financial, operating and compliance risks for retailers. It also considers the retail operating margin to be effectively lower than 5.7 per cent given 'understated components of the cost stack such as operating costs, Victorian Energy Upgrades or customer acquisition costs. Its view is that this results in market offers providing lower retail margins'.[67]

In the 1 January 2022 Victorian Default Offer review, we looked into the level of retail margins existing in Victoria. We analysed actual retail electricity costs from the cost data submitted by Victorian retailers. The assessment indicated that the average retail margin recovered by retailers in Victoria in the last two financial years was in line with the margin allowed in the Victorian Default Offer. This suggests that at a broad level there is no significant difference in the retail margins set by the commission for Victorian Default Offer and the existing margins in the Victorian retail electricity market. Also, as shown in Figure 4, bills for the Victorian Default Offer are above the amounts for median market offers. This suggests that the margin included in our cost stack provides retailers with a sufficient return.

For these reasons we do not propose to adjust the retail operating margin in the 2022–23 Victorian Default Offer.

---

[64] Clause 12(7) of the order notes that in determining retail operating margin we must have regard to the principle that the margin must not compensate retailers for risks that are compensated elsewhere in the costs.

[65] Clause 12(9) of the order.

[66] AGL, Victorian Default Offer 2022-23, submission received 3 February 2022, p. 4.

[67] AGL, Victorian Default Offer 2022-23, submission received 3 February 2022, p. 4.

Calculating Victorian Default Offer tariffs and maximum bills

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:

1. **flat tariffs -** for standing offers with flat tariffs
2. **two-period time of use tariffs –** for standing offers with two-period time of use tariffs
3. **the maximum 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.

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.

Our draft decision on flat tariffs

Our draft decision is to use the same approach to setting standing offer rates for flat tariffs as we did in our 1 January 2022 Victorian Default Offer price determination. Under this approach, we align the tariff structures with the underlying flat network tariffs in each distribution zone.

Having a flat tariff provides a simple option for standing offer customers. This is consistent with the objectives of the pricing order, which states the Victorian Default Offer is to provide a simple, trusted and reasonably priced option for customers unable or unwilling to engage in the market.

Stakeholders generally supported our approach to flat tariffs as described in our 2021 determination.[68] They have not raised any issues during our 1 January 2022 Victorian Default Offer review and our initial consultation on the 2022–23 Victorian Default Offer review.

[68] Essential Services Commission, Victorian Default Offer 2021: Final decision, November 2020, pp. 45.

Flat tariff cost allocation

Daily supply charge (fixed costs) =

(retail operating costs including customer acquisition and retention + fixed network costs +

per customer ancillary and feed in tariff social cost of carbon) x (1 + retail operating margin)

Usage charge (variable costs) =

(wholesale electricity costs + environmental program costs + variable ancillary costs +

electricity network losses + variable network costs) x (1 + retail operating margin)

Our draft decision on two-period time of use tariffs

Our draft decision is to use the same approach to setting standing offer rates for two-period time of use tariffs as we did in our 1 January 2022 Victorian Default Offer price determination.[69] Under this approach, we align the tariff structures with the underlying two-period time of use network tariffs.

Stakeholders generally supported our approach to two-period time of use tariffs as described in our 2021 amended determination[70] and did not raise any issues during our 1 January 2022 Victorian Default Offer review and our initial consultation on the 2022–23 Victorian Default Offer review.

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 +

[69] Essential Services Commission, 1 January 2022 Victorian Default Offer price determination: November 2021.

[70] Essential Services Commission, Victorian Default Offer amendment to price determination 2021: Final decision, July 2021, p.11.

per customer ancillary and feed in tariff social cost of carbon) x (1 + retail operating margin)

Peak usage charge (variable costs) =

(wholesale electricity costs + environmental program costs + variable ancillary costs +

electricity network losses + variable network costs for peak period) x (1 + retail operating margin)

Off peak usage charge (variable costs) =

(wholesale electricity costs + environmental program costs + variable ancillary costs +

electricity network losses + variable network costs for off-peak period) x (1 + retail operating margin)

Our draft decision is to keep our approach to the maximum customer bill

In addition to setting the flat and two-period time of use tariffs described, our draft decision is to regulate all other standing offers (for example, non-standard time of use and demand tariffs) through a compliant maximum annual bill. The compliant maximum annual bill amount is calculated based on the two-period time of use tariffs. This is consistent with the approach we took in the 1 January 2022 Victorian Default Offer.

Retailers offering non-flat standing offer tariffs must make sure their tariffs do not result in a bill above the compliant maximum annual bill at a specific usage amount determined by the commission. The maximum annual 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 compliant maximum annual bill amount is as follows:

- For domestic customers, there will be 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 will be 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 updated the usage profiles for calculating the compliant maximum annual bill amounts for the 2022–23 Victorian Default Offer draft decision. The usage profiles in tables 3 and 4 are based on the load data for the 2021 calendar year. We used manually read interval meter data provided by the Australian Energy Market Operator to calculate these profiles.

Table 3: Domestic – usage profile for maximum bill calculation

Customer class	Peak period	Off peak
Time period window	3.00pm–9.00pm every day	All other times
Usage profile	0.33	0.67

Table 4: Small business – usage profile for maximum bill calculation

Customer class	Peak period	Off peak
Time period window	9.00am–9.00pm weekdays	All other times
Usage profile	0.47	0.53

Calculating the compliant maximum annual bill amount

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

- annual reference consumption amount
- usage profiles as specified in tables 3 and 4
- two-period time of use tariffs determined by the commission for each distribution zone.

Retailers must show they comply with the maximum annual 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 compliant maximum annual 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

In making a Victorian Default Offer price determination we must adopt an approach and methodology in accordance with section 33(2) of the *Essential Services Commission Act 2001 (Vic)* (ESC Act), and the pricing order.[71] Taken together, this means we must adopt an approach and methodology that best meets the objectives specified in the ESC Act, the commission's objectives under the *Electricity Industry Act 2000 (Vic)* and the objective of the Victorian Default Offer.[72]

Further, the Victorian Default Offer price determination must be based on the efficient costs of the sale of electricity by a retailer,[73] having regard to:[74]

- wholesale electricity costs
- network costs
- environmental costs
- retail operating costs, including only modest costs of customer acquisition and retention[75]
- retail operating margin[76]
- any other costs, matters or things we consider appropriate or relevant.

The pricing order also specifies that we must not include headroom.[77]

---

[71] Clause 12(1) of the pricing order.

[72] Best meeting the objective of the Victorian Default Offer is a requirement of clause 12(2) of the pricing order.

[73] Clause 12(3) of the 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.

[74] Clause 12(4) of the pricing order.

[75] Clause 12(6) of the pricing order specifies that this is to be an amount determined by the commission in its discretion.

[76] 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.

[77] 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.'

Our objectives in setting the Victorian Default Offer

As specified in the pricing order, 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.[78]

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. As objectives of the Electricity Industry Act 2000 (Vic), 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).

Without derogating from these objectives and the matters to which regard must be had under section 8A of the ESC Act, the commission must also when performing its functions and exercising its powers do so in a manner that the commission considers best achieves any objectives specified in the empowering instrument, in this case the pricing order.

In making a price determination, the commission must adopt an approach and methodology which the commission considers will best meet the objectives specified in the ESC Act and any relevant legislation. Section 33(5) of the ESC Act further states that a price determination by the commission may regulate a prescribed price for prescribed goods and services in any manner the commission considers appropriate.

Other factors the commission must have regard to

Section 8A of the ESC Act provides that in seeking to achieve the commission's objective 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

[78] 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 of the ESC Act only applies to the extent it is not contrary to the pricing order.[79] Section 33(2) of the ESC Act provides that in making a price determination, the commission must adopt an approach and methodology which the commission considers will best meet the objectives specified in the ESC Act and the Electricity Industry Act.[80]

Section 33(3) of the ESC Act specifies that in making a determination 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.[81]

[79] Clause 12(12) of the pricing order.

[80] Section 33(2) of the ESC Act. The section refers to 'relevant legislation', which in this circumstance means the Electricity Industry Act.

[81] 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

Victorian Government Gazette

No. S 208 Thursday 30 May 2019

By Authority of Victorian Government Printer

The Lieutenant-Governor, as the Governor's deputy, with the advice of the Executive Council on the recommendation of the Minister pursuant to section 13(1B) of the **Electricity Industry Act 2000** (the Minister having first consulted with the Premier and Treasurer pursuant to section 13(1C) of that Act), acting under section 13 of the **Electricity Industry Act 2000** makes the following Order:

1. Purpose

The main purpose of this Order is to regulate the standing offer tariffs that retailers may charge prescribed customers, through the introduction of the Victorian default offer.

2. Commencement

This Order comes into operation on the date on which it is published in the Government Gazette and remains in force until it is revoked.

3. Objective of the Victorian default offer

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.

4. Definitions

1. In this Order:

Act means the **Electricity Industry Act 2000**;

annual reference consumption has the meaning given in clause 15(5);

controlled load tariff means a tariff for the supply or sale of electricity only for use in specific appliances that are permanently wired to the relevant electricity meter;

Example: A storage water heater is such an appliance.

controlled load usage means use by a specific appliance that is permanently wired to the relevant electricity meter;

customer type means a customer who is either a domestic customer or a small business customer, as the case may be;

distribution system means a system of electric lines and associated equipment (generally at nominal voltage levels of 66 kV or below) which a distribution company is licensed to use to distribute electricity for supply under its licence;

distribution zone means the area in which a distribution company is licensed to distribute and supply electricity under the Act;

domestic customer means a customer who purchases electricity principally for personal, household or domestic use at a supply point;

Energy Retail Code means the document of that name (version 12 dated 1 January 2019) published by the Commission as amended and in force from time to time;

ESC Act means the **Essential Services Commission Act 2001**;

flat tariff means a tariff for the supply or sale of electricity where the tariff components do not vary by reference to:

(a) the time of day;

(b) the amount of electricity distributed or supplied during the day;

(c) temperature, whether actual or forecast; or

(d) other characteristics that vary during the day.

Notes:

1. A tariff with a daily supply charge as one tariff component and a usage charge calculated by $ per kWh as another tariff component, is a flat tariff;
2. Paragraph (b) does not exclude block tariffs from being flat tariffs;
3. The definition does not exclude tariffs that vary seasonally, from being flat tariffs;

flexible tariff means a tariff for the supply or sale of electricity where the tariff components vary (wholly or partly) according to the time of day when the electricity is supplied;

former franchise customer means a person described in section 37 of the Act who is either a domestic customer or a small business customer;

general usage means any electricity usage that is not controlled load usage;

headroom means an allowance that does not reflect an efficient cost borne by firms operating in the market;

Example: An allowance that is added, so that retail prices do not act as a barrier to new entrants, is headroom.

kWh means kilowatt hour;

Minister means the Minister administering the Act;

MWh means megawatt hour;

objective of the Victorian default offer means the objective specified in clause 3;

Order means this Order;

prescribed customer: see clause 5;

quarter means a period of 3 consecutive months;

regulatory period means a period over which a VDO price determination is to apply;

Note: the first regulatory period commences on 1 January 2020.

relevant customer has the same meaning as in section 39 of the Act;

small business customer means a customer who is not a domestic customer and whose aggregate consumption of electricity taken from a supply point is not, or in the case of a new supply point is not likely to be, more than 40 MWh per annum;

standing offer tariffs means the tariffs determined by a licensee under section 35(1) of the Act and published in the Government Gazette in accordance with that section, as varied from time to time by the licensee as provided for under section 35(3) of the Act;

supply charge means a fixed charge for supplying electricity to a customer (whether charged on a daily basis or over any other period);

Note: A supply charge is also sometimes called a service charge.

supply point means, in relation to a supply of electricity to a person, the point at which that supply of electricity last leaves the distribution system owned or operated by a distribution company before being supplied to the person, whether or not the electricity passes through facilities owned or operated by any other person after leaving that point before being so supplied;

tariff component, in respect of a tariff for the supply or sale of electricity, includes the supply charge, the usage charge and any other charge that is part of the tariff for the supply or sale of electricity;

usage charge means a charge for the amount of electricity supplied or sold to a customer;

Note: A usage charge is sometimes called a consumption charge.

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;

Victorian default offer or ***VDO*** means an offer a retailer must make pursuant to this Order.

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 315 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. Conferral 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 may 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 32 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:

(a) the tariffs, or the maximum tariffs, a retailer may charge prescribed customers under a standing offer during the regulatory period; or

(b) the manner in which the tariffs, or the maximum tariffs, a retailer may charge prescribed customers under a standing offer during the regulatory period are to be determined or calculated.

2. Without limiting subclause (1), the price determination that the Commission makes in respect of the first regulatory period:

(a) must determine:

i. the standing offer tariffs that are to apply in respect of flat tariffs, including, in the case of domestic customers, both flat tariffs and flat tariffs with a controlled load tariff; and

ii. in the case of a prescribed customer who is on:

A. a tariff that is not a flat tariff; or

B. any combination of a flat tariff, and a tariff that is not a flat tariff,

the maximum annual electricity bill amount that the prescribed customer is to pay under a standing offer in the regulatory period (***VDO compliant maximum annual bill***); and

(b) may provide, in the case of the customers specified in subclause (2)(a)(ii), for how any overpayment by those customers in that regulatory period, or any year (or part year) thereof, is to be dealt with; and

(c) may also include any other decisions or determinations that are required by this Order.

3. Despite subclause (2), the Commission may after its first price determination, determine another manner pursuant to which the standing offer tariffs referred to in that subclause are to be determined or calculated.

11. Regulatory periods for VDO price determinations

1. The first regulatory period commences on 1 January 2020.

2. Subject to subclause (3), the duration of each regulatory period is 12 months.

3. Before the commencement of a regulatory period, if the Commission considers that special circumstances exist, the Commission may, after consulting the Minister:

(a) extend the duration of the regulatory period by up to 6 months; or

(b) reduce the duration of the regulatory period, provided the duration of the regulatory period as so reduced is not less than 6 months.

12. Approach and methodology for making a VDO price determination

1. In making a VDO price determination, the Commission must adopt an approach and methodology that is in accordance with section 33(2) of the ESC Act and this Order.

Note: section 33(2) of the ESC Act requires the Commission to adopt an approach and methodology that best meets the objectives of the ESC Act and of the **Electricity Industry Act 2000.**

2. In addition, the Commission must adopt an approach and methodology which the Commission considers will best meet the objective of the Victorian default offer.

3. The tariffs determined by the Commission pursuant to the VDO price determination are to be based on the efficient costs of the sale of electricity by a retailer.

4. For the purposes of subclause (3), the Commission must have regard to:

(a) wholesale electricity costs;

(b) network costs;

(c) environmental costs;

retail operating costs, including modest costs of customer acquisition and retention;

(d) retail operating margin; and

(e) 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(3)(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 return 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

(a) 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 3;

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 those discounts.

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

(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

4. Any actual comparison in accordance with the methodology must be readily understandable by a prescribed customer. 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.

Distribution zone	Supply charge ($ per day)	Usage charge structure	Usage charge (not controlled load) ($ per kWh)	Usage charge: controlled load ($ per kWh)
AusNet Services	$1.1368	Block 1 (up to 1020 kWh during a quarter) Block 2 (> 1020 kWh during a quarter)	$0.2763 $0.3113	$0.2024
CitiPower	$1.1055	Anytime	$0.2325	$0.1809
Jemena	$1.0037	Anytime	$0.2547	$0.1618
Powercor	$1.2333	Anytime	$0.2403	$0.1561
United Energy	$0.9115	Anytime	$0.2620	$0.1873

SCHEDULE 2

Victorian default offer tariffs for period from 1 July 2019 to 31 December 2019 – small business customers

Charges are inclusive of GST.

Distribution zone	Supply charge ($ per day)	Usage charge structure	Usage charge ($ per kWh)
AusNet Services	$1.1368	Block 1 (up to 1020 kWh during a quarter) Block 2 (> 1020 kWh during a quarter)	$0.3154 $0.3605
CitiPower	$1.2972	Anytime	$0.2464
Jemena	$1.1450	Anytime	$0.2682
Powercor	$1.3611	Anytime	$0.2394
United Energy	$0.9691	Anytime	$0.2717

SCHEDULE 3

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:

$$EAC = SC \times 365 + ARC \times UC_P \times UA_P + ARC \times UC_S \times UA_S + ARC \times UC_{OP} \times UA_{OP}$$

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;

UAs is the shoulder usage allocation specified in column 3 of Table 1; UC_{OP} is the retailer's off-peak usage charge; and

UA_{OP} 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:

$$EAC = EAC_{GU} + UC_{CL} \times ARC_{CL}$$

where:

EAC is the estimated annual cost of the offer;

EAC_{GU} 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

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

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

Electricity Industry Act 2000

MINISTERIAL ORDER UNDER SECTION 35(3B)

I, Lily D'Ambrosio, Minister for Energy, Environment and Climate Change and Minister responsible for administering the **Electricity Industry Act 2000** (the Act), specify, pursuant to sections 35(3B)(a) and 35(3B)(b) of the Act, the following periods within which a licensee may publish a notice under section 35(3) of the Act, and the following dates on which tariffs varied in accordance with section 35(3) of the Act must take effect.

1. Commencement

This Order commences on the date that it is published in the Government Gazette.

2. Periods within which a notice varying licensee standing offers must be published

If, during the period from the date of commencement of this Order until the expiry date of this Order, a licensee proposes to publish a notice under section 35(3) of the Act, varying the tariffs determined by the licensee and published in the Government Gazette under section 35(1) of the Act, the notice may be published during the following periods:

(a) the period commencing on the date this Order commences and ending on 17 June 2019; and

(b) the period commencing on 25 November 2019 and ending on 18 December 2019.

3. Dates on which a variation to a licensee standing offer under clause 2 must take effect

Pursuant to section 35(3B)(b) of the Act, any variation to licensee standing offer tariffs under clause 2 of this Order must take effect on the following dates:

(a) if the variation is under clause 2(a) – on 1 July 2019; and

(b) if the variation is under clause 2(b) – on 1 January 2020.

4. Expiry of this Order

This Order expires on 31 March 2020.

Dated 22 May 2019

HON. LILY D'AMBROSIO MP

Minister for Energy, Environment and Climate Change

Appendix C: Network tariffs in the cost stack

Table C.1: Single network tariff categories

Distribution zone	Domestic tariff	Small business tariff
AusNet Services	Small residential single rate, NEE11	Small business single rate, NEE12
CitiPower	Residential single rate, C1R	Non-residential single rate, C1G
Jemena	Single rate, A100/F100 general purpose	Small business, A200/F200
Powercor	Residential single rate, D1	Non-residential single rate, ND1
United Energy	Low voltage small 1 rate, LVS1R	Low voltage medium 1 rate, LVM1R

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

Distribution zone	Domestic tariff	Small business tariff
AusNet Services	Small residential time of use, NAST11	Small business time of use, NAST12
CitiPower	Residential TOU, CRTOU	Small business TOU, CGTOU
Jemena	Residential time of use, A120/F120	Time of use weekdays, A210/F210
Powercor	Residential TOU, PRTOU	Small business TOU, NDTOU
United Energy	Residential TOU, URTOU	Small business TOU, LVTOU

Table C.3: Controlled load network tariff categories

Distribution zone	Domestic controlled load or dedicated circuit tariff code
AusNet Services	NEE13
CitiPower	CDS
Jemena	A180
Powercor	DD1
United Energy	LVDed

Appendix D: Calculation of the cost stack

This appendix provides a summary of the key figures required to understand our draft 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 2022-23 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 as a result of different customer load profiles in each distribution zone. Financial year 2022–23 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 2022–23, as of 28 January 2022 (GST exclusive)

Distribution zone	Domestic		Small business	
	Wholesale price - 12 month ($/MWh nominal)	Volatility adjustment ($/MWh nominal)	Wholesale price - 12 month ($/MWh nominal)	Volatility adjustment ($/MWh nominal)
AusNet Services	$76.81	$0.27	$64.87	$0.32
CitiPower	$70.64	$0.31	$66.54	$0.44
Jemena	$77.59	$0.25	$65.70	$0.41
Powercor	$75.07	$0.32	$63.68	$0.31
United Energy	$76.90	$0.31	$66.55	$0.45

Source: Frontier Economics, Wholesale electricity costs for 2022-23: A draft report for the Essential Services Commission, February 2022.

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 have calculated the total loss factor based on the 2021-22 distribution and marginal loss factors published by Australia Energy Market Operator (see table D.2).[82]We will update the total loss factor in the final decision when the Australian Energy Market Operator publish the distribution and marginal loss factors for 2022–23 sometime in April 2022.

Table D.2: Network losses

Distribution zone	Distribution loss factor (DLF)	Marginal loss factor (MLF)	Total loss factor
AusNet Services	1.0734	1.0056	7.95%
CitiPower	1.0500	0.9979	4.78%
Jemena	1.0430	0.9993	4.23%
Powercor	1.0782	0.9938	7.15%
United Energy	1.0525	0.9957	4.79%

Source: Australian Energy Market Operator, Distribution Loss Factors and Marginal Loss Factors 2021-22

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 2021 to 30 June 2022 for the purposes of our draft decision. We will update these tariffs with the Australian Energy Regulator approved flat network tariffs for the period 1 July 2022 to 30 June 2023 in the final decision.

Table D.3 Domestic electricity network charges, flat tariff, 2021–22 (GST exclusive)

Distribution zone	Daily charge ($ per year)	Variable charge structure	Variable charge ($ per kWh)	Controlled load ($ per kWh)
AusNet Services	$111.11	Block 1 Block 2	$0.1145 $0.1284	$0.0426

[82] Australian Energy Market Operator, Distribution Loss Factors for the 2021-22 Financial Year, July 2021, p. 13; Citipower, Powercor & United Energy, response to Distribution data: solar export and transmission lines, July 2021; AusNet, response to request on Ausnet data - solar export and transmission lines, July 2021; Australian Energy Market Operator, Marginal Loss Factors for the 2021-22 Financial Year, July 2021, pp. 24-29.

CitiPower	$90.01	Anytime	$0.0805	$0.0247
Jemena	$82.20	Anytime	$0.0867	$0.0360
Powercor	$139.98	Anytime	$0.0815	$0.0239
United Energy	$80.01	Anytime	$0.0799	$0.0217

Source: Victorian distribution businesses' Australian Energy Regulator approved 2021–22 pricing proposals.

Table D.4 Small business electricity network charges, flat tariff, 2021–22 (GST exclusive)

Distribution zone	Daily charge ($ per year)	Variable charge structure	Variable charge ($ per kWh)
AusNet Services	$111.11	Block 1 Block 2	$0.1554 $0.1827
CitiPower	$160.02	Anytime	$0.0821
Jemena	$134.47	Anytime	$0.1097
Powercor	$179.98	Anytime	$0.0929
United Energy	$120.01	Anytime	$0.0879

Source: Victorian distribution businesses' Australian Energy Regulator approved 2021–22 pricing proposals.

Tables D.5 and D.6 show the Australian Energy Regulator approved two-period network tariffs for the period 1 July 2021 to 30 June 2022, which will be used in the draft decision. We will update these tariffs with the Australian Energy Regulator approved two period time of use tariffs for the period 1 July 2022 to 30 June 2023 in the final decision.

Table D.5 Domestic electricity network charges, two-period time of use network tariffs, 2021–22 (GST exclusive)

Distribution zone	Daily charge ($ per year)	Peak variable charge ($ per kWh)	Off-peak Variable charge ($ per kWh)	Controlled load ($ per kWh)
AusNet Services	$111.11	$0.2085	$0.0434	$0.0426
CitiPower	$90.01	$0.1594	$0.0398	$0.0247
Jemena	$82.20	$0.1349	$0.0389	$0.0360
Powercor	$139.98	$0.1587	$0.0396	$0.0239
United Energy	$80.01	$0.1579	$0.0395	$0.0217

Source: Victorian distribution businesses' Australian Energy Regulator approved 2021–22 pricing proposals.

Table D.6 Small business electricity network charges, two-period time of use network tariffs 2021–22 (GST exclusive)

Distribution zone	Daily charge ($ per year)	Peak variable charge ($ per kWh)	Off-peak variable charge ($ per kWh)
AusNet Services	$111.11	$0.1751	$0.0427
CitiPower	$160.02	$0.1302	$0.0289
Jemena	$242.12	$0.1433	$0.0305
Powercor	$179.98	$0.1475	$0.0328
United Energy	$120.01	$0.1399	$0.0311

Source: Victorian distribution businesses' Australian Energy Regulator approved 2021–22 pricing proposals.

Table D.7 shows a mass market weighted average of the Australian Energy Regulator approved network metering charges from 1 July 2021 to 30 June 2022, which will be used in the draft decision. We will update these charges using the Australian Energy Regulator approved metering charges and forecast customer numbers for the period 1 July 2022 to 30 June 2023 in the final decision.

Table D.7 Network metering charges, 2021–22 (GST exclusive)

Distribution business	Annual metering charge ($ per customer)
AusNet Services	$72.90
CitiPower	$62.51
Jemena	$55.82
Powercor	$59.39
United Energy	$43.81

Source: Victorian distribution businesses' Australian Energy Regulator approved 2021–22 pricing proposals.

Environmental scheme costs

Large-scale Renewable Energy Target costs

Under the Large-scale Renewable Energy Target scheme, the liability percentage is called the renewable power percentage. The Clean Energy Regulator has set the 2022 renewable power percentage (18.64 per cent), under current targets this will not change for the duration of the program. We calculate the 12 month average of futures market prices for financial year 2022-23 large-scale generation certificates as reported by Demand Manager.[83]

[83] Demand Manager, Certificate prices, accessed 15 February 2022, http://demandmanager.com.au/certificate-prices.

Small-scale Renewable Energy Scheme costs

The liability percentage under the Small-scale Renewable Energy scheme is called the small-scale technology percentage. The federal Clean Energy Regulator has published the binding small-scale technology percentage for 2022. We used the mid-point between the 2022 binding and 2023 non-binding small-scale technology percentage to calculate the liability for this draft decision.[84]

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.

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 2022. As the greenhouse gas reduction rate for 2023 is not available at the time of our draft decision, we used the 2022 rate of 0.16113.

The cost of Victorian energy efficiency certificates under the Victorian Energy Upgrades program is estimated from the trade-weighted average of 12-month historic market prices. Based on the information available on 31 January 2022, we estimate an average price of $74.14 per certificate for the draft decision.

Our estimate of the per megawatt hour Victorian Energy Upgrade Costs for the draft decision is $11.95, which is higher than the estimate used in the 1 January 2022 Victorian Default Offer.

Feed-in Tariff (social cost of carbon)

For the draft decision, the impact of the feed-in tariff on retailer costs is based on total small-scale renewable exports in the 2020-21 financial year multiplied by the social cost of carbon (2.5 cents). The resulting figure is divided by the total average domestic and small business customer numbers in the 2020-21 financial year.

Table D.8: Cost of complying with Environmental Schemes (GST exclusive)[85]:

Environmental scheme	Certificate price, $/MWh	Scheme liability, %	Cost, $/MWh
Large-scale Renewable Energy Target	$40.28	18.64%	$7.51

[84] Clean Energy Regulator, The small-scale technology percentage, accessed 18 March 2022, The small-scale technology percentage (cleanenergyregulator.gov.au).

[85] Costs other than Feed-in Tariff (social cost of carbon) have been multiplied by network loss factors.

Small-scale Renewable Energy Scheme	$40.00	24.8%	$9.92
Victorian Energy Upgrades	$74.14	16.11%	$11.95
Feed-in Tariff (social cost of carbon)			$13.34/customer
Small-scale Renewable Energy Scheme true up adjustment (GST inclusive)			$0.82
Large-scale Renewable Energy Target true up adjustment (GST inclusive)			$0.04

Source: ESC analysis and Frontier, Wholesale electricity costs for 2022-23: A draft report for the Essential Services Commission, February 2022, pp. 52-53.

Retail operating costs

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 costs

Based on our updated benchmarks, we have used a benchmark of $143.50 for retail operating costs and $40.15 for customer acquisition and retention costs (see table D.9).

Retail margin

We applied a retail margin of 5.7 per cent. The retail margin represents the margin in dollars as a proportion of the total revenue.

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

Retail costs and margin	Annual benchmark
Retail operating costs	$143.50
Customer acquisition and retention costs	$40.15
Retail margin	5.7%

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

Budget and Fees report.[86] The estimate of our licence fee is a market-wide average based on the approved fees for the year 2020-21, which is the latest available information. Other cost items are adjusted for inflation in our 2022–23 Victorian Default Offer model[87]. We have 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)

Charge	Rate
Essential Services Commission licence fee	$2.18/customer
Australian Energy Market Operator fees	
National Electricity Market fees	$0.41/MWh
Full retail contestability	$1.38/customer
National Transmission Planner	$0.00/MWh
IT Upgrade and Five-minute and global settlement compliance fees	$0.13/MWh
Distributed energy resources integration program fees	$0.03/MWh
Energy Consumers Australia	$0.63/customer
Ancillary services	$0.35/MWh
Reliability and Emergency Reserve Trader	$0.00/customer
Total per MWh:	**$0.92/MWh**
Total per customer:	**$4.19/customer[88]**

[86] Australian Energy Market Operator, 2021-22 AEMO Final Budget and Fees.

[87] All charges and fees are adjusted for inflation bar Ancillary services.

[88] 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 have considered these matters.

Our approach to this review

In coming to our draft decision on the 2022–23 Victorian Default Offer, we have built on our 1 January 2022 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 1 January 2022 price determination. 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. 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 collected cost data from electricity retailers during the 1 January 2022 Victorian Default Offer review. This information allowed us to understand the types of costs electricity retailers incur and elements of the efficient costs of supplying electricity to customers. We consider these cost data to still be relevant to this review. We have also requested retailers' cost data for the most recent financial or calendar years. We will consider these new cost data in making our final decision in May 2022.

We sought advice from independent consultants on forecasting retailers' wholesale electricity costs and of retailers' costs of complying with environmental programs for 2022–23.

Our approach and methodology include these elements to estimate the efficient costs of the sale of electricity by a retailer:[89]

[89] Clause 12(4) of the pricing order.

- **wholesale electricity costs –** based on the expected future electricity costs in the market, which also includes 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 on benchmarks from previous regulatory decisions
- **other costs** – taken directly from published reports from industry bodies
- **retail operating margin** – based on a benchmark from a comparable regulatory decision.

Some elements of the cost-stack are estimated using market data such as wholesale electricity purchase costs. We will update estimates of these elements in our final decision and price determination to account for any changes in market data that occurred after our draft decision. The data provided by retailers will be used as a cross check of our cost stack and will allow us to compare the cost stack elements across different segments of the retail market. We may also use 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 the impact of the coronavirus pandemic and other changes

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.[90]

Among other things, our review has taken into consideration the impact of the coronavirus pandemic (the pandemic) on retailers and the retail electricity market.

Through stakeholder submissions in previous Victorian Default Offer reviews we heard many Victorian residential and small business customers are experiencing vulnerability because of the pandemic, including payment difficulties. We have considered the information available on the impact on the retail electricity market. In considering this information we have had regard to our

[90] Clause 12(4)(f) of the pricing order.

statutory objectives, including the financial viability of the retail energy market and promoting full retail competition.

We also had regard to other changes in the regulatory environment that may affect retailers' efficient costs: for example changes due to five-minute settlement and the consumer data right.

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 have 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.[91] We also consider this arrangement provides a framework that does not impose unreasonable costs on retailers.[92] As with other elements of our methodology, we have also had regard to the approaches adopted by other regulators including the Australian Energy Regulator's Default Market Offer.[93]

Our assessment approach helps us meet our legislative requirements

Our assessment approach helps us meet our objectives

In setting the Victorian Default Offer our objectives are to:

- provide a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the electricity retail market.[94]
- promote the long-term interests of Victorian consumers. In seeking to achieve this objective we must have regard to the price, quality and reliability of essential services. [95]

In terms of promoting the development of full retail competition, the Victorian Default Offer does not prevent customers from choosing their electricity retailer. As retailers will still be free to compete for

[91] Section 10(c) of the Electricity Industry Act.

[92] Section 8A(1)(e) of the ESC Act.

[93] Section 8A(1)(f) of the ESC Act.

[94] Clauses 3 and 12(2) of the pricing order. Also consistent with section 10(c), Electricity Industry Act.

[95] Section 8 of the ESC Act.

customers in the market by making offers above and below the Victorian Default Offer, we note that our approach to the Victorian Default Offer is consistent with the objective in the Electricity Industry Act relating to full retail competition.

Having regard to the relevant matters under the ESC Act

In making our determination, we must have regard to a number of matters to the extent that they are relevant.[96] We have had regard to all of these matters in coming to our draft decision.

Efficiency

Efficiency is an important consideration for our decision.[97] 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.[98] Our review used largely the same approach as our 1 January 2022 price determination.

Financial viability

A related matter is the consideration of long-term incentives for investment and financial viability.[99] As our draft 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.[100]

The relevant legislation applying to the industry

We considered other legislation that affects the efficient costs of a retailer.[101] 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, five-minute settlements and consumer data right). We also note that our benchmarks of retailer

---

[96] Sections 8A and 33(3) of the ESC Act.

[97] Section 8A(1)(a) and 33(3)(b) of the ESC Act 2001.

[98] Section 33(3)(c) of the ESC Act; clause 12(4)(e) of the pricing order.

[99] Section 8A(1)(b) of the ESC Act.

[100] Section 8A(1)(c) of the ESC Act.

[101] Section 8A(1)(d) of the ESC Act.

operating costs, customer acquisition and retention costs and retail operating margin reflect the costs and margins of Australian 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.[102] In formulating the Victorian Default Offer we are not required to revisit the costs and benefits of implementing the Victorian Default Offer.[103]

We have, however, had regard to the costs and benefits of regulation in our approach to formulating the Victorian Default Offer.[104] The Victorian Default Offer reflects a price that is based on the efficient costs of providing retail electricity services. The efficient cost and its interrelationship with the costs and benefits of regulation have been considered throughout our draft decision. Further, in consulting with stakeholders, we considered the information presented to us and noted we would require strong new evidence to change our approach for most cost items. In using this already established approach we sought to minimise the amount of change and regulatory burden for stakeholders.

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 State jurisdictions. In considering benchmarks from other jurisdictions we also had regard to the different policy intent of the relevant legislation.[105]

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.[106] We also had regard to actual cost data from retailers. We also considered the broader economic environment including the impact of the pandemic on retailers' costs. We have also included an additional amount in our benchmarking

---

[102] The development of the Victorian Default Offer stemmed from the Independent Review into the Electricity and Gas Retail Markets in Victoria. The final report from the Independent Review recommended a range of regulatory responses were required to protect the long-term interests of consumers. See Independent Review into the Electricity and Gas Retail Markets in Victoria: Final Report, August 2017, p. 52.

[103] Under clause 12(11) of the pricing order, section 33(4)(a) does not apply to a Victorian Default Offer determination.

[104] Section 8A(1)(e) of the ESC Act.

[105] Section 8A(1)(f) and 33(3)(d) of the ESC Act.

[106] Section 8A(1)(e) of the ESC Act.

of retail operating costs to cover differences in regulation between Victoria and other parts of Australia.

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.[107] 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 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.

Having regard to the other relevant matters the pricing order

Clause 12 of the pricing order provides guidance on the approach and methodology for making a Victorian Default Offer price determination. We have considered this guidance in making our draft decision. The relevant matters are considered in the body of our draft decision including the cost stack chapter, chapter on flat tariffs and maximum bill, and earlier in this appendix.

[107] Section 33(4)(b) of the ESC Act.

Appendix F: Stakeholder submissions on initial consultation

Name of organisation	Date received
AGL	3 February 2022
Energy Australia	3 February 2022
Globird	3 February 2022
Momentum Energy	3 February 2022
Origin Energy	3 February 2022
Red and Lumo Energy	3 February 2022
Simply Energy	27 January 2022

Appendix G: Changes to cost benchmarks

Table G.1 shows how our cost stack has changed compared to the 1 January 2022 Victorian Default Offer.

Table G.1: Changes between 1 January 2022 Victorian Default Offer final decision and 2022–23 Victorian Default Offer draft decision

Item	1 January 2022 Victorian Default Offer final decision	2022–23 Victorian Default Offer draft decision
Victorian Default Offer costs		
Wholesale electricity costs	Estimated based on a 12-month trade weighted average of future contract prices from ASX Energy. Demand and relationship between demand and price estimated in a Monte-Carlo simulation using 5 years of data. Used the weighted average of the short and long sub-transmission factors for calculating distribution losses to apply to both AusNet and Powercor regions. Removed some transmission nodes that do not have residential or small business load in calculating the marginal loss factor.	No change in approach but the Monte Carlo simulation to forecast demand, and the relationship between demand and price, now only uses 3 years of historical data.
Network costs	Australian Energy Regulator's approved network tariffs are treated as pass through costs. Metering costs based on lowest cost service available. Included a true-up for under or over recovered network costs from July and August 2021.	Australian Energy Regulator's approved network tariffs are treated as pass through costs. Metering costs based on customer weighted average metering costs. True-up for under or over recovered network costs from July and August 2021 does not apply anymore.
Environmental costs		

Large-scale Renewable Energy Target	Estimated based on the 2022 default renewable power percentage (calculated using the Clean Energy Regulator's outlined methodology) multiplied by the futures market price for large-scale certificates.	No change in approach
Small-scale Renewable Energy Scheme	Estimated based on mid-point of the 2022 non-binding small-scale technology percentage and the 2021 binding small-scale technology percentage, multiplied by the clearing house price. We included an adjustment to account for the discrepancy between the level of the non-binding small-scale technology percentage we used in the 2021 Victorian Default Offer and the binding small-scale technology percentage for 2021.	No change in approach
Victorian Energy Upgrades	Estimated based on the 2021 greenhouse reduction rate for electricity multiplied by the historic 12–month trade-weighted average price for Victorian Energy Efficiency Certificates.	No change in approach
Minimum feed-in tariff (social costs of carbon)	Estimated based on total renewable exports in 2020–21 divided by average total domestic and small business customers in 2020–21, multiplied by the social cost of carbon of 2.5 cents.	No change in approach
Retail operating costs	Estimated based on a benchmark set by the Independent Competition and Regulatory Commission in 2017 and adjusted for the change in consumer price index since 2017. Benchmark also includes $10 for additional regulatory costs specific to Victoria and a small annual amount of $0.84 for the ongoing operating expenditure	No change in approach

	associated with five-minute settlement. The $6 temporary adjustment for bad debts that was removed in the 1 January 2022 VDO, has not been reinstated.	
Customer acquisition and retention costs	Estimated based on cost levels from the Australian Competition and Consumer Commission's retail and electricity pricing inquiry's final report[108] updated for inflation.	No change in approach
Other costs	Estimated and updated based on the latest available information on the: Australian Energy Market Operator's fees and charges for Distributed Energy Resources Integration Program and five-minute settlement; ancillary fees; reliability and emergency reserve trader costs; and Essential Services Commission licence fees.	No change in approach.
Retail operating margin	Estimated benchmark of 5.7 per cent is based on recent regulatory decisions by Australian regulators.	No change in approach
Other matters		
Tariffs and structure	Flat tariffs Two period time-of use tariffs Compliant maximum annual bill based on two period time-of use tariffs	No change in approach
Regulatory period	6 months	12 months

[108] Australian Competition and Consumer Commission, Retail electricity pricing inquiry – Final report, July 2018.

Table G.2: Changes in average residential costs benchmarks ($nominal)

Item	1 January 2022 Victorian Default Offer final decision	2022–23 Victorian Default Offer draft decision
Wholesale electricity costs	$303	$320
Network costs	$523	$514
Environmental costs	$138	$141
Retail operating costs (including acquisition costs)	$181	$184
Retail operating margin	$68	$70
Other costs	$8	$8