ESSENTIAL SERVICES COMMISSION

Victorian Default Offer 2021

Final Decision

25 November 2020

An appropriate citation for this paper is:

Essential Services Commission 2020, Victorian Default Offer 2021: Final Decision, 25 November

Contents

Our final decision is that VDO prices will decrease

- As a result of our final decision the average annual bill for VDO customers will fall by ten per cent for residential customers and 14 per cent for small business customers in 2021. This is mainly due to forecast decreases in wholesale electricity and network costs.
- Our final decision on the 2021 VDO uses generally the same approach and methodology we used in our determination on the 2020 VDO.
- We have accounted for the effect of the coronavirus pandemic on retailers' costs by increasing the amount in the VDO cost stack for bad debts. This is based on new information provided to us by retailers in response to our draft decision.
- Our expectation is that the additional $6 we have allowed for bad debts is temporary, and a specific response to the effects of the coronavirus pandemic and its impact on the economy that will be removed from the VDO 'cost stack' at a future review
- Our determination is for a 12 month regulatory period starting 1 January 2021. However, when the AER approves network tariffs for the second half of 2021, if there are material changes that might affect VDO prices, we will engage with stakeholders on how to reflect the tariffs in VDO prices. Two options we are considering are:

1. revoking our determination to shorten the regulatory period. We would then make a new determination that would last until 30 June 2022; and
2. continuing with a 12 month period and using our variation mechanism to pass through changes in network tariffs.

The Victorian Default Offer (VDO) was introduced by the Victorian Government on 30 May 2019 to regulate standing offer prices for electricity in Victoria. The VDO started on 1 July 2019. Based on advice we gave,[1] to begin with the Victorian Government set the prices retailers may charge for standing offer contracts with a flat tariff structure[2] in an Order in Council (pricing order).[3]

Standing offers are contracts that electricity retailers are obliged to make available to domestic and small business customers.[4] 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.[5]

Although prices for standing offers are regulated, electricity retailers can and do supply electricity under market offers with prices that are higher or lower than standing offers.

The pricing order also gave us the role of regulating the tariffs for all standing offers and sets out the scope and requirements we must follow when making VDO price determinations. We made our first VDO determination under the pricing order for the 2020 calendar year.

This determination regulates the amounts retailers can charge customers on standing offers in Victoria in 2021. The commission made its determination on these tariffs on 25 November 2020.

The VDO price determination and its objective

The objective of the VDO

The objective of the VDO is to provide a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the electricity market.[6]

---

[1] Essential Services Commission, Victorian Default Offer to apply from 1 July 2019: Advice to Victorian Government, May 2019.

[2] A flat tariff does not vary by reference to the time of day, the amount of electricity used during the day, temperature or other characteristics that vary during the day.

[3] 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).

[4] Domestic and small business customers are customers who purchase power for personal, household or domestic use or consume no more than 40 megawatt hours in a year for business use.

[5] Sections 35, 37 and 39 of the *Electricity Industry Act 2000*.

[6] Clause 3 of the pricing order sets out the objective of the VDO.

VDO price determination

The VDO is a set of prices that apply to all types of standing offers. The two key categories of standing offers to which the VDO applies are:

1. standing offers with tariffs that do not vary by time or usage (flat tariffs)
2. standing offers with tariffs that do vary by time or usage (non-flat tariffs).

The VDO also applies as a maximum price for most customers in embedded networks.[7]

Customers may be able to get a better deal than the VDO

The VDO is meant to be a reasonably priced electricity option and provide a safeguard for customers unable or unwilling to engage in the electricity retail market. While the VDO is generally available to domestic and small business customers, only around five per cent of households and 15 per cent of small business customers are on standing offers.

For most customers, the VDO will not be the best offer available and they can access a market offer with better prices. Retailers must regularly tell customers whether they are on the retailer's best energy plan, and how much the customer could save by switching. In addition to customers on standing offers to whom the VDO applies, there are also roughly 140,000 customers in embedded networks.[8] While the vast majority of embedded network customers may not be able to access market offers, the VDO provides protection to most of them as a maximum price. Embedded network sellers are also free to offer prices below the maximum. For more information, see our final decision on maximum prices for exempt sellers (embedded networks).[9]

Our final decision is to keep our approach largely unchanged

We consider that using largely the same approach as we did in our 2020 VDO price determination will best meet our legislative objectives. 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 (Vic)* (ESC Act), *Electricity Industry Act 2001 (Vic)* (EI Act) and the pricing order.

---

[7] Essential Services Commission 2020, Maximum prices for embedded networks and other exempt sellers: Final Decision, 22 July.

[8] Essential Services Commission, Embedded electricity network data and customer numbers, available at: https://www.esc.vic.gov.au/electricity-and-gas/licences-and-exemptions/electricity-licensing-exemptions/embedded-electricity-network-data-and-customer-numbers.

[9] Essential Services Commission 2020, Maximum prices for embedded networks and other exempt sellers: Final Decision, 22 July, available at: https://www.esc.vic.gov.au/sites/default/files/documents/Maximum%20price%20for%20exempt%20sellers%20final%20decision%20-%2022%20July%202020.pdf

Our final decision is 2021 VDO prices will be lower than 2020 VDO prices

Our forecasts of the efficient costs of the sale of electricity by a retailer (efficient costs) is lower for 2021 than it was in 2020. This is mainly driven by forecast decreases in wholesale electricity costs. We also reviewed and updated the other elements of our cost stack (environmental costs, retail costs, network costs and other costs) with the most recent data available.

Based on our forecasts we have estimated the efficient costs for serving residential and small business customers in each of Victoria's five distribution zones. On average, across all five distribution zones, for customers on the VDO the representative residential bill will decrease by roughly ten per cent and 14 per cent for the representative small business bill (see figures 1 and 2 for details).

Figure 1: The impact of our final decision on VDO prices – estimated annual bill for residential VDO customers (average across five distribution zones)

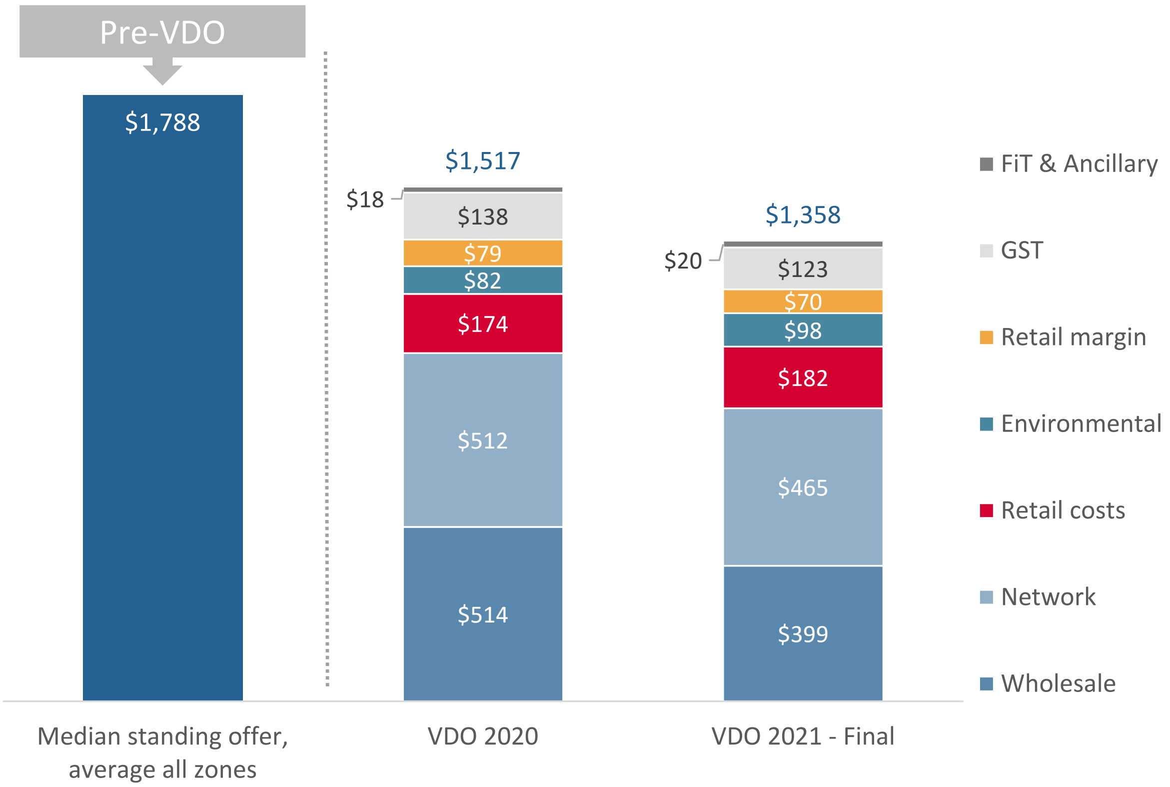
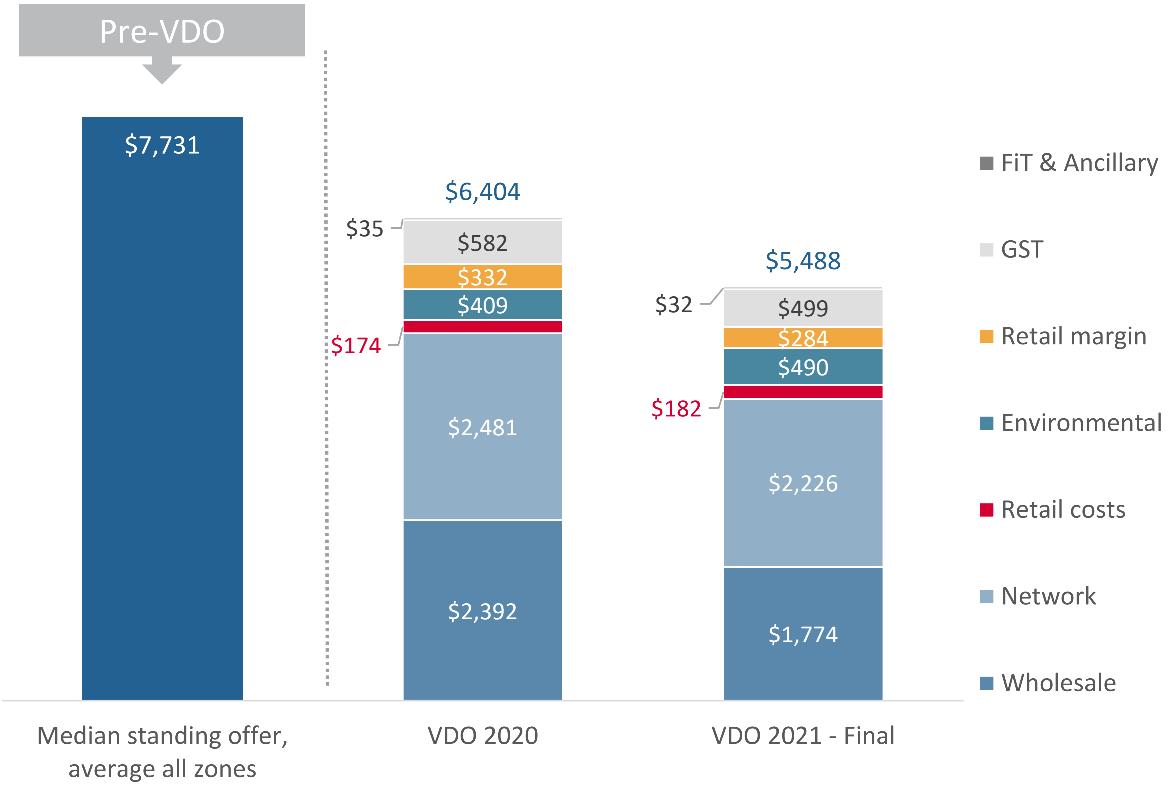


Figure 2: The impact of our final decision on VDO prices – estimated annual bill for small business VDO customers (average across five distribution zones)



We considered the impact of the coronavirus pandemic on retailers' costs

We have made an upward adjustment of $6 to our retail cost benchmark to reflect the expected effect of the pandemic on retailers' bad debt costs. This cost estimate is based on public information on retailers' doubtful debt provisions for 2020. On average across all distribution zones, this additional amount makes up 0.44 per cent of the cost stack for residential customers and 0.11 per cent for small business customers.

We have not included an adjustment for other costs associated with the effect of the pandemic. Information available to us did not suggest a further adjustment was needed.

The regulatory period will be 12 months

Our draft decision was for the regulatory period for this VDO decision to last for 12-months. This was because we would not have information on the network tariffs to apply for the second half of 2021. In response to our draft decision many retailers voiced strong support for a regulatory period shorter than 12 months, including recommendations for a six to nine month regulatory period, as this would mean fewer price changes over the next two years.

We accept that there are attractive features of a shorter regulatory period. However, it is not clear that we will have all the information we need or the time to properly consult if we commit to a shorter regulatory period. So, on balance, we consider that a 12 month VDO period gives us the most flexibility to deal with uncertainty around the new network tariffs for the 2022 financial year.

But if there are material issues and it is practical to do so we may shorten the regulatory period

Once the Australian Energy Regulator approves electricity distribution networks' tariffs for the regulatory period starting 1 July 2021, if there are material changes to tariff structures, we will consult with stakeholders on how best to reflect these changes, and any other material matters, in the VDO.

If there are matters which materially affect our VDO cost stack or approach to VDO tariff structures, and it is practical to do so, we may make a new determination and revoke this determination. We would also consider setting the end date of a new determination to 30 June 2022 to align with the network regulatory year. Any decision we propose to shorten the current regulatory period and the next would be made only after consulting with the Minister administering the *Electricity Industry Act 2000* (Vic) and stakeholders.

If there is no material reason for us to revoke this determination, or it is not practical to do so, the 2021 VDO determination will continue to 31 December 2021 and we will use our variation mechanism to pass through changes in network tariffs after they are finalised: including any true-ups if required.

If we were to shorten the regulatory period by revoking our determination, rather than using our variation mechanism to pass through changes in network tariffs. We will then true up the network costs in the new determination. This will help reduce the number of price changes in 2021.

We have made changes in response to stakeholder feedback

Following our draft decision we obtained more information and views from stakeholders. We considered all feedback from stakeholders in making our determination. We received 17 submissions in response to our draft decision. We also held an online forum in October where stakeholders asked the commission questions and put forward their views. The forum was attended by 80 people from the energy sector, customer representative groups, and government.

One example of our responsiveness to stakeholder views is that we have incorporated an allowance for bad debts in retail operating costs, in response to new information made available to us following our draft decision. Other changes since our draft decision include updating cost items dependent on market information or other regulator decisions (i.e. network prices), for the latest available data. We have also updated retail costs to reflect the release of the September 2020 quarter consumer price index by the Australian Bureau of Statistics, since our draft decision.

Table 1 shows the impact of these changes on our VDO cost stack for residential customers.

Table 1: Comparison of draft and final decisions

Cost element	VDO 2021: draft decision	VDO 2021: final decision	% change Draft to final	Main driver of change*
FiT & Ancillary	$20	$20	0%	
Environmental	$97	$98	1%	
Retail costs	$173	$182	5%	Bad debts adjustment
Network	$512	$465	-9%	New network tariffs
Wholesale	$408	$399	-2%	New market data
Retail margin	$73	$70	-4%	Changes in the other costs
GST	$128	$123	-4%	Changes in the other costs
Total	**1411**	**$1358**	**-4%**	New network tariffs

Notes: These figures have been escalated by CPI which is driving some of the change between draft and final. Also totals may not match due to rounding

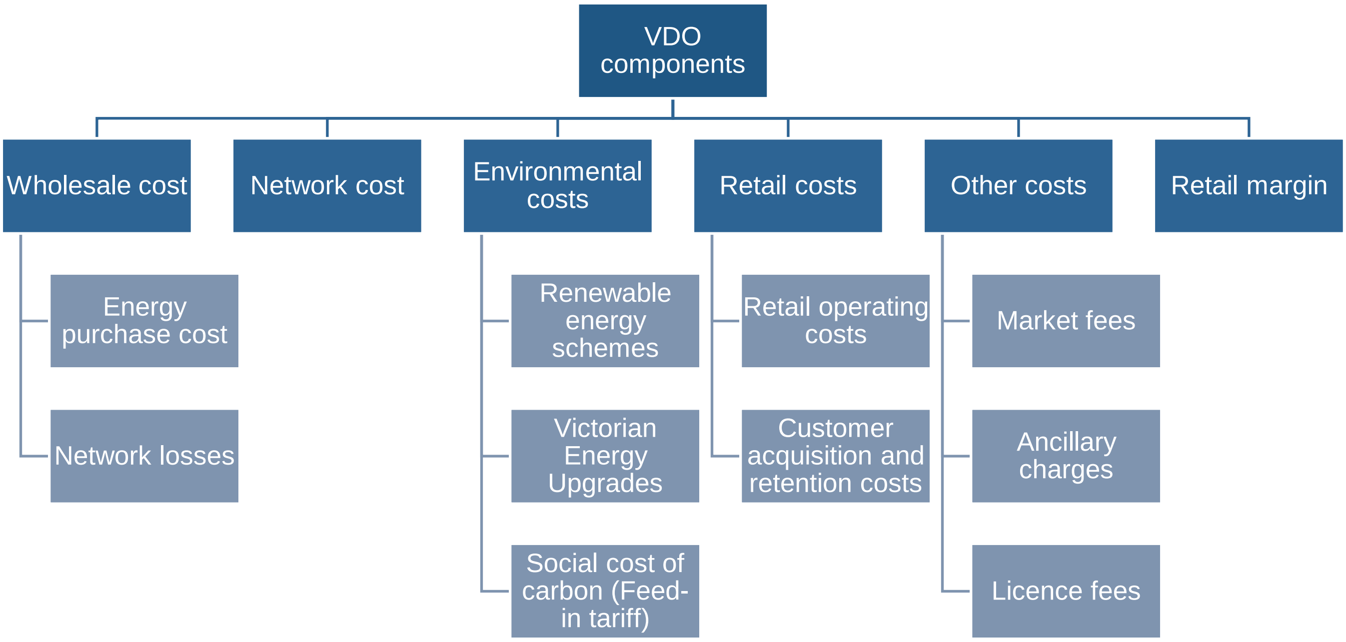
Please contact us if you have any questions

If you have any questions about this decision please email us at VDO@esc.vic.gov.au. or contact Jonathan Roberts on (03) 9032 1307.

VDO cost components

To set the Victorian Default Offer (VDO) tariffs, we must first estimate the efficient costs of providing retail electricity services to be recovered through those tariffs. Figure 3 sets out the key items we propose to include in our estimate of efficient costs.[10]

Figure 3: Cost items included in the VDO cost stack



A summary of our approaches to estimating each item that makes up the total VDO costs is as follows:

- **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** – taken directly from the 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 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.

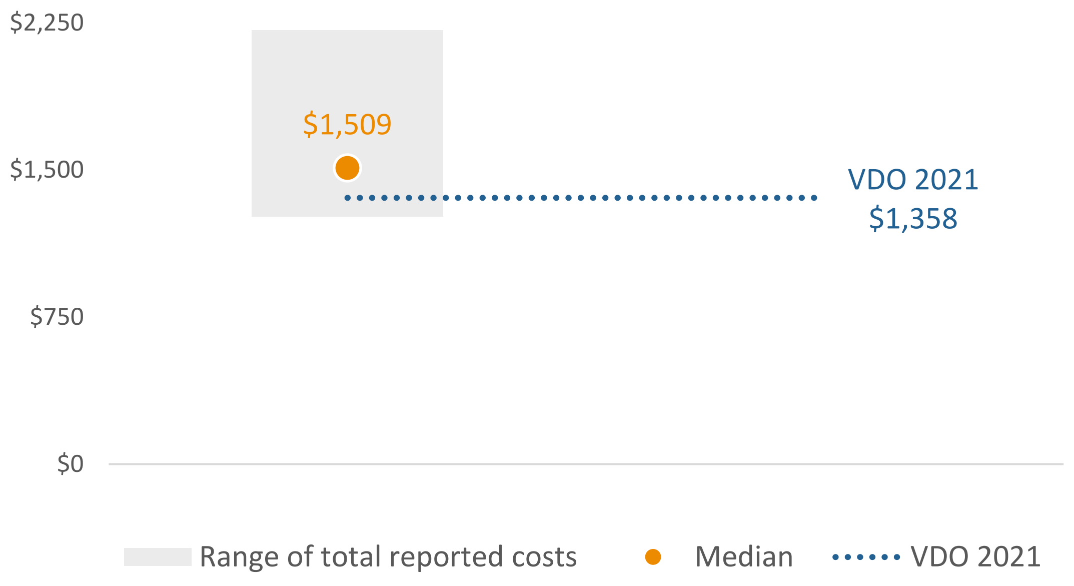
As part of this review we updated the estimates included in the VDO cost stack to reflect changes in the market and new data that is now available.

[10] Clause 12(4) of the pricing order that requires the commission to account for a particular set of costs.

In preparing this final decision we undertook further analysis of our already established approach to the VDO and the current economic environment including the impact of the coronavirus pandemic (the pandemic) on stakeholders.

As a cross-check, we also analysed the cost data we collected from retailers for financial year 2019 and compared it to the estimates from our VDO cost stack. We acknowledge that there are difficulties in directly comparing costs from 2019 to our forecast of costs in 2021. In particular wholesale costs and network costs are likely to be significantly lower in 2021 than they were in financial year 2019. We also note that costs from financial year 2019 are now more than a year old. The average residential customer bill for the 2021 VDO sits at the lower end of the range of retailers' actual costs for 2019. We note that a mix of retailers by size – small, medium and large – reported costs below the 'cost stack' we have calculated for the 2021 VDO.

Figure 4: Retailers' actual costs in 2019 and the average residential bill for the 2021 VDO ($2020 including GST)



Source: retail cost data and ESC analysis

Note: We added a margin of 5.7 per cent to all costs reported to make them more comparable to the VDO benchmark.

Wholesale electricity costs

- Our final decision uses forecasts of wholesale electricity prices based on futures prices from ASX Energy. This is consistent with what we proposed in our draft decision and is the approach we used in making our 2020 VDO price determination.
- In 2021 wholesale electricity purchase costs will make up approximately 29 per cent of an annual residential bill (averaged across the five distribution zones).

- The wholesale electricity costs included in our 2021 VDO cost stack for residential users will decrease by around 22 per cent when compared to the benchmark included in our 2020 determination.

We forecast energy purchase costs will decline

Energy purchase costs are incurred by retailers when they purchase electricity from the wholesale market to meet the demand of their customers. We must base tariffs on the efficient costs of the sale of electricity by a retailer, having regard to wholesale electricity costs.[11] We have used a futures market approach to estimate a benchmark for wholesale electricity costs for 2021. We used this approach in making our determination on the 2020 VDO and our draft decision. This approach is also consistent with the approach taken by other Australian regulators.[12] Our final decision forecast is lower than the benchmark provided in 2020 and our draft decision. This is driven by changes in the market data that we use to make our forecasts.

Energy purchase costs

Electricity generators supply wholesale electricity to the National Electricity Market which matches generation with demand in real time. Electricity retailers must secure a supply of wholesale electricity, and while some retailers own generators, many buy electricity directly from generators on the spot market. Buying electricity from the spot market exposes retailers to the risk that electricity prices may be high when they need to purchase electricity. An efficient approach to managing this risk is the use of hedging. 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 – the futures market on ASX Energy.

Futures prices are transparent as they are publicly traded. Also a retailer of any reasonable size can hedge in this way. In basing our estimate on the futures market, our approach reflects the outcome of a workably competitive market and that of a benchmark efficient retailer.

We engaged Frontier Economics to estimate wholesale electricity purchase costs

We engaged Frontier Economics to estimate wholesale electricity purchase costs. We have considered their approach and accept Frontier Economics' recommendations as reflecting a benchmark of efficient wholesale electricity purchase costs for the purpose of estimating the VDO prices. A full description of Frontier Economics' methodology, including data sources, is included in

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

[12] Other regulators including the Queensland Competition Authority, the Independent Competition and Regulatory Commission (in the ACT) and the Australian Energy Regulator have used a futures approach to forecast wholesale electricity costs.

its report.[13] A summary is provided below. Table B.1 of appendix B sets out wholesale electricity forecasts for 2021.

Frontier Economics determined the relationship between load and spot prices, using four years of historical data 2016-17, 2017-18, 2018-19 and 2019-20. Half-hourly customer load data was provided directly by the Australian Energy Market Operator (AEMO).[14] Victorian half-hourly spot prices for the same period were sourced from AEMO's publicly available data.

Frontier Economics performed a Monte Carlo simulation using historical data on load and price. The simulation randomly generates a year of half-hourly observations. This process is repeated 500 times to generate a range of simulated years.[15] 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 equal the relevant quarterly ASX Energy base swap price for 2021, subtracting a contract premium.[16]

It then estimated the cost of hedging, as well as the hedging position a prudent retailer would likely adopt. To estimate the cost of financial hedging, 12-month trade-weighted hedging contract prices on quarterly electricity derivative contracts were used; base and peak swaps, and base $300 caps. An efficient contracting position was then estimated using Frontier Economics' STRIKE model. An amount for holding working capital (cash) to fund spot market purchases was also included – a volatility allowance which funds shortfalls during periods of very high spot prices.

From 1 October 2021, base $300 cap contracts (which can be purchased up to four years in advance) have been delisted from ASX Energy.[17] This is due to AEMO's rule change on five-minute settlements in the National Electricity Market.[18] Frontier Economics has assumed a

---

[13] Frontier Economics, Wholesale electricity costs for 2021: a final report for the Essential Services Commission, 30 October 2020.

[14] AEMO directly provides us with separate half-hourly load data for each of Victoria's five distribution zones, for both residential and small business customers with an annual consumption less than 40MWh.

[15] 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).

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

[17] At the time of making our draft decision base $300 caps were not available from 1 July 2021. However, due to the delay in introducing the five-minute settlement rule change by 3 months, Q3 caps for 2021 began trading again on 7 August 2021.

On 22 January 2018, ASXEnergy announced the temporary withdrawal of Australian Electricity Base Load Calendar Quarter $300 Cap futures for the Q3 and Q4 2021. More information is available in ASXEnergy's bulletin https://www.asxenergy.com.au/newsroom/industry_news/delisting-of-australian-elect.

[18] In November 2017, the Australian Energy Market Commission ruled to change the settlement period for the electricity spot price from 30 minutes to five minutes – commencing 1 October 2021. This was done on the basis that five-minute settlements provide a better price signal for investment in fast response technologies, such as batteries, new generation gas peaking power plants and demand response (which incentivises businesses to reduce demand during peak events).

price for $300 caps in the fourth quarter of 2021 based on the relationship between quarter one caps and quarter four caps in 2020, and the price of quarter one caps in 2021 to infer a price for quarter four caps in 2021.[19]

We considered the potential for changes in wholesale costs due to the coronavirus pandemic

In reaching our final decision we have considered the effect the pandemic has had on patterns of electricity consumption in Victoria. Frontier Economics examined data for 2020 comparing it with data from previous years. It found differences in residential load profiles have become more noticeable in the months of July and August this year, with the morning peak occurring later in the day and daytime load increasing – resulting in a peakier load. This is consistent with changed working arrangements for many Victorians. However, evidence that the coronavirus pandemic is having an impact on load is not clear-cut. It is also not clear to what extent these changes will continue into next year.[20] We have considered Frontier Economics' analysis on the issue, and have accepted its advice to not modify its approach to account for any change in load due to the coronavirus pandemic. This view is supported by AGL in its submission stating, 'AGL has analysed the load shapes for Victoria over this period and agrees with Frontier that the pandemic has impacted electricity consumption but it is uncertain at this stage and not possible to identify a consistent change in consumption patterns that would warrant further adjustments'.[21]

We factored network losses into our 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. These losses must be factored into any electricity purchased through the wholesale market to ensure supply meets demand. As a result, more electricity is generated than is consumed by end users.

Our final decision uses the latest data from the AEMO for:

- Distribution loss factors – the short sub-transmission factor for the CitiPower, Jemena, and United Energy distribution zones and the average of the short and long sub-transmission factors for the Powercor and Ausnet zones.[22]

---

[19] Frontier Economics, Wholesale electricity costs for 2021: a final report for the Essential Services Commission, 30 October 2020, p. 27.

[20] Frontier Economics, Wholesale electricity costs for 2021: a final report for the Essential Services Commission, 30 October 2020, p. 56.

[21] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 1.

[22] Australian Energy Market Operator, Distribution Loss Factors for the 2020-21 Financial Year, October 2020, p. 13.

- Marginal loss factors – the relevant regional reference node factor for each distribution zone.[23]

We combine these to calculate an adjustment factor which is applied to energy purchase costs, environmental costs, and ancillary charges.

Stakeholder feedback on our draft decision on wholesale electricity purchase costs

In response to our draft decision, stakeholders continue to support our general approach in using a futures market method to estimate wholesale electricity costs.[24] Several submissions however made observations on Frontier Economics' approach to the futures market method which we adopted in past VDOs and in our draft decision, with some stakeholders proposing changes.

Some of the issues raised in response to our draft decision have been considered in previous reviews. In its submission, Tango Energy noted that the methodology used in developing the draft decision builds on previous determinations, and considers departures from the existing methodology unwarranted.[25]

While our approach is well established, we continue to consider matters raised by stakeholders. We are open to any new information that leads to our methodology better meeting our regulatory objectives.

Historical data on half-hourly price and load

In its submission, Simply Energy told us that using load data from 2016-17 is not representative of typical Victorian demand for 2021, as export from rooftop photovoltaic systems has increased leading to lower demand during the day, resulting in greater price volatility.[26] We acknowledge that the changing mix of generation (such as the closure of coal fired power stations and the increasing penetration of rooftop solar) will in time affect load, price level and price volatility. In developing our draft decision, Frontier Economics investigated this issue, noting that while there is some indication load during the day is falling, the effect does not appear to be significant at this stage.

Frontier Economics found that average daily spot prices have become more variable in recent years, due to an increasing number of high price events during the afternoon and evenings of January and February. Futures prices suggest that the market is expecting this to occur again in 2021. Frontier Economics explored cutting the data set to exclude observations from 2016-17,

---

[23] Australian Energy Market Operator, Regional and Marginal Loss Factors: FY 2020-21, July 2020, p. 20.

[24] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 1.

[25] Tango Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 1.

[26] Simply Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2.

finding the results did not materially impact our estimate of wholesale costs.[27] While we will continue to monitor for the effect of increasing solar exports in the future, our final decision continues to use four years of price and load data.

Scaling spot prices

Simply Energy's submission suggested the approach taken in scaling spot prices is done with only partial reference to market information, and is concerned our draft decision failed to reflect the market's expectation of high-price and high-volume events (such as those that occurred in January 2019).[28] [29] It suggested when generating future spot prices, Frontier Economics use peak swap and cap prices (in addition to base swap prices). Frontier Economics has previously considered scaling half-hourly prices to base swaps, peak swaps, and cap prices, noting it would require subjective judgements about how to simultaneously scale to each of these prices. The current approach of scaling to base swaps does not rely on scaling spot prices to more than one arbitrary contract price, which would require subjective decisions lead to a loss of predictability and an overall loss of transparency in its method.

We asked Frontier Economics to test the impact on wholesale electricity costs of scaling to cap prices for 2021. Frontier Economics explored the impact under one possible scenario which resulted in a wholesale electricity cost benchmark that was lower than the current approach.[30]

Given that this change in methodology would rely on decisions being made on how to rescale all other prices (below $300), which would ultimately reduce the predictability and transparency of the approach, our final decision continues to use the current approach of scaling only to base swaps.

Contract premium

As mentioned earlier, when forecasting spot prices in the wholesale market Frontier Economics use base swaps to scale spot prices. The correlation between load and price in the forecast is based on historical spot prices, but the forecast of the level of prices is based on futures contract prices. Frontier Economics subtract a contract premium of five per cent to reflect the difference between expected future spot prices and forward contract prices. This premium is only subtracted when forecasting the spot prices. These spot prices are then used to represent expectations of

---

[27] Frontier Economics, Wholesale electricity costs for 2021: a final report for the Essential Services Commission, 30 October 2020, p. 18.

[28] Simply Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2.

[29] AEMO's report on the load shedding events of January 2019 is available on its website: https://www.aemo.com.au/-/media/Files/Electricity/NEM/Market_Notices_and_Events/Power_System_Incident_Reports/2019/Load-Shedding-in-VIC-on-24-and-25-January-2019.pdf

[30] Frontier Economics, Wholesale electricity costs for 2021: a final report for the Essential Services Commission, 30 October 2020, p. 20.

wholesale prices that retailers must hedge against. When selecting contracts to hedge against these spot prices, the STRIKE model chooses a position by weighing up contract prices (without the contract premium removed) and spot price risk. This is consistent with the approach used in previous reviews.[31]

In its submission, Simply Energy told us it didn't believe the assumption of a contract premium should apply to swap prices, as swaps are generally agreements between retailers and generators who both derive benefit from certainty in price outcomes – retailers avoid exposure to high spot prices, while generators reduce exposure to low prices (locking in revenue).[32]

This issue has previously been raised; we note the evidence available to us on the issue has not changed. The benefits of purchasing swaps are not entirely symmetrical for retailers and generators. In purchasing swaps, retailers also reduce their exposure to low prices, while generators reduce their exposure to high prices – noting the spot market has a price cap of $15,000/MWh and a price floor of -$1,000/MWh, which means retailers are likely to benefit more by purchasing swaps as they reduce their exposure to high prices. Whilst the contract premium cannot be directly observed, the asymmetric risk inherent in procuring swaps supports the use of a positive contract premium.

AGL's submission also requested we reconsider the use of a contract premium, suggesting energy is now mostly procured through power purchase agreements (PPAs), and if a contract premium still exists it would be below the current 5 per cent estimate used by Frontier Economics.[33] In response, Frontier Economics note that a shift towards more PPAs does not necessarily lead to a change in the contract premium, as more PPAs reduces both supply (from generators) and demand (from retailers) for swaps – ultimately it may not change the balance between demand and supply, the opportunity cost of either generators or retailers, or the eventual contract premium.

We asked Frontier Economics to review the matter and assess whether a contract premium of 5 per cent reflects the current market for swaps.[34] It compared the actual spot prices for each quarter with the price of base swaps for that quarter on the trading day immediately before the start of that quarter, finding that it is likely that there is a contract premium of at least 5 per cent, supporting the position that exposure to price risk is asymmetric. We agree with Frontier

[31] That is, the difference between an expectation at a point in time of future spot prices (which cannot be observed) and the observed forward contract prices at that point in time.

[32] Simply Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2.

[33] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 3.

[34] Frontier Economics, Wholesale electricity costs for 2021: a draft report for the Essential Services Commission, 30 October 2020, p. 20.

Economics' recommendation, and our final decision continues to use a contract premium of five per cent.

Setting wholesale electricity costs

Both Origin Energy and Simply Energy told us they did not support setting wholesale electricity costs based on the median (50th percentile) of simulated years – the approach taken by Frontier Economics.[35] This matter was raised in determining 2020 VDO prices, with the Australian Energy Council recommending we take the 95th percentile of wholesale electricity costs. The Australian Energy Council suggested this on the basis that it would seek to be 95 per cent confident that it does not underestimate wholesale electricity costs for retailers.[36] We maintain the view that taking the median approach balances risks for both customers and retailers, and better fits the requirement to base our determination on efficient costs that do not provide for headroom. Our final decision continues to base wholesale electricity costs on the median of simulated years.

Network Losses

In response to our draft decision EnergyAustralia noted its support for the use of AEMO's published loss factors. It did however dispute the use of the short sub-transmission distribution loss factor (DLF) in the AusNet and Powercor distribution zones, and our approach to accounting for the Marginal Loss Factor (MLF) in the Powercor zone, on the basis that the parameters we use do not reflect the cost of supplying customers in rural areas.[37] EnergyAustralia provided us with new information on the scale of this impact to their business, suggesting 67 per cent of its customer usage in AusNet is attributable to the long sub-transmission distribution loss factor, while around 75 per cent of usage in Powercor is greater than the marginal loss factor we provide for. On the basis of the information provided by EnergyAustralia we undertook further investigation of the distribution loss factors and marginal loss factors.

After considering further information from electricity distributors we consider that using the short sub transmission loss factor may slightly undercompensate retailers for providing services to customers in the Ausnet and Powercor distribution zones. To address this, in those distribution zones we have used the simple average of the short and long sub-transmission distribution loss factors. This adjustment results in a minor increase to average annual bills – 0.28 per cent in

---

[35] Origin Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 6.

Simply Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 3.

[36] The Australian Energy Council: appendix prepared by ACIL Allen, submission to the Essential Services Commission, Victorian Default Offer to apply from 1 January 2020: Draft decision, October 2019, p. 11.

[37] EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 10.

Ausnet and 0.76 per cent in Powercor.[38] We will investigate a more accurate measure for distribution loss factors in those distribution areas as part of our next review.

However, we have not changed our approach to accounting for marginal losses. While no alternative methodology was proposed by stakeholders, we did consider each regional reference node (and its corresponding MLF) in both the Ausnet and Powercor distribution zones. We found a narrow range in factors across these zones and maintain our view that a simple average adequately accounts for marginal losses. We will consider this matter further as part of future reviews.

Network costs

- Our final decision continues to use a cost pass-through approach towards estimating network costs.
- Our final decision uses the tariffs approved by the AER for the period 1 January to 30 June 2021 which were published on 16 November 2020.
- Network costs represent about 34 per cent of costs in the average residential bill (averaged across the five distribution zones).
- The network costs included in our 2021 VDO cost stack for residential users will decrease by nine per cent when compared to our 2020 determination.

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.[39] There are five electricity distribution networks operating in five separate zones across Victoria, each with their own specific requirements in terms of maintenance and expansion. The charges levied by each network are approved by the AER on an annual basis.

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

- Distribution charges – tariffs for the use of the distribution network.
- Transmission charges – tariffs for the use of the transmission network.
- Jurisdictional charges for the payments distributors are required to make.

[38] Percentage figures are the average of both the residential and small busines average annual bill (the residential bill is based on an annual consumption of 4,000 kWh, while the small business bill is based on an annual consumption of 20,000 kWh).

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

Our final decision treats network costs as a pass-through

Our final decision retains the approach we took in determining 2020 VDO prices. We also used this approach in our draft decision. We have continued to treat network costs as a cost pass-through, using the simplest network tariffs approved by the AER for each distribution zone (set out in Appendix B). This is generally made up of a daily supply charge and a flat usage charge. We also include metering charges for each distribution zone, and a controlled load option for domestic customers. Our final decision and determination use the tariffs approved by the AER for the first half of the 2021 calendar year.[40]

The Victorian Government passed legislation to move Victorian distribution networks' regulatory period from calendar years to financial years.[41] To accommodate this, the current regulatory period for networks has been extended by six months to 30 June 2021. Our final decision uses approved network tariffs for the first six months of 2021, however approved network tariffs for the second half of 2021 are not yet available. We will either use our variation mechanism to update our determination when the network tariffs are made available or make a new determination to reflect the change in tariffs. We discuss our approach to updating our determination in the chapter titled other considerations.

Metering costs

Our final decision uses the simplest AER approved Advanced Metering Infrastructure charges for single phase meters in each distribution zone as a cost per customer (these are set out in Appendix A).

Stakeholder feedback to our draft decision on network tariffs

Simply Energy told us it agreed with the proposal set out in our draft decision of a general cost pass-through approach to network costs. It noted that should actual tariff data not be available, then a network cost forecast, with a risk allowance or provision for this in the retail operating margin, should be provided.[42] Origin Energy told us we should ensure retail businesses are not exposed to a situation where the estimated network costs do not reflect actual network costs.[43] As noted above, our determination uses the approved network tariffs for the first half of calendar year

[40] Our draft decision used tariffs for the 2020 calendar as approved 2021 tariffs were not yet available.

[41] National Energy Legislation Amendment Bill 2020 https://www.legislation.vic.gov.au/bills/national-energy-legislation-amendment-bill-2020.

[42] Simply Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 4.

[43] Origin Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 6.

2021. We will also account for changes in underlying network tariffs in the VDO by either using our variation mechanism or making a new determination once network tariffs are published in 2021.

Environmental costs

- Our final decision is to continue to use the approach to estimating environmental costs that we used in our final decision on the 2020 VDO.
- Environmental costs represent about 7 per cent of the average residential bill (averaged across the five distribution zones).
- Our final decision means the dollar value of environmental costs in the cost stack will increase by 20 per cent compared to the amount included in the 2020 VDO. This is mainly driven by increases in costs associated with the federal small-scale renewable energy scheme and Victorian Energy Upgrades.

Under the pricing order, we are required to have regard to environmental costs.[44] There are four main environmental costs faced by Victorian electricity retailers:

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

Our final decision is to maintain our approach to calculating environmental costs

Our final decision is to retain the methodology outlined in our draft decision, updating inputs where new information has become available to us since the release of our draft decision.

- Small-scale Renewable Energy Scheme – the mid-point of the 2021 non-binding small-scale technology percentage and 2020 binding small-scale technology percentage will be multiplied by the clearing house price, plus a true-up to account for the difference in the level of the small-scale technology percentage we used in the 2020 VDO and the actual binding small-scale technology percentage for 2020.
- Large-scale Renewable Energy Target – the 2021 default renewable power percentage will be multiplied by the futures market price for large-scale certificates plus a true-up mechanism to account for the difference between the default renewable power percentage used in the 2020 VDO and the binding renewable power percentage for 2020.

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

- Victorian Energy Upgrades – the 2020 greenhouse reduction rate for electricity will be multiplied by the historic 12-month average price for Victorian Energy Efficiency Certificates.
- The above costs will be multiplied by network loss factors.
- Minimum feed-in tariff (social costs of carbon) – total renewable exports in 2019-20 will be divided by average total domestic and small business customers in 2019-2020, multiplied by the social cost of carbon (2.5 cents).

Our final decision means that in the average annual bill for residential and small business customers, the benchmark for environmental costs has increased by around 20 per cent relative to the 2020 VDO. This is largely because of changes to the level of some inputs used to calculate the Small-scale Renewable Energy Scheme and Victorian Energy Upgrades components of environmental costs.

An increase in the forecast level of the small-scale technology percentage has increased the level of Small-scale Renewable Energy Scheme costs. This is in part due to the federal Clean Energy Regulator setting a higher non-binding small-scale technology percentage for 2021 as a result of higher than expected roof-top solar uptake.[45] Another driver of the increase compared to the 2020 VDO is that, as set out in our last review, we have included an amount for the gap between the forecast small-scale technology percentage we used in the 2020 VDO and the actual binding small-scale technology percentage for 2020. The calculation of this component is discussed in more detail in appendix B.

An increase in the price of Victorian Energy Efficiency Certificates has increased the benchmark for Victorian Energy Upgrade costs. This is based on the historic 12-month average price of these certificates.

We have kept the approach we used to calculate the SRES benchmark in the 2020 VDO

Our final decision is to maintain the approach we used in the 2020 VDO. This is also the approach we proposed in our draft decision to calculate the cost of the Small-scale Renewable Energy Scheme. We use the mid-point of the 2021 non-binding small-scale technology percentage and the 2020 binding small-scale technology percentage, multiplied by the clearing house price. We have also included an amount to account for the discrepancy between the level of the forecast small-scale technology percentage we used in the 2020 VDO and the actual binding small-scale technology percentage for 2020. This amount was introduced in our draft decision.

We have considered stakeholders' submissions on SRES costs

AGL supported our use of the midpoint of the 2021 non-binding small-scale technology percentage and the 2020 binding small-scale technology percentage to estimate Small-scale Renewable

[45] Clean Energy Regulator, Quarterly Carbon Market Report – June quarter 2020, p. 28.

Energy Scheme costs, given that the non-binding Small-scale Renewable Energy Scheme has been underestimated in past years.[46]

However, AGL proposed the 2021 non-binding small-scale technology percentage should be adjusted to reflect a forecast reduction in energy demand, as reported in the Australian Energy Market Operator's 2020 Electricity Statement of Opportunities, before applying our midpoint methodology.[47]

While an adjustment to the 2021 non-binding small-scale technology percentage may account for a forecast change in demand in 2021, we consider it is more appropriate to retain our approach. A discrepancy in energy demand will be dealt with through our true-up for the difference between our forecast small-scale technology percentage and the binding small-scale technology percentage for 2021.

We also note that in their final report on wholesale electricity costs, Frontier Economics' stated that while small business consumption tended to be lower in periods of lockdown, residential consumption tended to be materially higher.[48] This may point to electricity demand in Victoria for 2021 being more stable than anticipated.

We also consider that using the non-binding small-scale technology percentage as it has been set by the Clean Energy Regulator remains appropriate as it is a simple and transparent approach.

We have kept our approach to calculating the LRET benchmark

Our final decision is to retain the approach we used in the 2020 VDO to estimate a benchmark for costs associated with the Large-scale Renewable Energy Target. This is also the approach we proposed in our draft decision to calculate the cost of complying with the Large-scale Renewable Energy Target. Our approach will use the 2021 default renewable power percentage multiplied by the futures market price for large-scale generation certificates, to estimate the cost to retailers of complying with the Large-scale Renewable Energy Target.

For our final decision, we have also included a true-up to account for the difference between the 2020 default renewable power percentage and the 2020 binding renewable power percentage.

[46] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2.

[47] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2.

[48] Frontier Economics, Wholesale electricity costs for 2021: a final report for the Essential Services Commission, 30 October 2020, p. 56.

This was raised in a submission on our draft decision[49] and signalled in our final decision on the 2020 VDO.[50]

The binding renewable power percentage for 2021 is not yet released. As we did in our 2020 VDO price review, we have used the method set out by the Clean Energy Regulator to calculate a default renewable power percentage for 2021. We will include a true-up for any difference between the default and binding renewable power percentages for 2021 in our next VDO determination.

Further detail on how we have calculated Large-scale Renewable Energy Target costs is available in Appendix B.

Using market prices for LGCs best achieves the objectives of the VDO at this time

We consider using futures market prices to determine the cost of large-scale generation certificates offers a transparent and replicable method for estimating the efficient cost of the Large-scale Renewable Energy Target. It is based on publicly available information and is consistent with our methodology for estimating wholesale electricity costs.

We also note that our approach continues to be used by other regulators, including the Australian Energy Regulator in setting the Default Market Offer. In their final report to the Australian Energy Regulator on the 2020-21 Default Market Offer, ACIL Allen stated:

> a market-based approach using contemporary forward LGC prices represents the most reliable indicator of the current market consensus view of the price of LGCs in the near-term.[51]

Using the most recent cost data provided by retailers, we observed that our combined benchmark for wholesale and large-scale generation certificate costs in our final decision sits comfortably within the range of retailer's actual costs (see figure 5 below). Further, the actual costs of a number of retailers of different sizes are below our combined benchmark for wholesale and large-scale generation certificate costs. This supports our position that our combined benchmark for wholesale costs and Large-scale Renewable Energy Target costs meets the requirements of the order that the VDO is to be based on the efficient costs of the sale of electricity by a retailer.[52] We consider

---

[49] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2.

[50] Essential Services Commission 2019, Victorian Default Offer to apply from 1 January 2020: Final decision, 18 November, p. 39.

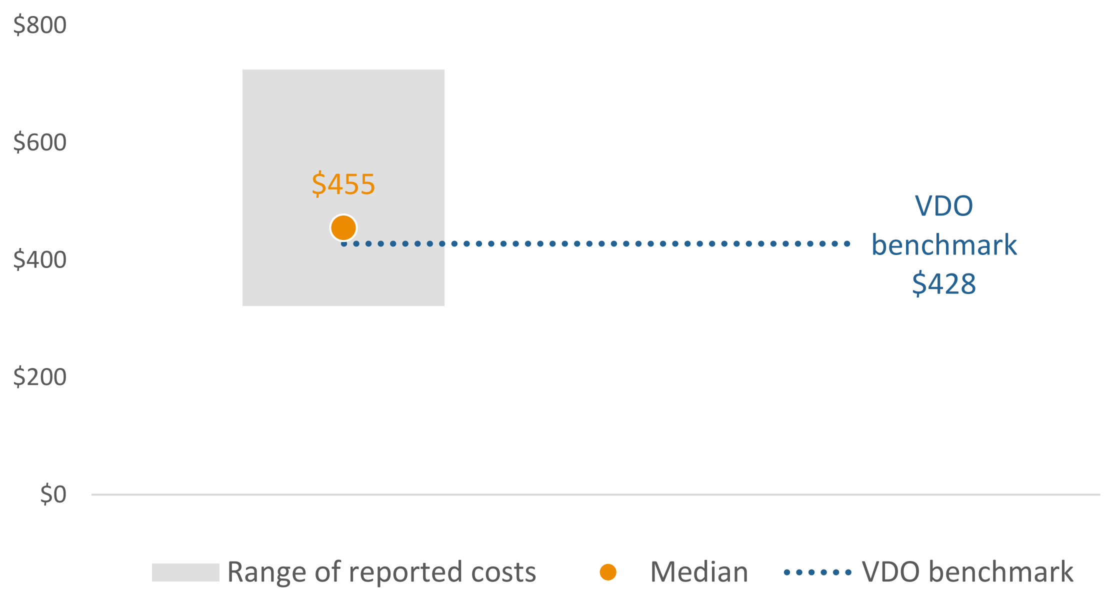
[51] ACIL Allen, Default Market Offer: Estimating wholesale energy and environmental costs: Phase 2: Application of methodology for 2020-21 final determination, April 2020, p. 18.

[52] Clause 12(3) of the order.

that reviewing both benchmarks together is appropriate as wholesale electricity is often purchased together with LGCs through power purchase agreements.

While we have used retailers' actual wholesale electricity costs and Large-scale Renewable Energy Target costs as a cross check of our approach, we accept that there are a number of drawbacks associated with this comparison. In particular we are comparing costs for financial year 2019 to forecast costs for 2021. We note that there has a been a significant decrease in market prices for large-scale generation certificates and wholesale electricity costs between 2019 and 2021. Nonetheless we consider that the comparison supports the conclusion that our benchmark is appropriate.

Figure 5: Retailers' reported wholesale electricity and LGC costs for financial year 2018-19 and 2021 VDO benchmark ($2020)



We have considered stakeholder's submissions on LRET costs

AGL and EnergyAustralia both submitted that relying solely on the futures market price for large-scale generation certificates to estimate the cost of the Large-scale Renewable Energy Target scheme was not appropriate. Both submitted such an approach does not account for the costs some retailers incur by procuring large-scale generation certificates through power purchase agreements.[53] We note that in its submission to our consultation paper, Simply Energy stated that

[53] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2; EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 6.

our method to estimating a benchmark for Large-scale Renewable Energy Target costs was reasonable 'given the constraints of the VDO-setting process'.[54]

Including a price floor for LGCs is unnecessary

In its submission, AGL recognised the difficulties in using power purchase agreement prices to estimate the cost of complying with the Large-scale Renewable Energy Target, and proposed the commission apply a minimum price to our market approach.[55] AGL proposed a methodology to calculate a price floor using the Australian Carbon Credit Unit certificate price and the National Electricity Market emissions intensity factor.

We consider it is unnecessary to impose a price floor on large-scale generation certificates. To the extent that large-scale generation certificates can be used to provide carbon credits, their market price will not fall below the price of a carbon credit (which is the price floor proposed by AGL).

In a market with perfect competition sunk costs cannot be passed on to consumers

In our last review we stated:

> While a retailer may enter into long-term PPAs, in a competitive market it would not pass through PPA costs that do not reflect market prices. To pass through higher costs than the market value of those certificates … would put those retailers at a competitive disadvantage.[56]

In its submission on our consultation paper EnergyAustralia stated that our view:

> is a theoretical position that is not supported by evidence. For example, if EnergyAustralia and other large retailers were not able to recover these costs from the market, we would have already observed the value of PPAs being written down as a result of falling LGC prices.[57]

The evidence provided by EnergyAustralia does not necessarily undermine our view. If a smaller retailer were able to offer lower prices due to an overall cost advantage, and significantly increase its market share at the expense of larger retailers, the larger retailers would be left with excess large-scale generation certificates. The profit maximising choice for them at that time would be for

---

[54] Simply Energy, submission to Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Consultation paper, July 2020, p. 2.

[55] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2.

[56] ESC, 2019, Victorian Default Offer to apply from 1 January 2020: Final decision, 18 November, p. 37.

[57] EnergyAustralia, submission to Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Consultation paper, July 2020, p. 11.

them to sell their large-scale generation certificates at the market price to the growing firm which would lead to a write down of large-scale generation certificates in their power purchase agreements. That we have not seen this take place could simply be because larger retailers have cost advantages in other areas that mean they can still outcompete their smaller rivals on price (for example by having lower wholesale costs).

Our market based approach best meets the requirements of the order

EnergyAustralia proposed a weighted average methodology for estimating Large-scale Renewable Energy Target costs based on an estimated industry wide price of large-scale generation certificates procured through power purchase agreements and the futures market price of large-scale generation certificates.[58]

While we acknowledge that historically retailers have made significant investment in power purchase agreements to ensure their Large-scale Renewable Energy Target obligations have been met, there is also some evidence that there is excess supply of large-scale generation certificates leading to decreases in the price of large-scale generation certificates.[59] This may indicate a level of over investment in power purchase agreements by retailers in order to meet their obligations.

As set out at the beginning of this chapter, we consider that retaining our approach to calculating Large-scale Renewable Energy Target costs using future market prices for large-scale generation certificates best meets the requirements of the pricing order to estimate the efficient cost of complying with the Large-scale Renewable Energy Target.[60]

Retailers' actual costs are a cross check of our market based approach

EnergyAustralia also raised concerns regarding the method we have used to compare our past VDO allowances to actual retailer costs for wholesale electricity and Large-scale Renewable Energy Target costs.[61] EnergyAustralia submitted that the prices used to calculate the 2019 VDO were more reflective of the cost of large-scale generation certificates. As a result, our past allowances for Large-scale Renewable Energy Target costs allowed retailers with large-scale generation certificates obtained through power purchase agreements to recover these costs.

---

[58] EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 6.

[59] Clean Energy Regulator, Quarterly Carbon Market Report: June Quarter 2020, September 2020, p. 19.

[60] Clause 12(3) of the order sets out 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.

[61] EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 6.

EnergyAustralia also raised concerns with our comparison of the VDO forecasts and retailers' actual costs for wholesale electricity and Large-scale Renewable Energy Target costs together. In its submission on our draft decision it stated:

> The VDO's benchmark wholesale energy costs are around $100 per MWh. Retailers' actual wholesale costs would easily vary by several dollars around this amount. When combined with environmental costs, this wholesale cost variance would more than offset the under-compensation arising from the Commission's LRET cost benchmark.[62]

We acknowledge that our analysis compares different periods of time. We also note that although both wholesale and large-scale certificate prices have decreased since financial year 2019 the combined VDO benchmark falls within the range of retailers' observed costs for that year. This suggests that at the total level, the 2021 VDO will allow retailers to recover the efficient costs of the sale of electricity.

We acknowledge the concerns raised by EnergyAustralia and AGL and note there has been decreases in the market prices for large-scale generation certificates since we established our approach to the cost of the Large-scale Renewable Energy Target. We will continue to monitor market prices for certificates and cross check with other information such as retailers' costs, and if appropriate we will revisit our approach to account for the different strategies retailers use to meet their Large-scale Renewable Energy Target obligations.

We have retained our draft decision approach to calculating Victorian Energy Upgrades costs

Our final decision is to calculate the cost of the Victorian Energy Upgrades scheme using the 2020 greenhouse reduction rate for electricity, multiplied by the historic 12-month average price for Victorian Energy Efficiency Certificates.

We have used the 2020 greenhouse reduction rate

The 2021 greenhouse reduction rate for electricity was not published in time for us to use in our final decision. As a result, we have used the 2020 greenhouse gas reduction rate to estimate the cost of the Victorian Energy Upgrades program in 2021. We will do a true-up in our next review if the actual reduction rate for 2021 is different to the rate we have used in our final decision.

We have considered stakeholders' submissions on Victorian Energy Upgrades costs

AGL stated that the increase in the level of the benchmark in our draft decision is largely due to the restriction of certificate generating activities caused by the impact of the coronavirus pandemic,

---

[62] EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 6.

and that this increase may not fully account for the cost of complying with the scheme in 2021, as restrictions continue to impact certificate generating activities, while the Victorian Energy Upgrades target remains at the same level and certain certificate generating activities may be removed.[63]

Events that occur in 2021 that raise the cost of complying with the Victorian Energy Upgrades program will be accounted for through the use of the 12-month historic average price for Victorian Energy Efficiency Certificates in 2021 when setting the next VDO.

We also understand that retailers have entered into contracts with accredited persons that extend into 2021 for certificates at a set price, meaning that for retailers not all certificates needed in 2021 will increase in price.

We have retained our draft decision approach to calculating the cost of the minimum feed-in tariff

Our final decision is to maintain the approach we used in our draft decision to calculating the cost of the minimum feed-in tariff. This is also the approach we used in 2020. To estimate a benchmark, we will use the total renewable exports in 2019-20 divided by average total domestic and small business customers in 2019-20, multiplied by the social cost of carbon (2.5 cents).

In the time following the release of our draft decision, the total number of domestic and small business customers in 2019-20 has become available. This is used to calculate the benchmark for the minimum feed-in tariff. Our final decision has been updated to reflect this.

Retail operating costs

- We will keep using a benchmarking approach to assess retail operating costs. This is consistent with the approach we used in our final decision on the 2020 VDO and our draft decision.
- Retail operating costs represent about 13 per cent of costs in the average residential bill (averaged across the five distribution zones).
- We estimate the benchmark for retail operating costs for 2021 will increase slightly compared to the benchmark included in our 2020 determination and our draft decision. This reflects adjustments for the effect of the coronavirus pandemic and five minute settlements.

[63] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 3.

Retail operating costs reflect a range of costs incurred by an electricity retailer in conducting its business, including billing and revenue collection systems, information technology systems, call centre costs, corporate overheads, energy trading costs, the cost of writing down bad debts, and regulatory compliance costs.[64]

Our final decision is to use a benchmark approach adjusted for Victoria specific costs

The 2021 estimate for retail operating costs per customer is based on the benchmark 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. Our final decision adjusts this benchmark for the change in the consumer price index (CPI) since 2017 which leads to a benchmark of $127.09.

In addition to this benchmark, we have included an estimate of Victoria specific operating costs of $10.[65] This reflects estimated costs related to operating in Victoria not covered by the Independent Competition and Regulatory Commission benchmark (this additional amount has been included in the VDO since it started in July 2019). We have also included an adjustment of $6 for costs relating to the effect of the coronavirus pandemic on bad debts and $0.21 associated with introducing five minute settlements. These adjustments take the estimate of retail operating costs per customer to $143.30 for 2021.

We anticipate the adjustment for bad debts will be removed in future years as the economy recovers. In assessing this adjustment, we would require further evidence on how the pandemic affected retailers' overall costs to serve. The adjustment for five minute settlements will change in future years as we have only included one quarter of costs in the 2021 VDO cost stack as the five minute settlements system will only commence from October 2021.

The benchmark approach is transparent and based on efficient costs

We have maintained a benchmarking approach to calculating a benchmark for retail operating costs in the VDO. We used this approach for our 2020 determination and in our advice to government on the VDO methodology in 2019.[66] The benchmark approach:

- is transparent, easily replicable and based on public information
- has been adopted for regulated prices in Queensland and Tasmania

---

[64] Clause 12(4)(d) of the 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.

[65] Based on the analysis of Victorian specific costs in the ACCC'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.

[66] Essential Services Commission 2019, Victorian Default Offer to apply from 1 July 2019: Advice to Victorian Government, 3 May, p. 66.

- is generally supported by stakeholders, noting most issues raised during our consultation on the 2021 VDO relate to the level of the benchmark adopted by the commission

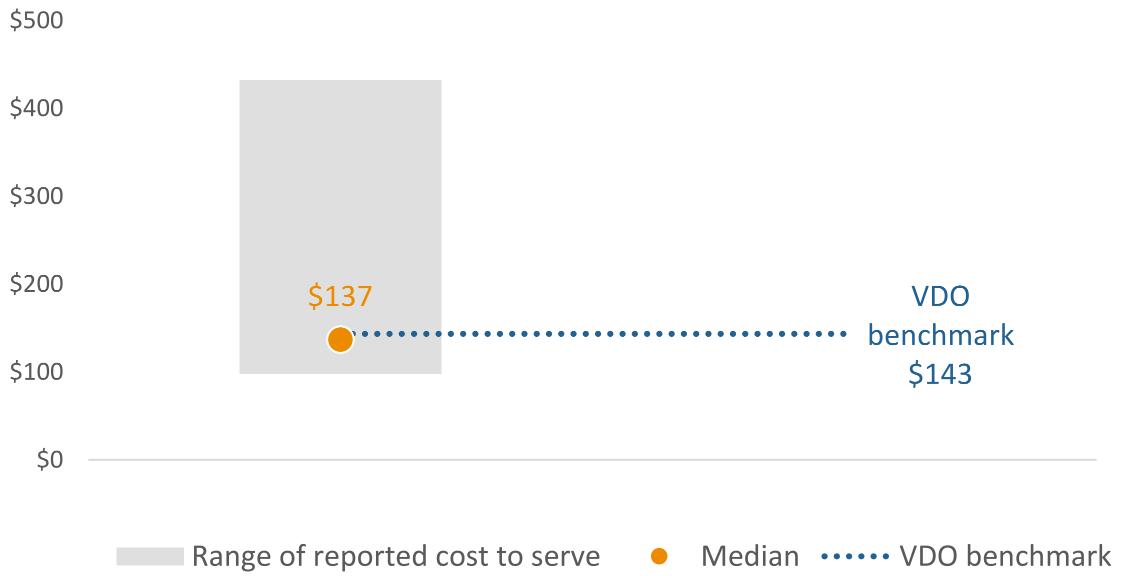
We cross-checked our estimate against actual cost data submitted to us by retailers (covering financial year 2018-19 or calendar year 2019) in response to an information request we issued them under the *Essential Services Commission Act 2001 (Vic.).* The data indicates the benchmark we have estimated for retail operating costs sits slightly above the median cost incurred by retailers in 2018-19 (Figure 6).

This information supports our estimate of retail operating costs. In particular, we consider our estimate is consistent with the pricing order requirements that the VDO is based on the efficient costs of the sale of electricity by a retailer, and that the VDO provides a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the electricity retail market.

While the estimate we have adopted for retail operating costs is below the costs reported by some retailers, we believe our approach provides for retailers of different sizes (or those with different strategies for that matter) to compete in the electricity retail market.

A mix of individual retailers in terms of size – small, medium and large – reported retail operating costs in 2018-19 that are below the benchmark we have used to calculate the 2021 VDO.

Figure 6: Retailers' reported costs to serve for financial year 2018-19 and 2021 VDO costs to serve benchmark ($2020)



We have considered the effect of the coronavirus pandemic on retail operating costs

In our draft decision we maintained the retail operating cost benchmark we used for our 2020 VDO determination, updated for inflation. In submissions on our consultation paper, retailers generally sought an upward adjustment to our benchmark to take into account the effects of the coronavirus pandemic on their costs (including for bad debts). However, when we made our draft decision we considered that they had not provided enough information to justify a change. This included insufficient evidence on how the pandemic had affected their overall costs to serve, and how the pandemic would affect their bad debts in 2021.

Our final decision includes an upward adjustment – relative to our 2020 VDO determination and our draft decision for the 2021 VDO – to the benchmark we estimate for retail operating costs to reflect increases in bad debts. This adjustment responds to new evidence electricity retailers provided us in response to our draft decision on their retail operating costs and bad debts.

The evidence available to us suggests bad debts have increased

In response to our draft decision, retailers provided us with confidential data that showed increases in bad debts ranging from 30 per cent to 165 per cent depending on the business.[67] We reviewed the justification for these estimates, where provided, and consider they are sound in most cases. These provisions reflect retailers' entire customer bases including customers on market contracts. Many small retailers have very few VDO customers, with a higher proportion of VDO customers with the largest retailers.

Some retailers also pointed to public information, notably the most recent financial statements issued by Origin Energy, AGL and Red/Lumo Energy.[68] These public and independently audited statements estimated an increase in bad debts using financial year 2019-20 information of approximately \$10, \$5 and \$4 per customer (national), respectively.[69]

We consider these public statements, which are based on independently audited information, are transparent and reliable. In publishing these statements and estimates, corporations are required to meet obligations under the *Corporations Act 2001* including compliance with accounting standards that require estimates (including for future bad debts) to be reasonable and supportable. While these provisions are audited, and must be calculated on a reasonable basis, they are forecasts. The actual costs associated with the provisions are likely to be higher or lower.

The data reported by electricity retailers is supported by other information on trends in customer bill arrears. Information we have collected from retailers for Victoria shows average arrears for residential and small business customers has increased during the pandemic by around

---

[67] Confidential cost submissions from retailers on our draft decision.

[68] Red/Lumo Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 3; EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 8; AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, Attachment A, pp. 4-6.

[69] AGL, Annual Report 2020, p. 6 and p. 75; Origin Energy, Annual Report 2020, p. 6 and p. 31; Snowy Hydro, Annual report 2020, p. 4 and p. 41.

10 per cent and 23 per cent respectively.[70] At the national level, recent data published by the Australian Energy Regulator also indicates an increase in debt levels for residential and small businesses customers during the pandemic.[71]

We acknowledge the trend in arrears may not directly flow through to the bad debts incurred in future years. There are a number of factors that could affect this. Government support through JobKeeper and JobSeeker have been extended to March 2021, the Victorian government has announced a Power Savings Bonus to assist concession holders with their energy bills[72] and additional customer support requirements remain in place.

However, we note that forecasts generally point to subdued economic conditions for some time, which we consider is likely to affect bad debts. The Reserve Bank of Australia's most recent Quarterly Statement on Monetary Policy noted it expects (under its 'base case') employment will return to pre-pandemic levels only by the end of 2022.[73] Total hours worked is also likely to remain well below pre-pandemic levels through 2021, also contributing to low wages growth.

There is strong evidence to suggest that an increase to our benchmark to reflect bad debts is appropriate.

There is insufficient evidence that other costs have changed, or will change, due to the pandemic

In our draft decision, we requested more information from electricity retailers about changes in their total retail operating costs (noting the cost information provided to us by retailers in response to our request for data issued under our information gathering powers in the ESC Act covers 2018-19). Some retailers provided additional information on their total retail operating costs.[74] Some retailers provided data that showed total costs to serve had increased, and others that they had decreased.

Retailers also provided us some additional information on the impact of the pandemic and current economic conditions on specific cost categories.

We engaged EY to investigate the effect of the pandemic on retailers' costs. EY's report identified some costs that were likely to be affected in 2021. These included increased costs arising from higher volumes of customer service inquiries, longer average call handling times and overall

---

[70] See: https://www.esc.vic.gov.au/electricity-and-gas/market-performance-and-reporting/energy-customer-support-during-coronavirus-pandemic

[71] AER, Weekly retail markets dashboard, 19 October 2020, https://www.aer.gov.au/retail-markets/performance-reporting/weekly-retail-market-dashboards-covid-19

[72] On the 17 November 2020 Victorian government announced a once-off $250 Power Saving Bonus to help eligible households with their energy bills as a part of the Victorian Government's Household Energy Savings Package. See: https://compare.energy.vic.gov.au/

[73] RBA, Statement of Monetary Policy November 2020, p. 1.

[74] Including some confidential cost submissions.

increased costs associated with labour and administration of customer support programs. While some of these costs may have increased slightly, generally they appeared to be offset by decreases in other costs.

Of these costs, EY found that increased call centre costs, were most likely to continue being incurred in 2021, but the extent to which there will be a notable and consistent effect on costs is uncertain. Given that increases to call centre costs so far have been noticeable, but not significant, EY found it is unlikely that the effect on costs in 2021 will be significant.[75]

We have included an upward adjustment of $6 to reflect the impact of the coronavirus pandemic on retail operating costs through higher bad debts

Compared with our draft decision and the 2020 VDO, we have included an additional $6 for the effect of the pandemic on bad debts. To estimate this, we calculated the simple average of the per customer cost of bad and doubtful debt as a result of the pandemic as reported by retailers in their public financial statements.[76] As noted above, we consider this information is transparent and reliable. The adjustment is equivalent to around 0.5 per cent of the VDO 'cost stack'.

We consider that using national figures on bad debts is reasonable. A number of retailers indicated that a key driver behind the forecast increase in bad debts is the moratorium on customer disconnections.[77] This policy has been pursued across the National Electricity Market. Further, the retailers with public financial statements service more than half of the Victorian market and VDO customers tend to be serviced by retailers of similar size.

Our expectation is that the additional $6 reflects a temporary amount rather than a permanent change to efficient costs – and a specific response to the effects of the coronavirus pandemic and its impact on the economy – that will be removed from the VDO 'cost stack' at a future review. Including an adjustment on the higher end of observed costs, or once the effects of the pandemic have ended, would not reflect efficient costs or ensure that the VDO continues to provide a safeguard to consumers unable or unwilling to engage in the retail electricity market.

---

[75] EY, Impact of COVID-19 on the efficient costs for retailers to supply electricity Final Report, 10 November 2020, 32.

[76] Origin Energy, Annual Report 2020, p. 88; AGL, Annual Report 2019-20, p. 96; AGL, AGL Energy FY20 Full-Year Results, 13 August 2020; Snowy Hydro, Annual Report 2020, p. 41.

[77] Origin Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 1. Powershop/MEA Group , submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 1; Momentum, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 4; Red/Lumo Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2; Tango, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2; Australian Energy Council, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 4.

We considered the cost to comply with the five-minute settlement rule change

Our final decision includes an additional adjustment for compliance with the five-minute settlement rule change. We acknowledge the introduction of five-minute settlement from 1 October 2021 is a new national regulatory obligation which will lead to some additional costs for retailers.[78]

From the information provided by retailers it appears most of the costs incurred in the transition to five-minute settlement are capital expenditure investments in existing operating systems. We note the retail margin already includes the annual cost of depreciation to update and maintain operating systems. We do not consider an additional allowance for capital expenditure has been supported at this stage.

In considering if our retail operating cost benchmark should increase it is the ongoing operating costs that we need to consider in making an additional allowance. While most five-minute settlement costs were capital investments, retailers provided information that showed there were some ongoing operating costs.

We also considered any benefits to retailers associated with the five-minute settlement rule change in deciding whether an adjustment was required. The benefits of the rule change will largely be reflected in lower wholesale spot prices.[79] As such they will be captured through our wholesale electricity forecasts which are based on forecast market prices and so any savings should be passed onto consumers through this mechanism.

On the basis of the information provided we have estimated an additional amount of $0.84 per annum per customer, adjusted to reflect the commencement of the five-minute settlement obligation in October 2021. This equates to $0.21 per customer in 2021.

In making our final decision we considered stakeholder's submissions on our draft decision

Our retail operating cost benchmark reflects efficient costs

Tango and Simply Energy raised considerations on our use of the benchmark for retail operating costs in our draft decision.[80] Tango notes there have been significant structural changes to the retail market since 2017 which may affect the relevance of 2017 data. We note we cross checked

---

[78] AEC, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2; EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 9; AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, Attachment A, p. 7.

[79] AEMC, Five Minute Settlement, final determination, 28 November 2017, p. vi.

[80] Tango, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p.3; Simply Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 4.

the VDO benchmark for 2021 against retailers' actual operating costs in financial years 2018 and 2019. We found that the benchmark was comfortably within the range of observed costs (see figure 6 above).

We will investigate the use of a productivity factor in future

In our draft decision we said we would further investigate a productivity factor in future reviews. Consumer groups supported the introduction of a productivity factor.[81] Whereas retailers and AEC opposed the inclusion of a productivity factor.[82]

EnergyAustralia suggested the commission should establish a robust benchmark in the first instance before considering methods to escalate this forward.[83] Similarly Origin does not consider that given the uncertainty of the current environment the introduction of a productivity measure is appropriate.[84]

We have not included a productivity factor for the 2021 VDO due to the uncertainty associated with the pandemic. We agree with retailers that with the current economic uncertainty applying a productivity factor may not be appropriate at this time. However, we will consider applying a productivity factor in future reviews.

Accounting for uncertain costs

In response to our draft decision, the Consumer Action Law Centre submitted that costs and risks from unplanned economic disruption should not be passed on to consumers.[85] Retailers also raised a number of matters about accounting for uncertain costs. In particular they were concerned that our approach is based on forecast costs, with no mechanism for costs to be recovered if they

[81] CALC, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, pp. 2-3.

[82] EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 8; AEC, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, pp.4-5; Powershop/MEA Group, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 3; Alinta Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2; AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 6; Origin Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, pp. 2-3.

[83] EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 8.

[84] Origin Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, pp. 2-3.

[85] CALC, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 2.

are higher than expected.[86] A common solution proposed was that the commission should use a 'true-up' mechanism. A 'true-up' mechanism can be used to account for differences between cost forecasts from previous regulatory periods and the actual costs that eventuate. Origin noted that Ofgem had proposed this approach for bad and doubtful debts to manage the uncertainty of the pandemic.[87]

Our final decision on costs to serve includes an adjustment for forecast increases in bad debt costs. As discussed above we consider there is enough evidence that bad debts will increase to justify an adjustment for it. The tariffs we determined must be based on the efficient costs of the retailers: including those that might be associated with unplanned economic disruptions.

Generally, our approach uses the best available information on efficient costs at the time we make our determination, to set a "benchmark" cost stack that is used to calculate VDO tariffs.[88]

Under such an approach, actual costs faced by individual retailers are likely to be different to the benchmark. And estimates of the benchmark cost stack are likely to vary from the original benchmark within a pricing period (for example, due to a significant drop in wholesale electricity costs this year many retailers likely benefitted from lower costs).

While movements in costs within a pricing period will disadvantage retailers (or customers) in some years, they will benefit in others. The risks for retailers and customers are symmetric. We note the submissions by retailers did not suggest we should compensate customers where windfall gains were made.

Approach to updating for inflation – indexing approaches using a single quarter and smoothing approaches are the same in the long-run

Origin suggests the commission should use a smoothing formula consistent with ICRC's approach to index retail operating costs. [89]

The approach proposed by Origin and our current approach provide the same results in the long run. The only difference is that there will be slightly more volatility using our current approach.

---

[86] AEC, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p.3; EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 9; Momentum Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 4; Tango, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 1.

[87] Origin Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, pp.1-2.

[88] For some regulatory costs and network charges (which are approved by the AER and treated as a "pass through"), we provide for a true up mechanism.

[89] Origin Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 5.

Given that indexing the benchmark accounts for less than 0.5 per cent of the total cost stack, and our current approach is easier to implement and understand, we will continue to use our current approach.

Customer acquisition and retention costs

- Our final decision is to use the approach we used in 2020 to estimate customer acquisition and retention costs (CARC), updating for inflation. This is also the approach we used in our draft decision.
- CARC represents about 3 per cent of costs for the average residential bill (averaged across the five distribution zones).
- Our final decision means the CARC allowance provided for in the cost stack will slightly increase compared with our draft decision.

The pricing order requires us to include a modest amount for CARC in making our VDO price determination.[90] 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 or telemarketing sales), the cost of retention teams, and marketing costs targeted at driving customer acquisition or retention.

Our final decision on setting a benchmark for CARC

Our final decision is to use the benchmarking approach we used in our 2020 VDO decision, updating for inflation. We also used this approach in our draft decision. In coming to our final decision we have considered submissions from stakeholders and used the most recent cost data provided by retailers to cross-check the benchmark made for CARC in our final decision. While noting that the VDO is not required to be based on actual retailer costs, our benchmark sits within the range of retailer's observed actual costs. Based on the most recent cost data provided by retailers, we also note that on average, retailer's actual CARC costs decreased in 2018-19 compared to the costs observed in 2017-18.

We consider retaining our approach remains appropriate due to the level of uncertainty facing the retail electricity industry in Victoria due to the ongoing pandemic. Until we have more information on the size of these changes, we consider it is too early to change our approach on CARC, but we have noted in our draft decision that we will give further consideration to reducing CARC where warranted.

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

We have considered stakeholders' submissions on our draft decision

Simply Energy stated they have seen an increase in their CARC costs since 1 July 2019 and that the benchmark for CARC should be set in a transparent process that reflects actual costs incurred by retailers in serving Victorian customers.[91] We note that our benchmark is not required to be based on retailers actual costs and that the order requires the benchmark to be 'modest'.

Consumer Action Law Centre submitted that the commission should conduct research with households to determine the value that customer acquisition and retention activities provide customers. CALC also submitted that the CARC component of the VDO should be reduced to zero to encourage retailers to offer value to customers through greater hardship assistance or more affordable bills.[92] While we have retained our approach to setting a benchmark for CARC in light of the ongoing pandemic, we note the order requires that we include a 'modest' amount for CARC. We will give further consideration to lowering CARC in future reviews.

Other costs

- Our final decision includes a benchmark for other regulatory costs that are based on the latest available market information and represent around one per cent of total costs for a representative customer (averaged across the five distribution zones).
- Our final decision would marginally decrease the benchmark for these costs compared with the current VDO.

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 (around one per cent) but are a relevant factor in our estimation of the efficient costs for the sale of electricity by a retailer.[93] Only a submission from AGL proposed specific changes to the approach taken to estimating other costs in our draft decision.[94] As these proposals are not based on new evidence and there was not a consistent concern raised more broadly, we have not changed our approach for the final decision.

---

[91] Simply Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, September 2020, p. 4.

[92] Consumer Action Law Centre, submission to Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, September 2020, p. 3.

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

[94] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p. 3

Australian Energy Market Operator fees

These fees are charged to recover the costs of market operation and full retail contestability functions. It also includes costs recovered for Energy Consumers Australia.

The AEMO Energy Market Budget and Fees report contains budgeted fees and charges for 2020-21 but does not include forecast estimates for 2021-22. Consistent with our draft decision, we have applied the budgeted fees and will monitor any changes to fees introduced from 1 July 2021. As discussed in our draft decision this excludes fees levied on generators and the charges associated with the National Transmission Planner functions that are levied only on transmission network businesses.[95]

Ancillary fees

Ancillary services are used by AEMO to manage the power system safely, securely and reliably, with respect to standards such as frequency, voltage and system restart processes. Unlike other charges, AEMO operates separate markets for various ancillary services.

The relevant charges are dependent 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 AEMO data to estimate Victorian ancillary charges in the regulatory period beginning 1 January 2021. Our final decision is to use an average of the past 52 weeks (ending 31 October 2020) of ancillary service payments in Victoria, this results in an average ancillary service payment of $0.36/MWh.

Reliability and Emergency Reserve Trader costs

The Reliability and Emergency Reserve Trader is a function conferred on AEMO to maintain power system reliability and system security using reserve contracts. As this is a separately levied cost on market participants (including retailers), we have included the latest cost data in the VDO with an amount of $2.46 per customer.[96]

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.

---

[95] Australian Energy Market Operator, 2020-21 Final Budget and Fees, p.26.

[96] As noted by AEMO, these are an estimate of the average cost to customers and they do not have visibility of how these costs are passed on to end users. We believe this approach continues to be the most simple and transparent option.

Our final decision includes the market wide average of all retailer licence fees. The latest available data on licence fees is from 2019-20 (updated for inflation), resulting in an amount of $1.69 per customer.

Retail operating margin

- Our final decision is to use the benchmarking approach to the retail operating margin we used in 2020. This is also the approach we used in our draft decision.
- The retail operating margin will be 5.7 per cent.
- Our final decision would mean that the dollar value of the retail operating margin in the cost stack will slightly decrease.

The pricing order requires us to have regard to retail operating margin when making a VDO price determination.[97] We considered how the pandemic will affect retailers' margins and whether or not the level or methodology of the retail operation margin in the VDO should change to reflect this. Our final decision is to maintain the approach we used to set the retail operating margin in our last review.

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 should be sufficient to cover the cost of capital, and the systematic (non-diversifiable) risk associated with investment.[98] The retail operating margin is expressed as a percentage of the cost stack.[99] The pricing order notes that risks accounted for in other components of the cost stack (such as wholesale electricity market risk) must not be included in the retail operating margin[100], and that we are not required to base retail operating margins on actual retailer operating margins.[101]

---

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

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

[99] 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 (Earnings before Interest, Taxes, Depreciation and Amortisation, or EBITDA) divided by revenue. 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.

[100] 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.

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

Our final decision is to keep the retail operating margin at 5.7 per cent

We have retained the benchmarking approach used in our 2020 decision and proposed in our draft decision. This approach uses recent regulatory decisions by Australian regulators to set a benchmark for a retail operating margin. The evidence before us does not suggest there has been a material, and ongoing, need to change the retail operating margin. As a result, we do not propose to make an adjustment to the retail operating margin for the impact of the pandemic at this time.

We considered how the pandemic will affect retailers' margins

The impact of the pandemic will affect retailers of different sizes differently

At the industry level, there is some evidence that borrowing costs may have decreased. With the Reserve Bank of Australia cash rate at historic lows, the cost of borrowing for larger retailers may be below long-term trends. However, we also note that this may not be the case for smaller retailers that do not have access to low cost lines of finance. However, in setting the retail operating margin, we must estimate efficient costs not the actual costs of retailers.

Systematic risk is accounted for in the retail operating margin

The retail operating margin covers among other things retailers' cost of capital. The cost of capital includes remuneration for systematic risk through the market risk premium. Systematic risks include the risk of long-term economy wide downturns such as would be caused by the business cycle, financial crisis, war or a pandemic. As a result, the retail operating margin is set on the assumption that economic downturns, such as those caused by a pandemic, will occur.

Due to the lack of available data, it is still unclear whether systematic risk has materially changed as a result of the pandemic, but in the short term investors' appetite for risk may have. Increasing the retail operating margin, at this stage, could double count the premium for systematic risk already included in the retail operating margin.

Additionally, our retail operating margin is already set closer to the upper end of the benchmark range, as estimated by Frontier Economics using the expected returns approach. The estimates varied between 4.8 to 6.1 per cent with the base at 5.4 per cent.[102]

We considered stakeholders' submissions to the draft decision on the margin

AGL generally supported our approach to maintain the retail operating margin based on previous regulatory decisions by Australian regulators provided we have appropriately accounted for all

[102] Frontier Economics, Retail Costs and Margin: a report for the Essential Services Commission, 24 April 2019, p. 33.

other costs.[103] Some retailers made submissions on our methodology for determining the retail operating margin.

Accounting for efficient capital expenditure

EnergyAustralia submitted that our cost stack methodology does not contain an explicit amount for efficient capital costs as amortisation is factored into the retail margin and assumes that all capital overheads are included in retail operating costs. It noted that the current approach does not account for the cost increases associated with upfront investment in new systems targeted at reducing operating expenditure and therefore lower VDO prices in the future.[104] Alinta Energy also requested that the commission consider how significant capital expenditure to support regulatory changes (such as five-minute settlement) is appropriately reflected in future VDO decisions.[105]

The VDO allows for the benchmark retailer to undertake some level of capital expenditure. While cross-checking the retail margin using the expected returns approach, the capital expenditure less depreciation was assumed to be 0.52% of expected total costs in each year.[106] Therefore we expect that the current level of retail margin compensates retailers for cash outflows associated with efficient capital investments.

In addition, the pricing order does not require us to determine tariffs based on the actual costs of a retailer. However, to consider the impact of any change in capital expenditure we need to identify long term trends in depreciation and amortisation reported by retailers over a period. In order to do this we will explore whether retailers will be required to provide information on the depreciation costs of their retail operations in future cost data requests.

The impacts of the pandemic

AGL noted in its submission that if cost increases associated with the pandemic are not included in the other cost stack components, the current level of retail operating margin will need to be revisited.

The majority of the submissions on the effect of the pandemic suggest that, to the extent that the pandemic affects costs, the effects would be to increase retail operating costs. On the basis of information provided by retailers on the change in their total costs, and information on retailers' provisions for bad debts, we have included an amount for the forecast increase in bad debts in the

[103] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, September 2020, p. 10.

[104] EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, September 2020, p. 9.

[105] Alinta, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, September 2020, p. 1

[106] Frontier Economics, Retail Costs and Margin: a report for the Essential Services Commission, 24 April 2019, p. 30.

retail operating cost category. We anticipate this amount, driven by increase in bad debts due to the ongoing pandemic situation, will be removed in a future review.

Undertaking a new benchmarking study

Simply Energy noted in its submission that benchmarking regulatory decisions from other jurisdictions creates a risk to retailers in Victoria. It proposed that the benchmark be updated to reflect the actual situation faced by Victorian retailers, and ensure new entrants are not unduly constrained.[107]

We note that the outcome of the benchmarking approach has been cross-checked with the range of retail margin derived from the expected returns approach by Frontier Economics. The current level of retail margin was found to be within the range identified to compensate equity investors in a notional electricity retailer for the systematic risk they bear when committing equity capital to the firm. The assessment was based on using a benchmark weighted average cost of capital (WACC) and forecast future cash flows of the notional retailer.[108]

In absence of strong evidence to support a material and ongoing change in the level of the retail operating margin for an efficient retailer, we will not revisit our approach to the retail margin at this time. However, we may consider it further in future reviews.

Consumers are able to choose from a range of retail options

The information available to us on licence applications and market offers shows that consumers still have access to a range of retail electricity services. The number of market offers on Victorian Energy Compare increased in each distribution zone in 2019-20, compared to the previous year.

We continue to receive new retail licence applications

During the pandemic we have received nine applications for retail licences. This suggests that investors consider that it is still reasonably profitable to enter the electricity retail market.

AGL submitted that one retailer has exited the retail energy market due to “risks associated with ongoing exposure to a challenging and changing regulatory environment and a potential COVID-19 related increase in bad debt.”[109]

---

[107] Simply Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, September 2020, p. 4.

[108] Frontier Economics, Retail Costs and Margin: a report for the Essential Services Commission, 24 April 2019, p. 30.

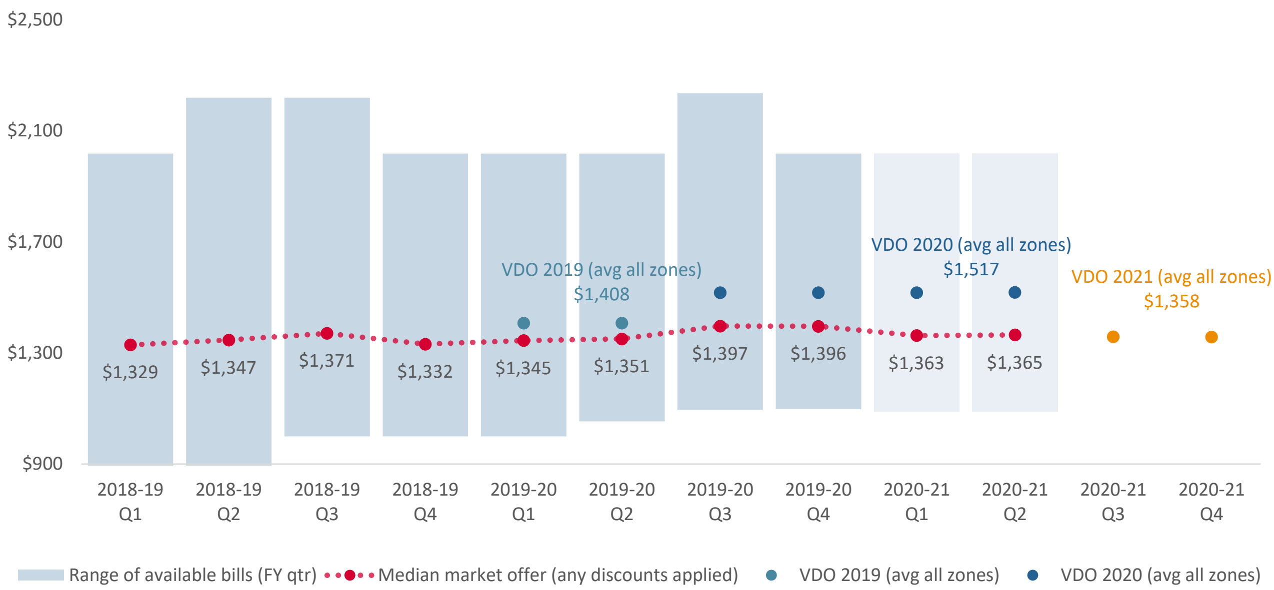
[109] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, September 2020, p. 10

We note that AGL bought the firm it is referring to. The public announcement suggests that the decision to sell was based on a number of factors including strategic and financial value for all entities involved. This implies that this cannot be entirely attributed to the pandemic.

During the pandemic retailers continue to provide market offers below the VDO

We have observed how VDO prices compare to the market offers currently available from retailers. A number of market offers continue to be available below the median market offer. Figure 4 compares the median market offer to the average residential VDO bill. We observe a similar pattern in the data for small business customers.

Figure 7: Annual residential VDO bill compared to market offer bills (4,000 kWh/year)



A few retailers submitted that the above view is too simplistic.[110] Although there is additional complexity underlying the headline figures, comparing the VDO with the median market offer is a simple and easy to understand metric. However, we have also considered other factors in assessing whether the VDO allows retailers to recover efficient costs. As shown at the start of this chapter we also undertook analysis of retailers' actual costs for financial year 2019. Although wholesale and network costs are likely to be significantly lower in 2021 than in financial year 2019 the average residential customer bill for the 2021 VDO sits within the range of retailers' observed costs.

[110] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, September 2020, p. 10; EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, September 2020, pp. 4-5.

Calculating the VDO tariffs and maximum bill

Our final decision is to use the approach we used in making our determination on the 2020 VDO for calculating VDO flat tariffs and the maximum bill.

The pricing order requires us to determine:[111]

- the tariffs, or the maximum tariffs, a retailer may charge prescribed customers under a standing offer during the regulatory period or
- 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.

For the first determination, after we estimated the cost of providing a retail electricity service, we turned the costs into prices for the VDO using two different methods:

- **flat VDO tariffs -** for standing offers with flat tariffs, and
- **the maximum bill -** for standing offers with non-flat tariffs.

Consistent with our draft decision, our final decision is to continue to use flat VDO tariffs for standing offers with flat tariffs and the maximum bill for standing offers with non-flat tariffs.

Tariff structure

Because of underlying network tariffs, almost all tariffs contain a fixed, daily supply charge and a variable, per kilowatt hour charge. However, unlike the supply charge, the variable charge component can be structured in different ways and this determines how a customer is charged for the energy they use.[112]

Under a flat or anytime usage tariff, customers are billed the same amount for each kilowatt hour of electricity they use at all times of the day. In contrast, non-flat tariffs have different rates for electricity used at different times of the day. Under a time-varying tariff structure, using energy during times of peak and shoulder demand is more expensive. There can also be further differences in these prices between weekdays and weekends.

[111] Clause 10(1) of the order.

[112] Victorian DNSPs have proposed moving to more cost reflective tariffs in the upcoming regulatory period. This is discussed further below and in the networks tariff section of this decision.

Although this variety provides customers with different options, it also increases the complexity of some tariffs and requires a customer to have a thorough understanding of how their own pattern of electricity use will be reflected in their bill when it arrives.

Our final decision on flat VDO tariffs

Our final decision is to use the same approach to setting standing offer rates for flat tariffs as we did in our 2020 VDO determination. Under this approach, we align the VDO tariff structure with the underlying flat network tariffs in each distribution zone.

We are also guided by the objectives of the pricing order, which states the VDO is to provide a simple, trusted and reasonably priced option for customers unable or unwilling to engage in the market.[113] As set out in our consultation paper and draft decision, we consider that this objective is best satisfied by setting VDO tariffs with a daily supply charge, and a flat, anytime usage charge as in the current VDO regulatory period. Where relevant for domestic customers, we have also set a controlled load charge. This is largely due to the relative complexity and variety[114] of non-flat tariff structures.

As we noted in our draft decision, submissions to our consultation paper generally supported our approach to VDO tariffs for standing offers with flat tariffs[115] and we received no submissions on our draft decision.

Cost allocation

To set the rates for flat tariffs, we must identify how costs should be allocated within that structure.

Consistent with our previous VDO determination, the simple and logical method to allocating costs with fixed costs contained in the daily supply charge and any costs that vary with usage making up the variable, per kilowatt hour charge component of the VDO tariffs is:

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)

[114] There are a number of potential variations arising from when peak, shoulder, and off-peak times are set and also on which days of the week these times apply.

[115] Essential Services Commission, Victorian Default Offer 2021, Draft Decision, 15 September 2020, p.36.

Usage charge (variable costs) =

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

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

Calculation of VDO tariffs

As described in the formulas included above, we have set the VDO tariffs by calculating fixed rates charged per day and variable rates charged per kilowatt hour. The methodology and approach we have used to estimate the costs that will underpin these calculations are covered in the chapter on the VDO cost components.

The maximum bill

In addition to setting the flat tariffs described above, our final decision is to regulate standing offers with non-flat tariffs (for example, time of use and demand tariffs) through a compliant maximum annual bill. This is consistent with the approach we took to making our determination on the 2020 VDO. In our last VDO determination we were required to use a maximum bill to regulate non-flat standing offer tariffs. However, the requirements for subsequent decisions (including this one) allow us to determine another manner to determine or calculate non-flat standing offer tariffs.[116]

Our final decision is to maintain our current approach to the maximum customer bill

Our final decision is to apply a compliant maximum annual bill for non-flat standing offer tariffs. Retailers choosing to offer non-flat standing offer tariffs will be required to ensure that their tariffs will not result in a bill above the maximum at that usage amount. This is consistent with the approach we took to making our determination on the 2020 VDO and we consider this approach best meets our obligations under the pricing order.

Taking this approach retains the safeguard of the VDO to all standing offer customers without removing the option of non-flat tariffs from customers currently receiving them. It will also provide flexibility for retailers to continue to offer retail tariffs that reflect the structure of underlying network tariffs, and to promote cost reflective pricing.

[116] Clause 10(3) of the order.

There are also likely to be lower costs associated with the administration of our maximum bill approach than an approach based on individual customer's actual consumption. This supports objectives in the pricing order and ESC Act relating to efficiency.

Setting the compliant maximum annual bill

Consistent with our current approach, we have set the VDO compliant maximum annual bill for standing offers with non-flat tariffs based on the relevant annual reference consumption amount and relevant flat standing offer tariffs determined for relevant customers, assuming a 365-day supply period.

For non-flat standing offers that a retailer chooses to offer, the retailer must demonstrate that its tariffs do not result in an annual bill that exceeds the relevant VDO maximum annual bill amount.

To do this, retailers must adopt the relevant annual reference consumption amount and profile of customer usage specified in clauses four and five of the Victorian Default Offer Price Determination 2021. This is also discussed below. Where a reference profile is not specified, the retailer must provide relevant usage allocations that are reasonably representative of usage by customers on that tariff type over a 365-day period.

Annual reference consumption amount

The annual reference consumption amount used to determine the VDO 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 kilowatt hours 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 kilowatt hours per year.

These annual reference consumption amounts are to be used to calculate whether a retailer's non-flat standing offer tariffs, for a particular tariff type, will result in an annual bill that exceeds the VDO compliant maximum annual bill amount relevant for that tariff type.

Representative usage profiles and related usage allocations

If offering a flexible, five or seven-day time of use (or the 5-day time of day/9pm off peak) standing offer tariff, a retailer must demonstrate those tariffs do not exceed the relevant VDO compliant maximum annual bill based on the representative usage profile for the customer group. See table 2 below.

Table 2 – Representative profile of customer usage for specified non-flat tariff type

Specified non-flat standing offer 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

For any other non-flat standing offer tariff, a retailer must demonstrate that these tariffs do not exceed the relevant maximum annual bill by using a representative usage profile, or relevant usage allocations, reflecting an estimate of consumption for the relevant group of customers in the 12-month period beginning 1 January 2021.

Publishing requirements

Retailers must publish all standing offers for the regulatory period beginning 1 January 2021 (including the flat standing offers we determine) in the government gazette. For non-flat standing offer tariffs, other than five or seven-day time of use tariffs, the retailer must also publish the usage profiles used to demonstrate those tariffs do not exceed the relevant maximum annual bill in the government gazette.

We considered stakeholders' submissions on the maximum bill

We received four submissions to our draft decision on non-flat tariff structures.

The Consumer Action Law Centre submitted that it supported our approach, but that there should be some investigation of the actual bills paid by consumers.[117]

[117] Consumer Action Law Centre, submission to the Essential Services Commission's Victorian Default Offer 2021, Draft Decision, 15 September 2020, p.4.

In responding to the length of the VDO regulatory period, Red Energy and Lumo Energy[118] and EnergyAustralia[119] noted that a shorter regulatory period for the 2021 VDO determination would enable the Commission to consider the impact of the new default two-rate time of use network tariffs on the level and structure of the VDO tariffs (this is considered in the section on the length of the regulatory period).

Simply Energy[120] reiterated that it still considers that the approach used by the AER for non-flat Default Market Offer tariffs is superior to the Commission's approach and that the Commission should adopt it. However, Simply Energy also noted any changes in usage profiles will require some lead time, including likely consultation with retailers and network businesses to gather and process associated data. That is, it will not simply be a matter of altering the prices of tariffs underlying the VDO determination but altering the structure of tariffs and associated reference pricing requirements.

As we noted in our draft decision, we consider that the effect of Victorian network businesses introducing default two-rate time of use tariffs for residential and small business customers from 1 July 2021 does not require a change in our approach to the maximum bill for the 2021 VDO determination because these tariffs will only apply to a small number of customers.[121] We also agree with Simply Energy that any change in our approach requires much greater consultation with retailers and networks on the replacement usage profiles, which we are not in a position to do for this determination.

As set out in the section on the length of the regulatory period, we propose to consider the impact on the 2021 VDO determination of any new default two-rate time of use network tariffs on the VDO structures when we amend the 2021 VDO determination for the new network tariffs from 1 July 2021. If our analysis suggests that any new default two-rate time of use network tariffs create a material risk to retailers through application of our 2021 VDO determination we will consider what options best address the risk at that time.

[118] Red Energy and Lumo Energy submission to the Essential Services Commission's Victorian Default Offer 2021, Draft Decision, 15 September 2020, p.4.

[119] EnergyAustralia submission to the Essential Services Commission's Victorian Default Offer 2021, Draft Decision, 15 September 2020, p.8.

[120] Simply Energy submission to the Essential Services Commission's Victorian Default Offer 2021, Draft Decision, 15 September 2020, p.5.

[121] The Victorian network businesses are proposing that the new time of use tariffs will apply to customers requesting the following services: new connections; 3 phase meter upgrades; and new solar connections. Customers (excluding solar customers) can request to opt-out to a single rate tariff. Customers on existing tariffs can opt-in to the new time of use tariff.

Other considerations

Length of the regulatory period

Our final decision is to set the 2021 VDO regulatory period for the 12 months 1 January 2021 to 31 December 2021.

The regulatory period for electricity networks is changing

The Victorian Government has passed legislation to align the regulatory periods for the Victorian network businesses with those for other jurisdictions to run on a financial year basis. We intend to align the VDO regulatory periods and Victorian network businesses' regulatory periods as soon as practical.

Requirements in the pricing order

The pricing order sets out that the regulatory period for a VDO determination is 12 months. Currently, VDO regulatory periods run on calendar years. However, the pricing order provides for the regulatory period to be extended or reduced if special circumstances exist. We must consult with the Minister for Energy, Environment and Climate Change before changing the length of the regulatory period.

Pass through of 1 July 2021 network tariffs

Some stakeholders[122] noted that if we proceed with a 12-month determination and a proposed variation for the new network tariffs that become effective 1 July 2021, then the new network tariffs should be passed through without any materiality test. This is consistent with our draft decision which was that:

- We will adjust the VDO determination to pass through the AER approved network tariffs that become effective from 1 July 2021.
- At the time of passing through the new network tariffs we would consider whether there is any material impact on our approach to VDO tariff structures resulting from any new default two-rate time of use network tariffs approved by the AER.

[122] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p.3; Alinta, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p.1; EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p.7.

Our final decision is consistent with the intent of our draft decision and we confirm that if our determination continues to 31 December 2021, and there are no material changes to network tariff structures, it is our expectation that we will pass through the 1 July 2021 network tariffs.

For practical reasons we have set a 12-month period

As noted in our draft decision, in addition to our regulatory obligations there are practical timing constraints that we must consider in how we reflect the AER's approved 1 July 2021 network tariffs in a new determination. Consequently, in our draft decision we proposed a 12-month VDO regulatory period with a variation mechanism to pass through the network tariffs that apply from 1 July 2021.

Some stakeholders recognised these timing constraints but suggested that an alternative is for us to have an initial six to nine-month VDO determination followed by a determination through to 30 June 2022. It was suggested that this approach would also enable us to consider other elements of the cost stack and the appropriateness of our approach to VDO tariff structures for any new default two-rate time of use network tariffs. It was stated that this approach would provide retailers with certainty on network tariffs from 1 July 2021.

The first step in adjusting our 2021 VDO determination for the new network tariffs is approval of them by the AER. For the first year of a regulatory period this can take a bit longer than in other years. This makes it difficult for us to commit to a VDO period which is less than 12 months and have the confidence that we can meet our statutory obligations in making a timely new VDO determination.

On balance, we consider that a 12 month VDO period provides us with the best flexibility in dealing with uncertainty around the new network tariffs. It also allows us to deal with other issues that might require broader consideration. If there are material changes to network tariff structures, or other matters arise that require further consideration, we will consider making a new determination and revoking this determination.

If we make a new determination, rather than pass through the changes in network tariffs using the variation mechanism in the 2021 VDO determination, we would also set the end date of a new determination to 30 June 2022 to align with the network regulatory year. We will then true-up network costs in the new determination. This will help reduce the total number of price changes retailers will be required to consider next year. If we were to propose a regulatory period length of less than a year we would also need to consult with the Minister responsible for administration of the *Electricity Industry Act 2000* (Vic).

If there is no material reason for us to revoke this determination, the 2021 VDO determination will continue to 31 December 2021. Once network tariffs from 1 July 2021 are approved, if there are any material changes to the structure of network tariffs, we will consult with stakeholders on how best to reflect the new tariffs in VDO prices: including any true-ups if necessary.

It is our view that it is desirable to align the regulatory periods for the VDO and network tariffs as soon as practically possible. To this end, if the 2021 VDO regulatory period continues to 31 December 2021 it is our expectation that, on the basis of the information available to us now, the next VDO regulatory period will be six months.

We considered stakeholders' feedback on our draft decision

Several stakeholders[123] stated in their submissions on our draft decision that they did not support our draft decision to set a 12 month VDO determination period. Instead their preference was for us to align the VDO regulatory periods and Victorian network businesses' regulatory periods as soon as the AER has approved the network tariffs that apply from 1 July 2021. This would mean that this determination should be for a period less than 12 months, followed by a new determination made next year that will apply to 30 June 2022. Given timing issues of when the network tariffs would be available, and our requirements of completing a new determination, that would mean that this 2021 determination would have to be in place for at least seven to nine months.

We understand and accept the benefits of other regulatory period lengths outlined by stakeholders. However, we are concerned that if we make this a six to nine month regulatory period, we may not have enough time to meet our obligations under the Order to consult on and make a timely new price determination that meets our procedural requirements for making a new determination.

In a year when the AER is not reviewing network tariffs we would have more confidence that we can. However, given that the AER is not scheduled to make its decision on the revenues to be recovered by network tariffs until the last day of April, and it is not clear exactly when it will approve tariffs after that, we cannot be sure that a six or nine month regulatory period will be appropriate or possible. If network tariffs took longer than expected to be approved, and we had committed to a shorter regulatory period for this determination, we would not be able to make a new determination in time and in accordance with our legal and procedural fairness obligations as required by the ESC Act and the pricing order.

[123] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, pp.1-3; The Australian Energy Council, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p.2; Alinta Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p.1; EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p.7; Origin Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p.6; Red Energy and Lumo Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p. 4.

Other stakeholders[124] stated their first preference is an extension of the current VDO determination until 1 July 2021 followed by annual 12-month regulatory periods. Momentum Energy and Powershop's next preferences are a six or seven month determination followed by a determination to 30 June 2022. Given the significant decreases in wholesale and network costs since we made our last determination in 2019 we consider this approach inappropriate.

18-month regulatory period

Elysian Energy submitted that an 18-month regulatory period would be preferable to a 12-month period.[125] It would provide price certainty for customers and retailers would avoid the additional administration costs from a six month determination. However, the Australian Energy Council and AGL oppose a period longer than 12 months.[126] We also do not think that an 18-month period is appropriate at this time given the current economic uncertainty associated with the pandemic.

The effect of the pandemic

Stakeholders noted that in addition to reflecting the actual network tariffs from 1 July 2021, a shorter 2021 VDO determination will also allow the Commission to revisit other elements of the cost stack, particularly retailer cost to serve, at a time where COVID-19 impacts will hopefully be easier to predict.[127]

As discussed in the section on retail costs above we have included an adjustment for the expected effect of the pandemic on bad debts.

Retailers' ability to adjust retail market offers

We also note Red Energy and Lumo Energy and EnergyAustralia's concern about only being able to revise their market offers for electricity for a change in network prices.[128] Under our 12-month

---

[124] Momentum Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p. 2; MEA Powershop, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p. 3; Simply Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p. 5.

[125] Elysian Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p. 1.

[126] AGL, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p. 1; The Australian Energy Council, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p. 2.

[127] EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p.7; Origin Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p.6; Simply Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p. 5.

[128] Red Energy and Lumo Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, pp. 4-5; EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p.7.

VDO regulatory period they are concerned that they cannot revise their market offers when the next VDO regulatory period begins on 1 January 2022.

The Energy Retail Code does not prevent retailers from making the new standing offers required by the VDO regime. Specifically, clause 46AA of the Energy Retail Code only regulates "market retail contracts". The VDO as a standing offer is outside that definition and therefore is not regulated by clause 46AA.

Clause 46AA of the Energy Retail Code only limits when retailers can **increase** prices for **existing** market offer customers. Retailers may increase prices for customers on existing market offers at the end of a fixed price period, the anniversary of the end of a fixed price period and when network tariffs change. Further, in the event that we use a variation mechanism, under sub-clause 46AA(7) of the code retailers may also increase prices for their existing market offer customers. This means that retailers will have a number of opportunities to reconsider their pricing positions for market offers in 2021.

Price certainty for customers

Elysian Energy's preference is for an 18-month determination period on the basis it provides price certainty for customers who are both confused by the electricity market and dealing with significant changes due to the pandemic.[129] EnergyAustralia also stated that having a misalignment of price changes for market offers and standing offers, and associated reference price comparisons, would create confusion for customers.[130]

We consider that the customer confusion created by changes in the VDO prices will be minimal. Customers on the VDO are generally disengaged or unable to engage and so are unlikely to notice changes to their tariffs. They also only account for roughly five per cent of all customers. Given the current economic uncertainty we consider VDO customers are better served by having prices that reflect the most recent data available on efficient costs.

As for customers on market offers, to the extent reference price comparisons encourage them to engage with the market, this should help promote competition between retailers for customers.

---

[129] Elysian Energy, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p.1.

[130] EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft Decision, October 2020, p.7.

Variation mechanism

Our final decision is to:

- carry forward the 2020 VDO price determination variation mechanisms into the 2021 VDO price determination
- nominate the Australian Energy Regulator's (AER) approval of network tariffs as an event that would lead us to consider a variation to our determination. If the 2021 VDO determination continues to 31 December 2021, and there is no reason for us to revisit the structure of network tariffs underlying the VDO prices, we will pass through changes in network tariffs as a variation to the 2021 VDO price determination.

The pricing order specifies that before or during a regulatory period, that we may, on our own initiative, vary a VDO price determination in respect of the regulatory period.[131] However, we must specify, in the VDO price determination, the circumstances under which we will consider and the basis on which we will decide on a proposed variation. We must also specify the processes to be followed to enable us to make such a variation.

We have included a mechanism that provides for variations to the 2021 VDO price determination in the event of a material unforeseen change or error that:

- was sufficiently uncertain or unforeseen at the time of making the price determination – such as an exogenous shock,[132] and
- was sufficiently material to impact the benchmark established for the efficient costs to supply an electricity retail service.[133]

The determination also allows us to make a variation to a VDO price determination to correct a clerical error, miscalculation, misdescription or other deficiency. This is consistent with the variation mechanism in our 2020 VDO determination.

We will also nominate the Australian Energy Regulator's (AER) approval of network tariffs as an event that would lead us to consider a variation to our determination. If the 2021 VDO determination continues to 31 December 2021, and there is no reason for us to revisit the structure

[131] Clause 13(1) of the order.

[132] An exogenous shock here refers to an event that occurs outside the control of a retailer or the industry.

[133] Essential Services Commission, Victorian Default Offer Price Determination 2020: 1 January 2020 – 31 December 2020, 18 November 2019, clause 6 (2).

of network tariffs underlying the VDO prices, we could pass through changes in network tariffs and vary the 2021 VDO price determination to reflect this. This is consistent with our draft decision.

Our variation mechanism will manage uncertainty on changes in network tariffs

The variation mechanism included in the 2021 VDO determination could be used to make an adjustment during the 2021 regulatory period to account for changes in network tariffs. In any variation process, we would have regard to all relevant matters under the ESC Act, EI Act and the pricing order and the procedural requirements of the ESC Act and the pricing order (including those related to consultation with stakeholders).

A variation for changes to network tariffs

As discussed in the section on the length of regulatory period, it is not clear when the final network tariffs approved by the AER for the second half of 2021 will be available. Once the AER has approved tariffs we will decide whether we shorten the regulatory period or continue with a 12-month one. If there are no material changes to network tariff structures, it is our expectation that we will continue with a 12-month regulatory period and use our variation mechanism to pass through changes in network costs consistent with our treatment of network costs in this determination. However, if there are material changes to tariff structures, we will consult with stakeholders on how best to reflect any changes in the default offer.

In our draft decision we sought feedback from stakeholders on circumstances where they consider we may not need to consult further, in the context of varying our determination to reflect the AER's final approval of network tariffs applying from 1 July 2021. In response to our draft decision some retailers voiced a strong preference that, if we do use our variation mechanism, the full amount of network price changes should be reflected in any mid-year adjustment.[134] However EnergyAustralia noted that any changes to reflect the new network tariff structures would require consultation with retailers and network businesses to gather and process associated data.

As noted above, it is currently our expectation that if there are no material changes to network tariff structures, we will use our variation mechanism to pass through any changes in tariffs in full. Also as mentioned above, if there is a material change in network tariff structures we will consult with stakeholders on how these should be reflected in VDO prices.

[134] EnergyAustralia, submission to the Essential Services Commission Victorian Default Offer to apply from 1 January 2021: Draft decision, October 2020, p. 10.

Our variation mechanism helps us manage material and unforeseen or uncertain events

We may use our variation mechanism in the case that there are material and unforeseen or uncertain changes in retailers' costs. Before making any variation to our VDO price determination we will consider all relevant factors, including total costs and retail costs.

In deciding whether a variation is required, our view about what is considered 'material' may change depending on the context. Importantly, a variation will be limited to extraordinary events that have a significant impact on the benchmark of efficient costs of delivering electricity retail services. This is consistent with the approach we take in other sectors and by other regulators in Australia.[135] In determining what is material we would have regard to all relevant legislative considerations including those set out in Appendix C. As part of this assessment, we would in our discretion, consider a number of matters including but not limited to:

- the timing and duration of the event or circumstance
- the extent of the impact (positive or negative) on efficient costs
- the extent of the impact (positive or negative) on the fixed flat tariffs;
- the general extent of the impact on prescribed customer annual bills;
- the capacity of retailers to manage the impact until the commencement of the next regulatory period
- the costs and benefits to retailers and prescribed customers of a proposed price determination variation
- the objectives and requirements of the pricing order, and
- any other matter that we consider relevant and appropriate.

The impact of the VDO on embedded network operators

In coming to our decision on the VDO we also considered the impact it would have on embedded network operators. The VDO acts as a maximum price for customers serviced by most embedded networks. Our final decision on the maximum prices for embedded networks and other exempt sellers provides further detail about why we consider this is appropriate.[136]

---

[135] For example, our 2018 water price reviews, while the ICRC only consider pass through events as part of their annual recalibration process. See ICRC, Final report: Standing offer prices for the supply of electricity to small customers from 1 July 2017, June 2017, p. 62.

[136] Essential Services Commission 2020, Maximum prices for embedded networks and other exempt sellers: Final Decision, 22 July, available at: https://www.esc.vic.gov.au/sites/default/files/documents/Maximum%20price%20for%20exempt%20sellers%20final%20decision%20-%2022%20July%202020.pdf

We are required to base VDO prices on the efficient costs of the sale of electricity. The pricing order does not require the commission to determine tariffs based on actual costs. Nonetheless, our decision should not jeopardise the financial viability of efficiently run embedded networks as there are a number of market offers available with prices below our VDO benchmark for 2021.

In making our determination we must also meet the objectives of the Order to provide a simple, trusted and reasonably priced electricity option that safeguards consumers **unable** (or unwilling) to engage in the electricity retail market. Customers in embedded networks face high barriers to accessing retail market competition.[137] They are effectively unable to engage in the retail market as the cost of metering or network re-configuration can be too expensive, and energy retailers may choose not to sell an 'energy only offer' to a customer inside an embedded network. Our decision on the 2021 VDO will ensure that embedded network customers have access to a reasonably priced electricity option.

[137] Essential Services Commission 2020, Maximum prices for embedded networks and other exempt sellers: Final Decision, 22 July, p. 3.

Appendix A: VDO tariffs and maximum bill amounts

VDO flat tariffs

For each distribution zone we have calculated the flat VDO tariffs that will apply for domestic and small business customers.

Tables A.1 and A.2 below set out the VDO rates for each category of customer expressed in GST inclusive terms.

Table A.1 Flat VDO tariffs for domestic customers

Distribution zone	Supply charge ($ per day)	Usage charge structure	Usage charge ($ per kWh)	Controlled load ($ per kWh)
AusNet Services	$1.1643	Block 1 (up to 1020kWh used in a quarterly period) Block 2 (balance of usage in a quarterly period)	$0.2703 $0.2882	$0.1924
CitiPower	$1.1330	Anytime	$0.2140	$0.1629
Jemena	$1.0675	Anytime	$0.2344	$0.1819
Powercor	$1.2918	Anytime	$0.2240	$0.1704
United Energy	$0.9824	Anytime	$0.2400	$0.1707

Table A.2 Flat VDO tariffs for small business customers

Distribution zone	Supply charge ($ per day)	Usage charge structure	Usage charge ($ per kWh)	Controlled load ($ per kWh)
AusNet Services	$1.1643	Block 1 (up to 1020kWh used in a quarterly period) Block 2 (balance of usage in a quarterly period)	$0.2955 $0.3302	Not applicable
CitiPower	$1.3567	Anytime	$0.2218	Not applicable

Jemena	$1.2264	Anytime	$0.2405	Not applicable
Powercor	$1.4197	Anytime	$0.2288	Not applicable
United Energy	$1.0463	Anytime	$0.2444	Not applicable

VDO Maximum bills

The maximum bill values below are calculated from the VDO rates in each zone using a representative profile of annual electricity usage.

For residential customers we used 4,000 kilowatt hours per year and for small business customers 20,000 kilowatt hours per year, with usage allocated evenly throughout the year. To allow for practical application and ensure the full cost of all rates are captured, the maximum bill amounts have been rounded up to the nearest dollar.

Customers on the VDO may have bills that are higher or lower than the maximum bill amounts. The maximum amounts are based on representative profiles of electricity use that are likely to be different to the specific pattern and level of electricity usage of individual customers.

Table A.3 VDO compliant maximum annual bill amounts for all non-flat standing offer tariff types

Distribution zone	VDO compliant maximum annual bill amount – domestic customers (4,000kWh usage)	VDO compliant maximum annual bill amount – small business customers (20,000kWh usage)
AusNet Services	$1,507	$6,887
CitiPower	$1,270	$4,931
Jemena	$1,328	$5,258
Powercor	$1,368	$5,095
United Energy	$1,319	$5,270

Appendix B: Calculation of the cost stack

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

Wholesale electricity costs

We engaged Frontier Economics to estimate wholesale electricity costs for 2021 using the method described in the chapter on VDO 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 allowance for volatility.

These costs vary across Victoria as a result of different customer load profiles in each distribution zone. Calendar year 2021 estimates of the wholesale electricity price and volatility allowance for each zone are displayed in the table below.

Table B.1 Wholesale electricity forecasts for 2021, as at 30 October 2020 (GST exclusive)

Distribution zone	Domestic		Small business	
	Wholesale price - 12 month ($/MWh nominal)	Volatility allowance ($/MWh nominal)	Wholesale price - 12 month ($/MWh nominal)	Volatility allowance ($/MWh nominal)
AusNet Services	$94.02	$0.48	$82.28	$0.34
CitiPower	$88.84	$0.47	$85.08	$0.40
Jemena	$97.80	$0.45	$84.51	$0.36
Powercor	$92.03	$0.42	$80.11	$0.31
United Energy	$98.18	$0.49	$86.63	$0.41

Source: Frontier Economics, Wholesale electricity costs for 2021: a final report for the Essential Services Commission, 30 October 2020

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 LRET, SRES and VEU obligations of retailers.

We have calculated the total loss factor based on the 2020-21 distribution and marginal loss factors published by AEMO.[138]

Table B.2 Network losses

Distribution zone	Distribution loss factor (DLF)	Marginal loss factor (MLF)	Total loss factor
AusNet Services	1.0680	0.9992	6.70%
CitiPower	1.0509	0.9978	4.86%
Jemena	1.0394	0.9983	3.76%
Powercor	1.0830	0.9890	7.11%
United Energy	1.0563	0.9963	5.24%

Source: Australian Energy Market Operator, Distribution Loss Factors and Marginal Loss Factors 2020-21

Network tariff categories in the VDO

Our final decision on network tariffs takes the simplest network tariff in each distribution zone, along with the simplest controlled load tariff for domestic customers and the simplest Advanced Metering Infrastructure (AMI) charges for single phase meters as a cost per customer. We have adopted the simplest network tariffs and AMI charges in each distribution zone as they are the most commonly used charges, while the network tariffs flat structure supports the objective for the VDO to be simple and transparent. Network tariff categories are set out below.

[138] Australian Energy Market Operator, Distribution Loss Factors for the 2020-21 Financial Year, September 2020, p. 13-16; Australian Energy Market Operator, Regional and Marginal Loss Factors: FY 2020-21, July 2020, p. 20-24.

Table B.3 Network tariff categories

Distribution zone	Domestic tariff	Small Business tariff
AusNet Services	Residential small single rate, NEE11	Business small single rate, NEE12
CitiPower	Residential single rate, C1R	Non-residential single rate, C1G
Jemena	Residential, A100/F100a/T100b general purpose	Small business, A200/F200a/T200b general purpose
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 B.4 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

Network tariffs and metering charges

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.

As noted in the chapter on VDO cost components, the Victorian Government has passed legislation to change the timing of annual electricity network price changes from calendar year to financial year, bringing Victoria into alignment with the other states in the National Electricity Market. The change will come into effect for the next regulatory period. This will mean extending the current regulatory period for networks by 6-months to 30 June 2021. Tables B.5 and B.6 show the network tariffs approved by the AER for the period 1 January to 31 December 2021.

Table B.5 Domestic electricity network tariffs, 2021 (GST exclusive)

Distribution zone	Daily charge ($ per year)	Variable charge structure	Variable charge ($ per kWh)	Controlled load ($ per kWh)
AusNet Services	$106.00	Block 1	$0.1054	$0.0386
		Block 2	$0.1207	
CitiPower	$90.00	Anytime	$0.0647	$0.0209
Jemena	$69.03	Anytime	$0.0741	$0.0292
Powercor	$140.00	Anytime	$0.0674	$0.0214
United Energy	$59.86	Anytime	$0.0767	$0.0173

Source: Victorian distribution businesses' 2021 annual tariff statements

Table B.6 Small business electricity network tariffs, 2021 (GST exclusive)

Distribution zone	Daily charge ($ per year)	Variable charge structure	Variable charge ($ per kWh)
AusNet Services	$106.00	Block 1	$0.1396
		Block 2	$0.1693
CitiPower	$160.00	Anytime	$0.0754
Jemena	$118.74	Anytime	$0.0933
Powercor	$180.00	Anytime	$0.0844
United Energy	$79.86	Anytime	$0.0927

Source: Victorian distribution businesses' 2021 annual tariff statements

Table B.7 Network metering charges, 2021 (GST exclusive)

Distribution business	Annual metering charge ($ per customer)
AusNet Services	$59.60
CitiPower	$65.80
Jemena	$66.28
Powercor	$65.50
United Energy	$48.82

Source: Victorian distribution businesses' 2021 annual tariff statements

Environmental scheme costs

Large-scale Renewable Energy Target (LRET) costs

Under the LRET scheme, the liability percentage is called the Renewable Power Percentage. This is a legally binding obligation placed on electricity retailers to purchase and surrender a certain number of certificates each year to meet their renewable energy obligations.[139] The Clean Energy Regulator will not set the binding Renewable Power Percentage for 2021 until March 2021.

As an alternative the Clean Energy Regulator provides an approach for calculating a default Renewable Power Percentage. We have engaged Frontier Economics to estimate the cost of complying with the LRET. This includes estimating the default Renewable Power Percentage for 2021 (18.83 per cent) and calculating the 12-month average of 2020 futures market prices for certificates (LGCs) as reported by Demand Manager.[140] This is consistent with our previous approach of using the default Renewable Power Percentage in place of the binding Renewable Power Percentage.[141] The resulting estimate is reported in table B.6.

As signalled in our final decision on the 2020 VDO, we have included a true-up mechanism to account for the difference between the default Renewable Power Percentage we used in the 2020

[139] Obligations regarding the amount of renewable energy that must be generated each year is specified in the Renewable Energy (Electricity) Act 2000.

[140] Available at: http://demandmanager.com.au/certificate-prices. Accessed 21 July 2020.

[141] Essential Services Commission 2019, Victorian Default Offer to apply from 1 January 2020: Final decision, 18 November, p. 38.

(20.15 per cent) VDO and the actual binding Renewable Power Percentage for 2020 (19.31 per cent).[142] We will continue to use this true-up mechanism to allow for any difference between the default Renewable Power Percentage and binding Renewable Power Percentage to be accounted for in future regulatory periods.

In determining the true-up through amount we calculated the dollar amount per megawatt hour that the 2020 VDO benchmark for LRET costs would have been set at, if the actual binding Renewable Power Percentage was available at the time we set the 2020 VDO. This allows us to account for the different level of the 12-month average futures market price for certificates in 2020 compared to 2021. We then applied the resulting difference to the LRET benchmark for 2021, to calculate the adjustment we must make to the Renewable Power Percentage included in the 2021 VDO calculations.

Small-scale Renewable Energy Scheme (SRES) costs

The liability percentage under the SRES scheme is called the Small-Scale Technology Percentage (STP). The federal Clean Energy Regulator does not publish the binding STP until March 2021. However, it has published the non-binding STP for 2021 at 19.40 per cent.[143] The actual binding STP for 2020 was set at 24.40 percent.

Historically, spot prices for certificates under the SRES have been at or close to the clearing house price of $40. For this reason, the price per certificate is assumed to be $40.

As we flagged in our previous decision differences in our final decision and the 2020 binding STP published in early 2020 will be accounted for through a true-up mechanism. To set a benchmark for SRES costs, we have used the mid-point of the non-binding STP for 2021 and the binding STP for 2020, plus the level of the difference between the forecast STP we used in the 2020 VDO and the actual binding STP for 2020 (6.25 per cent), multiplied by the clearing house price.

The higher level of the non-binding STP the Clean Energy Regulator has set for 2021, along with the 6.25 per cent benchmark to account for the difference between the forecast STP used in the 2020 VDO and the actual binding STP for 2020, has increased the benchmark for SRES costs in our final decision compared to the 2020 VDO. This is reflected in an increase in both the residential and small business average annual bills.

---

[142] Essential Services Commission 2019, Victorian Default Offer to apply from 1 January 2020: Final decision, 18 November, p. 39.

[143] Available at http://www.cleanenergyregulator.gov.au/RET/Scheme-participants-and-industry/the-small-scale-technology-percentage. We note that there have historically been significant differences between the non-binding STP and the binding STP which we will account for through a true-up mechanism.

Victorian Energy Upgrades costs

For the cost of complying with the Victorian Energy Upgrades scheme, we use the relevant greenhouse reduction rate for electricity of the reference price year being assessed.

The 2021 greenhouse gas reduction rate for electricity has not yet been published, so we have used the 2020 reduction rate to calculate the cost of the Victorian Energy Upgrades scheme in 2021. We will account for any differences between the 2020 reduction rate and the actual 2021 reduction rate in our next VDO price review.

The cost of certificates under the Victorian Energy Upgrades scheme is gathered from historic market prices. We estimate an average price of $32.38 per certificate for 2021.

Our estimate of the average price per certificate is around $12 higher than the estimate used to calculate VEU costs for the 2020 VDO. This has increased the benchmark for VEU costs in our final decision compared to the 2020 VDO and is reflected in an increase in both the residential and small business average annual bills.

Table B.8 Cost of complying with Environmental Schemes (GST exclusive):

Environmental scheme	Certificate price	Scheme liability	Cost ($/MWh)
LRET	$35.75	17.76%	$6.35
SRES	$40.00	28.15%	$11.26
Victorian Energy Upgrades	$32.38	17.26%	$5.59

Source: Frontier Economics, Wholesale electricity costs for 2021: a final report for the Essential Services Commission, 30 October 2020.

Retail operating costs

We have described our benchmarking approach to retail costs and margin in the chapter on VDO 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 $143.30 for retail operating costs and $38.46 for customer acquisition and retention costs (see table B.9).

Retail margin

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

Table B.9 Retail costs and margin (GST exclusive)

Retail costs and margin	Benchmark
Retail operating costs	$143.30
Customer acquisition and retention costs	$38.46
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 AEMO's Budget and Fees report.[144] The estimate of our licence fee is a market-wide average based on the approved fees for the year 2019-20, updated for inflation. We have adopted a forecast of ancillary charges based on analysis of the past 12 months of ancillary service cost data. The impact of the social cost of carbon on retailer costs is based on total small-scale renewable exports in 2019-20 and customer numbers in 2019-20.

Table B.10 Other costs (GST exclusive)

Charge	Rate
AEMO fees	
NEM market fees	$0.37/MWh
Full retail contestability	$1.35/customer

[144] Australian Energy Market Operator, 2020-21 AEMO Final Budget and Fees.

Charge	Rate
National Transmission Planner	$0.00/MWh
Energy Consumers Australia	$0.63/customer
Ancillary services	$0.36/MWh
RERT	$2.46/customer
ESC licence fee	$1.69/customer
Feed-in Tariff (social cost of carbon)	$10.85/customer
Total per MWh $0.73/MWh	
Total per customer $16.98/customer	

Appendix C: Our legislative considerations

The pricing order provides the commission's power to make a VDO price determination and imposes some constraints on that power. This chapter explains at a high level the requirements for, and matters we must have regard to, in making the determination.

The commission's statutory power to determine the VDO

In making a VDO price determination we must adopt an approach and methodology that is in accordance with section 33(2) of the *Essential Services Commission Act 2001 (Vic)* (ESC Act), and the pricing order.[145] 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)* (EI Act) and the objective of the VDO.[146]

Further, the VDO price determination must be based on the efficient costs of the sale of electricity by a retailer,[147] having regard to:[148]

- wholesale electricity costs
- network costs
- environmental costs
- retail operating costs, including only modest costs of customer acquisition and retention[149]
- retail operating margin[150]
- any other costs, matters or things we consider appropriate or relevant.

The pricing order also specifies that we must not include headroom.[151]

---

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

[146] Best meeting the objective of the VDO is a requirement of clause 12(2) of the pricing order.

[147] 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.

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

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

[150] 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.

[151] 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 VDO

As specified in the pricing order, the objective of the VDO is to provide a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the electricity retail market.[152]

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

Without derogating from these objectives and the matters to which regard must be had under section 8A of the ESC Act outlined below, 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;

[152] Clause 3 of the order sets out the objective of the VDO.

- consistency in regulation between States and on a national basis;
- any matters specified in the empowering instrument (i.e. the pricing order; see discussion above).

Section 33 of the ESC Act only applies to the extent it is not contrary to the pricing order.[153] 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 EI Act.[154]

Section 33(3) of the ESC Act specifies some methodological considerations, specifically:

- the particular circumstances of the regulated industry (i.e. retail electricity market) and the prescribed goods and services (i.e. 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.[155]

[153] Clause 12(12) of the order.

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

[155] Under clause 12(11) of the pricing order, section 33(4)(a) does not apply to a VDO determination.

Appendix D: How we have assessed the VDO

Appendix C sets out the requirements and matters we must have regard to in making a Victorian Default Offer (VDO) price determination. This chapter summarises, how we have considered these matters.

Our approach to this review

In coming to our draft decision on the VDO, we have built on our 2020 VDO price determination, assessed developments in the retail electricity market (since we made our last determination) 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 used largely the same methodology as we did in our 2020 VDO price determination. As part of this review, the estimates included in the VDO 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 VDO 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 C).

We analysed the efficient costs of electricity retailers

Through information requests, and issuing notices under our compulsory information gathering powers, we collected cost data from electricity retailers. This information allowed us to understand the types of costs electricity retailers incur and elements of the efficient costs of supplying electricity to customers. We sought advice from independent consultants on forecasting of retailers' wholesale electricity costs and of retailers' costs of complying with environmental programs for calendar year 2021.

Our approach and methodology included the elements listed below to estimate the efficient costs of the sale of electricity by a retailer.[156] This includes:

- **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 will be directly taken from tariffs approved by the Australian Energy Regulator

[156] Clause 12(4) of the order.

- **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 updated estimates of these elements for our final decision and VDO price determination to account for any changes in market data. The data provided by retailers was used as a cross check of our VDO cost stack and allowed us to compare the cost stack elements across different segments of the retail market. We also used findings from other regulators (such as the Australian Competition and Consumer Commission's Retail Electricity Pricing Inquiry final report) in assessing the cost stack.

We note that the VDO benchmark amounts may differ from the actual costs of retailers. This is because we have sought to estimate the efficient costs of retailers. 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.[157]

Among other things, our review has taken into consideration the impact of the coronavirus pandemic (the pandemic) on retailers and the retail electricity market. We have only included costs in our VDO cost stack where we expect those costs to continue into 2021. As part of this determination we have also considered the need to allow for variation and flexibility where justified, having regard to our statutory objectives including promoting stability, certainty and trust in a regulatory approach.

Through stakeholder submissions we heard many Victorian residential and small business customers are experiencing vulnerability because of the pandemic, including payment difficulties. There have also been changes in the regulatory framework to support customers and retailers during this time. We have considered the information available and sought advice on the impact on the retail electricity market. In considering this information we have had regard to our statutory objectives, including the financial viability of the retail energy market and promoting full retail competition.

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

We also had regard to other changes in the regulatory environment that may affect retailers' efficient costs for example:

- The AEMC published a final determination and rule which delays the commencement of five-minute settlements by three months, so that they commence on 1 October 2021.
- We are also aware that the Retailer Reliability Obligation commenced on 1 July 2019 and is ongoing. At this time, given the Retailer Reliability Obligation has not been triggered there are no material costs for us to consider as part of this review. We note changes beyond this period are outside the scope of our review
- Our ensuring contracts are clear and fair review and
- Our supporting energy customers through the coronavirus pandemic 2020 review.

We considered our approach to the compliant maximum annual bill

Our price determination framework also includes a VDO 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 proposing a compliant maximum annual bill in this draft decision, we have had regard to the objective of the VDO to be a simple option and sought to provide for a framework that has regard to the administrative costs of retailers and ease of understanding by customers.[158] As with other elements of our methodology, we have also had regard to the approaches adopted by other regulators including the AER's Default Market Offer.[159]

Our assessment approach helps us meet our legislative requirements

Our assessment approach helps us meet our objectives

In setting the VDO 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.[160]
- 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. [161]

---

[158] Section 8A(1)(e) of the ESC Act and section 10(c) of the EI Act.

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

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

[161] Section 8 of the ESC Act

In terms of promoting the development of full retail competition, the VDO does not prevent customers from choosing their electricity retailer. As retailers will still be free to compete for customers in the market by making offers above and below the VDO, we note that our approach to the VDO is consistent with the objective in the EI 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.[162] We have had regard to all of these matters in coming to our draft decision.

Efficiency

We have considered efficiency in our decision.[163] Our approach helped us establish the tariffs that reflect the efficient costs of the sale of electricity by a retailer, including a benchmark for the retail operating margin.[164] Our review used largely the same approach as our 2020 VDO price determination.

Financial viability

A related matter is the consideration of long-term incentives for investment and financial viability.[165] As our draft decision on the VDO 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 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 VDO. Likewise, it does not prevent retailers, who can lower their costs, from attracting customers by making cheaper market offers available.[166]

In our consideration of the retail margin we also considered the range and types of offers available to customers as part of our review. This showed that the median priced, flat tariff market offer (made generally available to customers via the Vic Energy Compare site) is still cheaper than the currently applied VDO.

---

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

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

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

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

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

The relevant legislation applying to the industry

We considered other legislation that affects the efficient costs of a retailer**[167]** Among, other things, we considered costs associated with regulatory requirements on retailers (such as the LRET, SRES and five-minute settlements). We also note that our benchmarks of retailer operating costs, CARC and retail operating margin reflect the costs and margins of Australian retailers complying with the regulatory and legislative requirements.

The benefits and costs of regulation

The VDO was introduced as part of an independent review of the gas and electricity markets in Victoria. The VDO is a simple, trusted and reasonably priced electricity option that safeguards customers unable to engage in the electricity retail market.[168] In formulating the VDO we are not required to revisit the costs and benefits of implementing the VDO.[169]

We have, however, had regard to the costs and benefits of regulation in our approach to formulating the VDO.[170] The VDO 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 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 the retail pricing regulation that applies in other parts of Australia (the Default Market Offer) we also had regard to the different policy intent of the relevant legislation.[171]

---

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

[168] The development of the VDO 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.

[169] Under clause 12(11) of the pricing order, section 33(4)(a) does not apply to a VDO determination.

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

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

The particular circumstances of the regulated industry

As part of this review, the estimates included in the VDO cost stack have been updated to reflect changes in the market and new data that is now available.[172] 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 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.[173] In terms of the quality and reliability of services, retailers are required to offer the VDO under the regulated terms and conditions for standard retail contracts. We consider the benchmark provided to retailers under the VDO 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 VDO price determination.[174] We have considered this guidance in making our decision. The relevant matters are considered in the body of our decision including the VDO cost stack chapter, chapter on flat tariffs and maximum bill, and earlier in this appendix.

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

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

[174] Clause 12 of the order.

Appendix E: Submissions on the draft decision

Name of organisation	Date received
Anonymous 1	25 September 2020
Anonymous 2	29 September 2020
Brian and Jill Golland	16 October 2020
Tango Energy	19 October 2020
AEC	20 October 2020
AGL	20 October 2020
Alinta	20 October 2020
CALC	20 October 2020
Elysian	20 October 2020
Energy Australia	20 October 2020
Momentum	20 October 2020
Origin	20 October 2020
Powershop/MEA Group	20 October 2020
Red/Lumo	20 October 2020
Simply Energy	20 October 2020
Trevor Main Property Group[175]	20 October 2020
VCOSS	20 October 2020

[175] Note: Submission was confidential

Appendix F: Pricing order

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).

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	$0.1917
Powercor	$1.2333	Anytime	$0.2403	$0.1831
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