

NOTICE

Ernst & Young was engaged on the instructions of the Essential Services Commission Victoria ("Client") to advise on the potential impact of COVID-19 on the efficient costs for Victorian retailers to supply electricity ("Project"), in accordance with the letter of engagement dated 17 August 2020.

The results of Ernst & Young's work, including the assumptions and qualifications made in preparing the report, are set out in Ernst & Young's report dated 10 November 2020 ("Report"). The Report should be read in its entirety including the applicable scope of the work and any limitations. A reference to the Report includes any part of the Report.

Our work commenced on 17 August 2020 and was completed on 10 November 2020. Therefore, our Report does not take account of events or circumstances arising after 10 November 2020 and we have no responsibility to update the Report for such events or circumstances.

Ernst & Young has prepared the Report for the benefit of the Client and has considered only the interests of the Client. Ernst & Young has not been engaged to act, and has not acted, as advisor to any other party. Accordingly, Ernst & Young makes no representations as to the appropriateness, accuracy or completeness of the Report for any other party's purposes.

No reliance may be placed upon the Report or any of its contents by any party other than the Client ("Third Parties"). Any Third Party receiving a copy of the Report must make and rely on their own enquiries in relation to the issues to which the Report relates, the contents of the Report and all matters arising from or relating to or in any way connected with the Report or its contents.

Ernst & Young disclaims all responsibility to any Third Parties for any loss or liability that the Third Parties may suffer or incur arising from or relating to or in any way connected with the contents of the Report, the provision of the Report to the Third Parties or the reliance upon the Report by the Third Parties.

No claim or demand or any actions or proceedings may be brought against Ernst & Young arising from or connected with the contents of the Report or the provision of the Report to the Third Parties. Ernst & Young will be released and forever discharged from any such claims, demands, actions or proceedings.

In preparing this Report we have considered and relied upon information from a range of sources believed to be reliable and accurate. Further, we have not been notified that any information supplied to us, or obtained from public sources, was false or that any material information has been withheld from us. The full impact of the COVID-19 cannot be predicted with any degree of certainty, due to the complex inter-relationship between health and economic factors and evolving nature of COVID-19 and the potential for unknown ramifications on consumers, supply chains and commercial counterparties.

We do not imply and it should not be construed that we have verified any of the information provided to us, or that our enquiries could have identified any matter that a more extensive examination might disclose.

Ernst & Young have consented to the Report being published electronically on the Client's website for informational purposes only. Ernst & Young have not consented to distribution or disclosure beyond this. The material contained in the Report, including the Ernst & Young logo, is copyright. The copyright in the material contained in the Report itself, excluding Ernst & Young logo, vests in the Client. The Report, including the Ernst & Young logo, cannot be altered without prior written permission from Ernst & Young.

Ernst & Young's liability is limited by a scheme approved under Professional Standards Legislation.

Table of contents

1.	Introduction	1
1.1	Background	1
1.2	EY engagement	1
1.3	Purpose of this report	2
2.	The impact of COVID-19 on the economy	3
2.1	General macroeconomic conditions	3
2.2	The outlook for the remainder of 2020 and 2021	5
2.3	COVID-19 restrictions and support packages	8
3.	COVID-19 2021 VDO impact assessment framework	10
4.	Summary findings	13
5.	Assessment of COVID-19 impacts	17
5.1	Wholesale electricity costs	17
5.2	Network costs	20
5.3	Environmental and regulatory costs	21
5.4	Retail operating costs	24
5.5	Retail operating margin	32
6.	Overall impact assessment and recommendations	35
6.1	Does the collective view of impacts warrant adjustments to the VDO calculation?	35
6.2	What options does the Commission have?	35
Apper	ndix A Key government supports for COVID-19	37

1. Introduction

1.1 Background

The Victorian Default Offer (VDO) was introduced by the Victorian Government on 30 May 2019 in an Order in Council (pricing order) made under section 13 of the Electricity Industry Act 2000 to regulate standing offer prices for electricity in Victoria. The VDO commenced operation on 1 July 2019. 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. Based on advice prepared by the Essential Services Commission (the Commission), the Victorian Government set the prices retailers may charge for standing offer contracts with a flat tariff structure in the pricing order. The pricing order also gave the Commission the role of regulating the tariffs for all standing offers from that time on.

On 25 November 2019, the Commission made its first VDO price determination. The determination was for calendar year 2020. Under the pricing order, the Commission is required to make a new determination for the tariffs to apply for calendar year 2021 by 25 November 2020.

The VDO price determination must be based on the efficient costs of the sale of electricity by a retailer, having regard to:

- Wholesale electricity costs
- Network costs
- Environmental costs
- ▶ Retail operating costs, including modest costs of customer acquisition and retention
- ► Retail operating margin
- Any other costs, matters or things the Commission considers appropriate or relevant.

The Commission may also vary a VDO price determination before or during a regulatory period.² However, the circumstances under which the Commission will consider and the basis on which it will decide on a proposed variation must be specified in the VDO determination. The current VDO includes an existing variation mechanism which allows for changes to the VDO if there is an unforeseen and material change in costs.³

1.2 EY engagement

The coronavirus pandemic (COVID-19 or the pandemic) has created considerable economic uncertainty and is impacting all industries, including the energy sector. Accordingly, the Commission engaged EY to advise on the impact of COVID-19 on the efficient costs for retailers to supply electricity. The scope of the analysis covered the following elements:

- ▶ The impacts of COVID-19 on retailers and consumers
- ► How COVID-19 will affect retailers' total costs

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

² Clause 13(1) of the 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).

³ Essential Services Commission, 2020, Victorian Default Offer 2021 - Consultation Paper, pg. 21.

- ► To what extent any COVID-19 impacts are expected to continue into 2021
- ► Whether the Commission should change its VDO methodology to account for the impact of the pandemic
- ▶ If changes are required, what options should be considered.

1.3 Purpose of this report

The purpose of this report is to present the findings of EY's assessment of the impact of COVID-19 on retailers' total costs based on an assessment framework developed by EY in consultation with the Commission. The advice will inform the Commission's determination of the VDO commencing 1 January 2021.

2. The impact of COVID-19 on the economy

2.1 General macroeconomic conditions

Victoria

In Victoria, continued restrictions and re-emergence of COVID-19 community transmission have had significant macroeconomic impacts with a reduction in real Gross State Product (GSP), increased unemployment, decreased labour force participation and a fall in consumer and business confidence. Whilst all areas of the Victorian economy have been impacted, the most heavily impacted sectors include tourism, hospitality and entertainment, with border closures, restrictions on public gatherings and closures of non-essential businesses causing significant reductions in economic activity within those sectors.

The unemployment rate was 7.5 per cent for the month of June, compared to 5.2 per cent in February 2020⁴ and 4.7 per cent in June 2019.⁵ At 6.7 per cent, the September unemployment rate was lower than the June unemployment rate, however this was mostly due to a decline in labour force participation.⁶ As shown in Figure 1, the unemployment rate remains higher than prepandemic levels. Victoria currently has the highest underemployment rate of the country at 14.9 per cent.

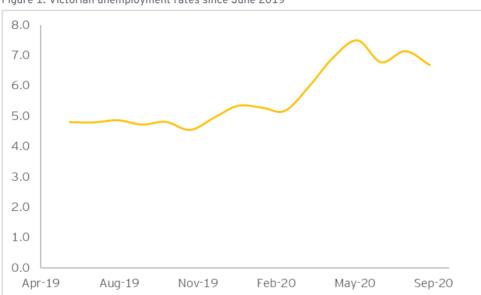


Figure 1: Victorian unemployment rates since June 2019

Source: ABS, Labour Force, Australia

⁴ ABS, Labour Force Commentary February 2020, available online [https://www.abs.gov.au/ausstats/abs@.nsf/Previousproducts/6202.0Main%20Features2Feb%202020?opendocument&tab name=Summary&prodno=6202.0&issue=Feb%202020&num=&view=], accessed 17 August 2020.

⁵ABS, Labour Force Commentary June 2019, available online [https://www.abs.gov.au/ausstats/abs@.nsf/Previousproducts/6202.0Main%20Features2Jun%202019?opendocument&tab name=Summary&prodno=6202.0&issue=Jun%202019&num=&view=], accessed 17 August 2020.

⁶ ABS, Labour Force Australia September 2020, available online [https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia/latest-release] accessed 28 October 2020

The Victorian consumer sentiment index saw a decrease of 10.4 per cent in July to 85.0 points⁷ and a further fall of 8.3 per cent in August to 78 points - a similar level to April when the first national lockdown occurred⁸. This is approximately 20 per cent lower than the consumer sentiment index in August 2019. Similarly, business confidence fell 22 points to -29 index points in July, prior to the announcement of the stage 4 lockdowns in Melbourne.⁹

As of November 2020, the Victorian economy remains heavily impacted by COVID-19 and associated restrictions, despite a significant decrease in case numbers and some easing of restrictions. Economic recovery has been limited due to the extended lockdown and phased easing of restrictions. However, increasing levels of consumer and business confidence suggest that economic conditions are likely to improve in the coming months as Victorian restrictions continue to ease throughout the remainder of 2020. Since July, Victorian consumer sentiment has increased by 13.7 per cent to a level comparable with most states except NSW. ¹⁰ Business confidence rose slightly by 0.9 points in September to 77.0.

Australia

More broadly, COVID-19 has significantly impacted the Australian economy, with the economy officially in recession as of the June quarter. GDP is estimated to have declined by 0.25 per cent in 2019-20 and forecast to decline by 2.5 per cent in 2020-21.

The July unemployment rate was 7.5 per cent, compared to 5.1 per cent in February 2020 and 5.2 per cent in July 2019. However, the effective unemployment rate was close to 11 per cent, taking into account workers who had left the labour force and those who were nominally employed but working zero hours, largely due to the JobKeeper program. ¹³

Consumer confidence across the country fell significantly to 88.6 on the ANZ Roy Morgan index, well below the August average of 109.9.¹⁴

Since August, the broader Australian economy has begun to recover, albeit with mixed results in terms of unemployment and underemployment. Unemployment has fallen from 7.5 per cent in July to 6.8 per cent in August and 6.9 per cent in September, however underemployment remains high at 11.4 per cent, reflecting reduced working hours and a significant number of workers still receiving JobKeeper support.¹⁵

[https://www.westpac.com.au/content/dam/public/wbc/documents/pdf/aw/economics-research/er20201014BullConsumerSentiment.pdf], accessed 15 October 2020.

⁷ Treasurer of Victoria, Inquiry into the Victorian Government's response to the COVID-19 Pandemic, 12 August 2020, available online [https://www.parliament.vic.gov.au/images/stories/committees/paec/COVID-] accessed 18 August 2020.19_Inquiry/Presentations_Round_2/PAEC_COVID-19_-_Treasurer_Presentation_August_2020_FINAL.pdf], accessed 20 August 2020.

⁸ Westpac, Consumer sentiment collapses again as Victoria's lockdown stokes fears across the nation, August 2020, available online [https://www.westpac.com.au/content/dam/public/wbc/documents/pdf/aw/economics-research/er20200812BullConsumerSentiment.pdf], accessed 18 August 2020.

⁹ Treasurer of Victoria, Inquiry into the Victorian Government's response to the COVID-19 Pandemic, 12 August 2020, available online [https://www.parliament.vic.gov.au/images/stories/committees/paec/COVID-], accessed 18 August 2020.19_Inquiry/Presentations_Round_2/PAEC_COVID-19_-_Treasurer_Presentation_August_2020_FINAL.pdf], accessed 21 August 2020.

¹⁰ Westpac Consumer Sentiment October,

¹¹ Commonwealth of Australia, Economic and Fiscal Update, July 2020, available online [https://budget.gov.au/2020-efu/downloads/JEFU2020.pdf], accessed 18 August 2020.

¹² Seasonally adjusted unemployment rate. ABS, 6202.0 Labour Force, Australia, Table 1. Labour force status by Sex, Australia - Trend, Seasonally adjusted and Original.

¹³ Commonwealth of Australia, Economic and Fiscal Update, July 2020, available online [https://budget.gov.au/2020-efu/downloads/JEFU2020.pdf], accessed 18 August 2020.

¹⁴ Roy Morgan, Australian CC - 2020 Summary, available online [http://www.roymorgan.com/morganpoll/consumer-confidence/consumer-weekly-rating], accessed 18 August 2020.

¹⁵ ABS, Labour Force Australia September 2020, available online [https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia/latest-release] accessed 28 October 2020

2.2 The outlook for the remainder of 2020 and 2021

Predicting the ongoing impacts of COVID-19 is extremely difficult given the evolving nature of the pandemic and the complex interplay between health and economic factors. In the absence of a vaccine, we are faced with the reality of continuous monitoring of the prevalence of the virus in our communities, and the imposition of proportionate restrictions based on the volume of cases.

2.2.1 Restrictions

Since 13 September 2020, restrictions in Victoria have begun easing in a staged progression according to the Victorian Government's "Coronavirus roadmap for reopening". ¹⁶ As of 9 November 2020, both Metropolitan Melbourne and Regional Victoria are at the 'Third Step'. The stay at home order (restrictions on reasons to leave home) has been removed. Retail, hospitality, and some sporting and recreational activities are open with patron caps and density limits. The 25km travel limit and regional-metro border have been removed.

It is expected that restrictions will continue to ease according to public health assessment of epidemiological conditions and thresholds such as the 14-day rolling average number of cases, and number of 'mystery cases' in the previous 14 day period.

However, due to the complex, fast-moving nature of the pandemic, it is difficult to forecast restriction levels throughout the rest of 2020 and into 2021. Restrictions may be eased and subsequently reimposed as was seen in Victoria from May to August 2020. Some restrictions such as international border restrictions are likely to remain in place for the remainder of 2020 well into 2021. As of 9 November 2020, domestic border restrictions have begun to ease, with the Northern Territory opening its borders to regional Victoria on 2 November, the ending of Western Australia's 'hard border' policy and a move to a "controlled border" policy on 14 November. The NSW-Victoria border will reopen from 12:01am 23 November 2020. However, varying levels of domestic border restrictions remain in place in most States and Territories. On 23 October 2020, all members of the National Cabinet except Western Australia agreed to a 'Framework for National Reopening Australia by Christmas'.¹⁷

Whilst assumptions about levels of restrictions in 2021 have not been made, based on conditions outlined in the Victorian COVID-19 reopening roadmap, it is likely that some level of restrictions, such as hospitality venue patronage caps and density limits, will remain in place for the rest of 2020.

2.2.2 Gross State and Domestic Product

The latest economic forecasts conducted by the Department of Treasury and Finance show that Real Gross State Product (GSP) is forecast to fall by 9 per cent in 2020-21. Real GSP is expected to continue to fall in the September quarter before recovering in the December quarter and in 2021, with an expected rebound of 6.25 per cent in real GSP growth by the end of the 2020-21 financial year.

¹⁶ Victorian Government, Coronavirus (COVID-19) roadmap for reopening, October 2020 https://www.coronavirus.vic.gov.au/coronavirus-covid-19-restrictions-roadmaps

¹⁷ Prime Minister, Media Statement 23 October 2020, available online [https://www.pm.gov.au/media/national-cabinet-1] accessed 2 November 2020.

¹⁸ Department of Treasury and Finance, Presentation to Inquiry into the Victorian Government's response to the COVID-19 Pandemic, Public Accounts and Estimates Committee.

¹⁹ Department of Treasury and Finance, Presentation to Inquiry into the Victorian Government's response to the COVID-19 Pandemic, Public Accounts and Estimates Committee.

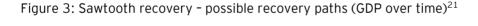
\$ million 130,000 120.000 110,000 100,000 90,000 July economic statement - No-coronavirus baseline 80.000 Jun 2019 Sep 2019 Dec 2019 Mar 2020 Jun 2020 Sep 2020 Jun 2021

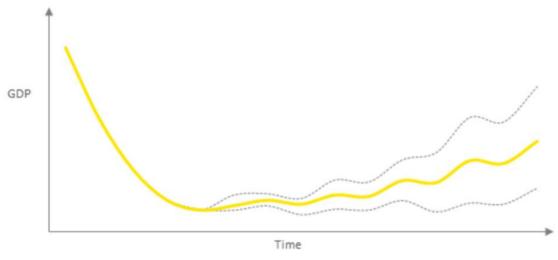
Figure 2: Estimated gross state product, Victoria

Source: Department of Treasury and Finance, Presentation to Inquiry into the Victorian Government's response to the COVID-19 Pandemic, Public Accounts and Estimates Committee.

According to EY's Chief Economist, there continues to be considerable uncertainty about Australia's economic outlook and managing hotspot outbreaks is likely to lead to a bumpy recovery profile: described as a 'Sawtooth' recovery, rather than a V, U, W or L. A 'sawtooth' pattern is something like the Nike Swoosh with a potholed bottom, as shown in . The second set of restrictions in Victoria has shown this to play out already, with economic recovery limited but not entirely stopped by Victorian restrictions from June to October.

Figure 3.²⁰ That bodes for a slow recovery where setbacks create bumps, not sufficient to derail the gentle upward slope but enough to present challenges in particular geographies or sectors of the economy. The second set of restrictions in Victoria has shown this to play out already, with economic recovery limited but not entirely stopped by Victorian restrictions from June to October.





Source: EY analysis

²⁰ Masters, Jo, 2020, July Fiscal Update: A Rock and a Hard Place, available online [https://www.ey.com/en_au/economics/july-budget-update], accessed 24 August 2020.

²¹ This forecast represents an overall trend and shape of economic recovery, as opposed to specific modelling of GDP.

2.2.3 Unemployment

The RBA economic outlook forecasts that employment is expected to decline further over the second half of 2020, as heightened restrictions in Victoria and the tapering of the JobKeeper program more than offset the recovery in jobs elsewhere in the economy.²² According to the Federal budget, unemployment is expected to peak at around 8 per cent in December.²³ While unemployment is expected to fall over 2021, it is not expected to return to pre-COVID-19 levels over the forecast period (see Figure 4).

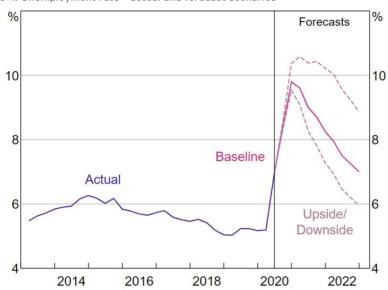


Figure 4: Unemployment rate - actual and forecast scenarios²⁴

Source: RBA, 2020, Statement on Monetary Policy - August 2020, Graph 6.2.

2.2.4 Other economic conditions

Economic data from other Australian jurisdictions that have seen the easing of restrictions can provide an estimate of economic conditions in Victoria once restrictions are eased.

In most other major Australian cities that have seen months of eased restrictions and opening of businesses, the usage trends of public transport suggest mobility within the economy has not returned to pre-COVID-19 rates. This suggests that although in many states it is no longer a requirement to work from home where possible, large sectors of the economy are still choosing to work primarily from home. As a result, COVID-19 economic patterns are likely to persist for many months, well into calendar year 2021.

²² The Reserve Bank of Australia, Economic Outlook, August 2020, available online [https://www.rba.gov.au/publications/smp/2020/aug/economic-outlook.html], accessed 28 August 2020.

²³ Commonwealth of Australia, Economic and Fiscal Update, July 2020, available online [https://budget.gov.au/2020-efu/downloads/JEFU2020.pdf], accessed 18 August 2020.

²⁴ The scenarios modelled by the RBA include 'upside' – assuming a faster recovery if further progress in controlling the virus is achieved in the near term and 'downside' – a slower recovery if Australia faces a series of periodic regional outbreaks and 'rolling' lockdowns to contain these outbreaks in coming quarters.

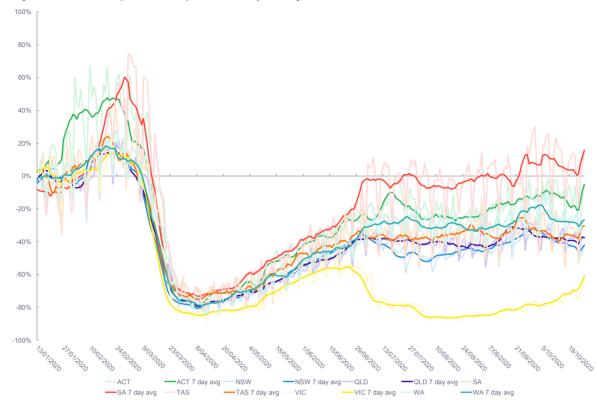


Figure 5: Public Transport trends - per cent of city moving relative to baseline

Source: Apple mobility trends report [online] Available at: https://www.apple.com/covid19/mobility.

2.3 COVID-19 restrictions and support packages

A range of economic and financial support from governments and the private sector have been announced to lessen the immediate impacts of COVID-19 on the Australian economy. With the resurgence of COVID-19 cases in Victoria, some of these supports were extended beyond their originally announced end-dates. The Victorian Government has also announced new measures of support to address the economic impacts of the extended lockdown, including the Third Round of the Business Support Fund.

Additionally, the Federal Government has announced the COVID-19 Response Package as part of the Federal Budget, including the JobMaker Hiring Credit and two further one-off Economic Support Payments of \$250 to eligible customers progressively from December 2020 and March 2021. These announcements are subject to the passage of legislation. The JobSeeker supplement will be extended for another three months until March, but the payment will fall from \$250 to \$150 per fortnight from 1 January 2021.

The Victorian state budget, to be delivered on November 24, is also expected to include the announcement of further COVID-19 support measures. The Treasurer of Victoria has indicated that the budget will continue "support for Victorian families and businesses".²⁵

The majority of currently confirmed support programs are due to conclude at the end of 2020, with limited support currently extending into 2021, as shown in the figure below.

Further detail on the support measures can be found in Appendix A.

²⁵ Tim Pallas MP, Victorian Budget 2020/21 to create jobs and help Victoria Recover, [https://www.timpallas.com.au/treasurer/], accessed 02 November 2020

State of Emergency Stage 4 2021 VDO declared Melbourne regulatory Third step Restrictions Second step Restrictions Stage 3 Stage 3 Restrictions Targeted Stage 3 Face masks Stage 3 period commences extended eased tightened Lockdown reinstated mandatory Melbourne Melbourne commence Regional commences 28 September 28 October 11, 17, 24 May 16 March 30 March 12 April 20 June 30 June 7 July 19, 30 July 2 August Start of 2021 \$750 Economic Support Payment **Boosting Cash** Flow for Employers Coronavirus supplement \$250 per fortnight \$150 per fortnight (JobSeeker) Early release of superannuation JobKeeper \$1,200 or \$750 per fortnight \$1,000 or \$650 per fortnight Temporary relief for financially distressed businesses **Business Support** Second payment First payment Third payment Fund Payroll tax Payroll tax waived for SMEs in FY19-20 refunds \$500m for tenants and Land tax relief and rental assistance fund landlords

Victorian Government Support

Private Sector Support

Figure 6: Timeline of COVID-19 restrictions and government supports

Source: EY analysis

Bank loan

moratorium

Commonwealth Government Support

Moratorium extension for some borrowers

3. COVID-19 2021 VDO impact assessment framework

Based on consultation with the Commission, EY developed an assessment framework to assess the impact of COVID-19 on retailers' costs. The outcomes of the assessment will inform the Commission's determination of the VDO commencing 1 January 2021.

The assessment considered:

- ► Each of the VDO's cost stack components separately, including the constituent elements used by the Commission to calculate the VDO and the key drivers of those elements
- Whether the constituent elements and cost drivers underlying each component of the cost stack were likely to have been impacted by COVID-19
- ▶ If the cost stack element was likely to be impacted by COVID-19, whether that impact was likely to extend into 2021, based on the forecast duration of key cost drivers and lagging indicators.

A summary of the VDO cost stack components and the constituent elements is provided in Figure 7 below.

Large-scale Renewable AER approved network tariffs Energy purchase costs Operating profit margin Billing and revenue collection (including hedging costs)
Historic half-hourly customer TUOS **Energy Target** Cost of capital
 Systematic (nonsystems NUOS 2020 default renewable load power percentage diversifiable) risk associated Futures market price for large-scale certificates IT systems Historic half-hourly spot with investment prices Call centre costs Retailer hedging positions Historic average cost of · Network loss factors financial hedging products Corporate overheads Small-scale Renewable Energy Scheme 2019 & 2020 non-binding small-scale technology Energy trading costs percentage Clearing house price Provision for bad and Network loss factors doubtful debts and working capital Victorian Energy Upgrades Regulatory compliance costs 2020 greenhouse reduction ate for electricity Customer acquisition and price for Vic Energy retention costs Efficiency Certificates Network loss factors * ESC calculates retail operating costs based on benchmark data Minimum feed-in tariff and cross-checked against Total renewables exports retailer cost data Average total domestic and SME customers Social cost of carbon Regulatory costs Market participant fees Ancillary service charges Reliability and Emergence Reserve Trader scheme Licence fees

Figure 7: The VDO cost stack components and constituent elements²⁶

Source: EY analysis

Once each component of the cost stack had been assessed, EY took a collective view of COVID-19 impacts across all cost stack components to form a view as to whether the impacts warrant consideration of an adjustment to the VDO calculation. If so, the final stage of the assessment was to outline the options available to the Commission to account for the COVID-19 impacts on the

²⁶ Note that we have considered the size of working capital in the retail operating cost element of the cost stack, as it is our understanding that the Commission's view is that, to the extent increases in bad debts lead to increases in working capital, working capital should be allowed for within retail operating costs component of the cost stack.

2021 VDO should it choose to do so as part of an overall assessment of the 2021 VDO. Against the background of macroeconomic conditions, restrictions and support packages outlined in section 2, EY's assessment considered:

- The estimated scale of the overall impact on the cost stack
- The likely duration of the impact (i.e. whether the impact was expected to continue throughout all of 2021)
- The certainty of the impact occurring
- The ability to forecast the cost impact.

The assessment has been performed by desktop research of qualitative and quantitative data provided by the Commission, submissions on the Commission's Victorian Default Offer 2021 consultation paper and draft decision and publicly available information. Further limitations of the analysis are noted below. Where submissions commented on other (non COVID-19 related) aspects of the Commission's proposed methodology to calculate elements of the retailer cost stack, these have not been considered as part of the assessment.

A summary of the assessment framework appears in Figure 8.

 $\Diamond =$ Stage 1. Identify the cost 00 Hi stack component and Retail operating margin Wholesale electricity costs Environmental costs Retail operating costs their constituent elements Network costs used by the Commission to calculate the VDO No further consideration Stage 2. Asses whether the cost stack 2 Is COVID-19 likely to required. No rationale to suggest No that specific element of retailer cost impact this element of the component is likely to be impacted by retailer's cost stack? stack has been impacted by COVID-19 COVID-19 Yes Stage 3. Assess whether impact is No further consideration likely to be experienced into 2021 3. Are the impacts required. Even though cost likely to extend into element impacted, no evidence to 2021? suggest this will be enduring into 2021 No further consideration Stage 4. Does collective view of 4 Does collective required. Even though VDO impacted by COVID-19, impact is view of impacts No COVID-19 impacts across all cost warrant adjustment stack components warrant to VDO not sufficiently large to change calculation methodology for 2021. adjustment to VDO calculation calculation? Stage 5. Options for the Commission to change the VDO approach

Source: EY analysis

Figure 8: Assessment framework

Limitations

Key limitations of the analysis are detailed below. Where possible, mitigating factors have been described.

This analysis relies on publicly available information and information provided by the Commission. Where possible, source information has been requested from the Commission to verify the analysis. In preparing this Report we have considered and relied upon information from a range of sources believed after due enquiry to be reliable and accurate. We have no reason to believe that any information supplied to us, or obtained from public sources, was false or that any material information has been withheld from us.

We do not imply, and it should not be construed that we have verified any of the information provided to us, or that our enquiries could have identified any matter that a more extensive examination might disclose. However, we have evaluated the information provided to us by the Commission as well as other parties through enquiry, analysis and review and nothing has come to our attention to indicate the information provided was materially mis-stated or would not afford reasonable grounds upon which to base our Report.

The analysis focuses on the COVID-19 impact on retailers' costs only. It does not consider impacts or changes to retailers' costs that are not related to COVID-19. As such, the conclusions in this report only relate to the changes in retail costs related to COVID-19 impacts and does not consider other factors that may influence the overall cost stack of retailers. The full impact of COVID-19 cannot be predicted with any degree of certainty, due to the complex inter-relationship between health and economic factors and evolving nature of the pandemic and the potential for unknown ramifications on consumers and retailers. Further, full information on the overall cost stack is uncertain, so it is difficult at this time to make clear recommendations.

The information provided in this assessment should be read in light of these limitations and should not be relied upon outside the scope of agreed purpose of the Review, as outlined in the notice.

4. Summary findings

Stage 1: Identi constituent ele		component and	Stage 2: Impacted by COVID-19?		Stage 3: Impact likely to extend into 2021?
Cost stack element	Cost stack component	Most significant cost drivers			
Wholesale electricity costs		Load profile	Yes	Total load in Victoria has not changed significantly over the last few months relative to previous years, however changes in load have occurred between market segments. Reductions in SME consumption have been driven by closure of businesses due to COVID-19 restrictions. These have been largely offset by increases in residential consumption due to a significant increase in employees working from home due to COVID-19 restrictions. ²⁷	Overall impact of COVID-19 on wholesale electricity costs will be considered by and addressed, if necessary, by Frontier's forecasting approach.
		Spot and futures prices	Yes	Both spot and futures prices have decreased over Q2 2020, partly due to reduced operational demand due to COVID-19 restrictions. ²⁸	
Network charges		Pass through based on simplest tariff from each Vic DNSP	N/A	Potential impact will be assessed by AER and flow through into VDO due to Commission's pass through approach.	Overall impact of COVID-19 on network costs will be considered by and addressed, if necessary, by the AER's regulatory determination process. No further assessment required.
Environmental and regulatory	LRET	2020 default renewable power percentage	No	The default renewable power percentage is set in advance by the Minister for Energy and Emissions Reduction	No further assessment required.
costs		Large scale certificates futures market price	No	No evidence to suggest forward prices are impacted by COVID-19	
	SRES	2021 non-binding STP	No	There is limited data currently available to assess the	No further assessment required.
		2020 binding STP	No	potential impact of COVID-19 on the small-scale solar market. The Clean Energy Regulator found that COVID-	
		Clearing house price	No	19 did not have a material impact on demand for STCs during the Q1 period.	
	VEU	2021 Greenhouse reduction rate for electricity	No	The 2021 reduction rate target has been announced by the Minister for Energy, Environment and Climate Change and will not be impacted by COVID	No further assessment required.

²⁷ AEMO, 2020, Quarterly Energy Dynamics Q2 2020, pg. 8, AEMO, 2020, Quarterly Energy Dynamics Q3 2020, pg. 9.

²⁸ AEMO, 2020, Quarterly Energy Dynamics Q2 2020, pg. 11

Stage 1: Ider constituent e		component and	Stage 2: Impacted by COVID-19?		Stage 3: Impact likely to extend into 2021?		
Cost stack element	Cost stack component	Most significant cost drivers					
		Historic 12 month average VEEC price	No	No evidence to suggest COVID-19 will impact VEEC prices.			
	FiT	Total renewable exports	No	Customer numbers and renewable exports are unlikely No furt	No furth	ner assessment required.	
		Average domestic and SME customers	No	to be significantly impacted by COVID-19.			
		Social cost of carbon	No	Set in legislation, so will not be impacted by COVID-19			
	AEMO market participant fees	Average 2020/21 and 21/22 estimates from AEMO	No	AEMO market participant fees are set on a cost recovery basis to recover AEMO's operating costs. These are not expected to be impacted by COVID-19 for 2020-21.	No furth	ner assessment required.	
	Ancillary fees	Average of previous 52 weeks	No	This is unlikely to be impacted by COVID-19 for 2020- 21, as total energy consumed has not been significantly impacted by COVID-19 to date.	No furth	ner assessment required.	
	RERT	Historic RERT estimate	No	There have been no RERT events since COVID-19 has impacted the Australian and Victorian economy	No furth	ner assessment required.	
	ESC license fees	Average fees paid	No	ESC licence fees are set by the Minister for Energy, Environment and Climate Change on a cost recovery basis to recover the Commission's operating costs. These are not expected to be impacted by COVID-19 for 2020-21.	No further assessment required.		
Retail operating costs	Costs to serve	Call centre costs ► Number of calls ► Call handling times	Yes	Overall there has been an increase in the volume of customer enquiries regarding assistance programs, concession registration and other forms of government support. Retailers have reported that the average volume and duration (and complexity) of calls has increased as they are primarily about accessing supports.	Likely	Overall, increased call centre activity volume and complexity is likely to continue as long as unemployment remains high and more people remain at risk of payment difficulty, which is forecast to extend into 2021. Impact is likely to be greater for smaller retailers.	

Stage 1: Identify cost stack component and constituent elements		Stage 2: Impacted by COVID-19?		Stage 3: Impact likely to extend into 2021?		
Cost stack element	Cost stack component	Most significant cost drivers				
		Corporate overheads ► Labour and equipment costs ► Travel ► Corporate hospitality	Yes	Corporate overheads have been impacted in two primary ways: ► Additional costs to develop COVID-19 responses (e.g. senior management time on COVID-19 working groups), establish remote working arrangements for employees such as the provision of office supplies and upgrades to IT systems, and ► A reduction in travel costs, corporate hospitality and other office costs	Unlikely	The extent to which corporate overhead impacts will extend into 2021 varies depending on the cost itself. The most significant implementation costs (moving to remote working, such as the purchase of monitors and office equipment) are one-off and unlikely to extend into 2021. There may be some ongoing costs and savings (e.g. reduced travel costs, increased technology support costs) into 2021, but these are unlikely to be material and will offset each other to a degree.
		Provision for bad and doubtful debts and working capital Number of customers on hardship programs, payment deferrals and/or paying debt Average debt of customers on hardship programs Actual bad and doubtful debt levels	Yes	Data on increased average arrears and deferrals suggests COVID-19 is increasing the number of customers that are delaying payments and that, as a result, retailers are likely to face increased short-term working capital requirements. Evidence from retailers and the Australian Energy Regulator suggest that the number of customers on hardship and payment assistance programs has also gone up, with a correlated increase in the amount of bad and doubtful debt. Similarly, the size of average arrears has increased, reflecting an increased risk of retailers accruing bad and doubtful debt. Some retailers have made increased allowances in the 2020 financial year for expected credit loss as a result of COVID-19 in their bad and doubtful debt provisions.	Likely	Government support and general macroeconomic conditions have a significant impact on household income and debt. Slow improvements in economic conditions are unlikely to be sufficient to prevent increases to levels of residential customer delaying payment and as a result, the impact on the rate of bad and doubtful debts and working capital are likely to extend into 2021. Further, the full extent of the impact of COVID-19 on retailers' bad and doubtful debt and working capital is only likely to become apparent when major government supports such as JobKeeper conclude in 2021.
		Regulatory costs	Yes	Implementation costs associated with regulatory changes addressing COVID-19 challenges, primarily due to the prevention of retailer disconnections ²⁹ and the upcoming Supporting energy customers through the coronavirus pandemic 2020 Final Decision.	Unlikely	Costs to comply incurred in 2020. No indication that currently known COVID-19 related regulatory changes will have an ongoing impact on retailers' regulatory compliance costs into 2021.

²⁹ Whilst the AER's Statement of Expectations addressing disconnections do not formally apply in the Victorian energy market, Energy Networks Australia has announced they will not be disconnecting residential or small business customers who may be in financial stress as part of their coronavirus relief package. Additionally, retailers in Victoria cannot disconnect electricity or gas customers who receive bill assistance or participate in payment plans. These measures have effectively stopped retailer disconnections for reasons of non-payment since March. Essential Services Commission, Safety net for Victorians suffering energy bill stress, available online [https://www.esc.vic.gov.au/media-centre/safety-net-victorians-suffering-energy-bill-stress], accessed 18 August 2020.

AER, Statement of Expectations of energy businesses: Protecting customers and the energy market during COVID-19, available online [https://www.aer.gov.au/publications/corporate-documents/aer-statement-of-expectations-of-energy-businesses-protecting-customers-and-the-energy-market-during-covid-19], accessed 20 August 2020.

Stage 1: Identify cost stack component and constituent elements		Stage 2: Impacted by COVID-19?		Stage 3: Impact likely to extend into 2021?		
Cost stack element	Cost stack component	Most significant cost drivers	-			
		Other operating costs	No	There is no evidence to suggest that the other elements of retailers' cost to serve will be impacted by COVID-19.	No further assessment required.	
and	acquisition and	Cost of acquisition channels (e.g. third party channels or aggregators)	No	There is no evidence that the key drivers of these costs, advertising and cost of acquisition channels, are likely to have been affected by COVID-19.	No further assessment required.	
	retention costs	Advertising and marketing costs	No			
Retail operating margin		Cost of capital	Unclear	Some retailers' cost of holding capital may also have increased as a result of COVID-19 and that may disproportionately impact smaller retailers.	No further assessment required.	
				It is quite likely that the market has at least temporarily re-rated their risk assessment of businesses with particular exposure to consumer spending, including energy retailers. However, electricity retailers are less likely to be affected than other businesses because consumers tend to prioritise essentials over other products and services.		
				Overall there is a lack of information and data to determine whether the retail operating margin has been materially impacted by COVID-19 at this stage.		

5. Assessment of COVID-19 impacts

5.1 Wholesale electricity costs

5.1.1 Cost drivers and how cost is calculated

Wholesale electricity costs are the costs retailers incur when they purchase electricity from the wholesale market to meet their customers' demand for electricity. Under the Commission's approach to estimating wholesale electricity costs, the key inputs into forecasting wholesale electricity costs in this way are:

- ► Half hourly customer load
- ► Half hourly spot prices
- ► Retailer hedging positions
- ► Futures prices.

The half hourly customer load and half hourly spot prices are derived from historical load and prices for Victorian domestic and small business customers for a three-year period from 1 July 2016 to 30 June 2019 using a Monte Carlo simulation.

5.1.2 Feedback from the market on COVID-19 impacts on cost element

Submissions to the Commission's Consultation Paper raised two issues related to COVID-19 impacts on the wholesale electricity costs:

- ► AGL, Origin and Powershop noted that there had been usage pattern changes as a result of COVID-19, in particular decreased commercial demand and increased residential demand and changes in the load shape which would impact retailers wholesale costs. The submissions expected that this impact would continue into 2021.³⁰
- ► Powershop noted that retailers generally hedge on the assumption that customers will use an 'average' amount of energy. If usage increases or decreases long-term, retailers will be short or long to the market prices. The current approach to forecast wholesale costs is based on static annual volumes, which does not capture COVID-19 impacts on demand.³¹

5.1.3 EY analysis

5.1.3.1 Is COVID-19 likely to impact this element of the retailers' cost stack?

EY considered the likely impact of COVID-19 on the customer load and prices separately.

Customer load

State government restrictions to prevent the spread of COVID-19 have had a significant impact on economic activity and all elements of Victorian society. In particular, the shift to working from home, and reduced overall economic activity has resulted in a shift in demand patterns.

At an overall level, COVID-19 has only had a modest impact on Australia and Victoria's total electricity demand in the second and third quarters of 2020:

³⁰ AGL, 2020, Submission to Victorian Default Offer 2021 - Consultation paper. Origin, 2020, Submission to Victorian Default Offer 2021 Consultation paper. Powershop Meridian, 2020, Submission to Victorian Default Offer to apply from 1 January 2021.

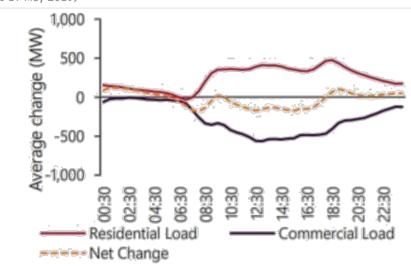
³¹ Powershop Meridian, 2020, Submission to Victorian Default Offer to apply from 1 January 2021, p. 2.

- ► AEMO estimated that COVID-19 contributed an estimated 2.1 per cent reduction in operational demand across the National Electricity Market in the second quarter of 2020, however this differed by sector. Large industrial load was broadly flat, commercial load was significantly down (around 10-20 per cent), and residential load increased, almost offsetting the commercial load reductions³²
- ► AEMO identified similar impacts on Victorian demand during the third quarter of 2020. Victorian large industrial demand was relatively flat, continuing the trend from the previous quarter, however commercial demand was significantly reduced (approximately down 15%) due to the stage 4 restrictions. This was offset by increased residential demand of around 10 15% increase.³³
- ► In contrast, COVID-19 impacts on maximum and minimum demand was relatively muted, with no minimum or maximum demand peaks set in Victoria during the second quarter of 2020.³⁴

In its Quarterly Energy Dynamics Q2 2020 Report AEMO presented an in-depth examination of COVID-19 impacts on electricity demand, using modelling which unbundled the impact of COVID-19 from other factors such as temperature, humidity, day of the week, time of the year, and the amount of distributed PV.

For Victoria, the demand reduction due to COVID-19 was moderate. AEMO found that commercial load had decreased in April and May, but this was largely offset by increased residential load (see Figure 9). The reduction in commercial load has been driven by the closure of businesses due to COVID-19 restrictions, and the increase in residential consumption has been driven by a significant increase in the number of employees working from home due to COVID-19 restrictions. This trend has continued throughout the third guarter of 2020.³⁵

Figure 9: Change in Victoria average weekday demand by sector and time of day (1 April to 17 May 2020 versus 1 April to 17 May 2019)³⁶



Source: AEMO, 2020, Quarterly Energy Dynamics Q2 2020, pg. 8

³² AEMO, 2020, Quarterly Energy Dynamics Q2 2020.

³³ AEMO, 2020, Quarterly Energy Dynamics Q3 2020, pg. 9.

³⁴ AEMO, 2020, Quarterly Energy Dynamics Q2 2020.

³⁵ AEMO, 2020, Quarterly Energy Dynamics Q3 2020.

³⁶ AEMO estimated residential load using sampling techniques from residential household metered data. Commercial load (distribution only) was estimated using the difference between total delivered distribution load and estimated residential load.

Figure 10 shows the percentage change on average weekday operational demand by time of day compared to AEMO's pre-COVID control model. This indicates that the impact on operational demand has varied by time of day and between months:

- ► In April, weekly operational demand was reduced by 1 per cent with the largest decrease during the morning peak
- ► In June and July, there were increases in operational demand, likely related to cold winter conditions with daytime residential heating load offsetting reduced commercial demand
- ► In September, underlying demand was reduced by 4%, mostly driven by a reduction in commercial demand due to Stage 4 Restrictions.

Overall, average changes to the pre-COVID daily load profile appear to be relatively minor, ranging from a maximum 8 per cent decline in the morning to a maximum 4 per cent increase in the late afternoon. To date, there does not seem to be a consistent change in the daily load profile due to COVID-19.

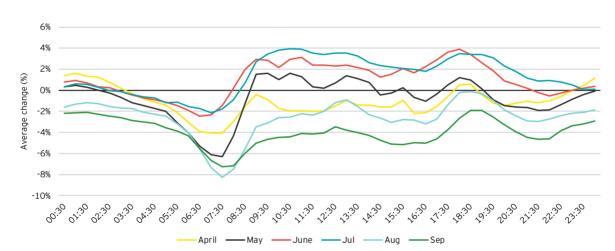


Figure 10: Change in Victorian average underlying demand by time of day (2020 compared to 2019)

Source: Adapted from AEMO, 2020, Quarterly Energy Dynamics Q2 2020, Figure 7 and AEMO, 2020, Quarterly Energy Dynamics Q3 2020, Figure 4.

Prices

NEM average spot wholesale electricity prices declined significantly in Q2 2020 ranging between \$32-43/MWh, representing a 48-68 per cent reduction on Q2 2019 levels.³⁷ This trend continued into Q3 2020, with NEM average spot wholesale electricity prices declining by 45-48% compared to Q3 2019.³⁸ However, this price reduction is primarily driven by an increasing supply of renewable energy generation, and overall increased supply availability across all major fuel types. AEMO analysis suggests that reduced operational demand due to increased distributed PV and COVID-19 restrictions were a much smaller contributor to the lower spot prices than supply side impacts.³⁹

Similarly, forward price expectations are in line with recent trends in the spot market, with expected futures prices experiencing falls between December 2019 and March 2020.

³⁷ AEMO, 2020, Quarterly Energy Dynamics Q2 2020, pg. 11

³⁸ AEMO, 2020, Quarterly Energy Dynamics Q3 2020, pg. 10

³⁹ AEMO, 2020, Quarterly Energy Dynamics Q2 2020, pg. 11, AMEO, 2020, Quarterly Energy Dynamics Q3 2020, pg. 10.

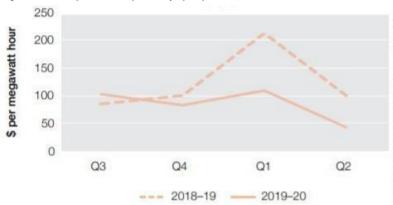


Figure 11: Comparison of quarterly spot prices (VWA) for Victoria in 2019-20 with 2018-19

AER, 2020, Wholesale Markets Quarterly Q2 2020,p. 6.

5.1.3.2 Are these impacts likely to extend into 2021?

We have been advised by the Commission that Frontier Economics is currently considering the impact of COVID-19 on the wholesale electricity cost component of the VDO. This analysis is investigating changes to both load and prices in Victoria and will consider whether changes are required to the Commission's forecasting approach to account for the impacts of COVID-19.

Given this quantitative analysis is in progress, EY has not assessed whether the impact of COVID-19 on wholesale electricity costs is likely to extend into 2021.

5.1.4 Conclusion

The impact on COVID-19 on wholesale electricity costs depends on both customer load and prices. COVID-19 has had modest impact on Australia and Victoria's total electricity demand in the second and third quarters of 2020. During the same period, NEM average spot wholesale electricity prices declined significantly; 48-68 per cent compared to Q2 2019 and 45-48 per cent compared to Q3 2019. EY has not considered whether these impacts will likely extend into 2021 or what the direction and scale of the impact likely to be. Both these questions are currently being considered in a separate piece of work by Frontier Economics.

5.2 Network costs

5.2.1 Cost drivers and how cost is calculated

Network costs represent the cost of building and operating the electricity distribution and transmission networks. The charges levied by network providers are approved by the Australian Energy Regulator on an annual basis.

The commission proposed using a cost pass through approach for estimating network costs for the 2021 VDO price review, using the simplest network tariff in each distribution zone and including metering charges.

5.2.2 Feedback from the market on COVID-19 impacts on cost element

Submissions received on the VDO consultation paper and draft decision did not identify any COVID-19 impacts on the network cost element of the cost stack.

5.2.3 EY analysis

5.2.3.1 Is COVID-19 likely to impact this element of the retailers' cost stack?

COVID-19 could impact elements of distribution and transmission network costs, in particular labour cost and wage pressures and demand impacts. The Victorian distribution network business' regulatory proposals were developed and submitted before the COVID-19 pandemic was declared.

With the situation changing rapidly, distribution network businesses have not yet made public statements around potential changes to their regulatory proposals because of the impacts of COVID-19.

The AER has recognised that COVID-19 may have an impact on network businesses operations and costs. ⁴⁰ At this stage, feedback from network businesses is mixed and suggests that, while it is too early to determine COVID-19 impacts on businesses' operations, the overall impacts may not be material in terms of costs. The network businesses have begun to gather data to aid any future impact assessment. Until all the data is available, the AER cannot determine the extent and direction of COVID-19 impacts on network businesses, or whether the impacts are material. ⁴¹

Any impact of COVID-19 on distribution and transmission costs, and resulting network tariffs will be assessed by the AER – either through the regulatory determination process for the distribution businesses, or through a pass through application, should any cost impacts be material. This assessment will flow through to the Commission's VDO decision, due to the proposed approach to pass through estimated network costs. As such, no further consideration is required, as any additional adjustment would double-count the impact on network costs.

5.2.4 Conclusion

While COVID-19 may impact elements of distribution and transmission network costs, these are expected to be considered by the AER in making its decision on network tariffs, and should not also be adjusted by the Commission, as this would double-count the impact.

5.3 Environmental and regulatory costs

The environmental and regulatory costs considered by the Commission in its VDO determination are:

- ► Large-scale Renewable Energy Target (LRET) a Commonwealth Government scheme that encourages renewable energy generation by creating a market for renewable energy certificates
- ► Small-scale Renewable Energy Scheme (SRES) a Commonwealth Government scheme that supports the installation of small-scale renewables, such as household solar rooftop panels and solar hot water systems
- ► Victorian Energy Upgrades (VEU) a state-based program that places a liability on Victorian energy retailers to surrender a specified number of Victorian Energy Efficiency Certificates each year
- ► Feed in tariff (FiT) retailers credit small scale renewable energy exports with the minimum feed-in tariff that includes an allowance for the avoided social cost of carbon
- ► Regulatory costs, such as market participant fees, ancillary service charges, the Reliability Emergency Reserve Trader scheme costs and licence fees.

5.3.1 Cost drivers and how cost is calculated

The key drivers of each environmental and regulatory cost are shown in the table below.

⁴⁰ AER, July 2020, Framework and Approach Powerlink, Regulatory control period commencing 1 July 2022, available online [https://www.aer.gov.au/system/files/AER%20-%20Powerlink%202022-27%20-%20Framework%20%26%20Approach%20-%20July%202020.pdf], accessed 18 August 2020.

⁴¹ AER, July 2020, Framework and Approach Powerlink, Regulatory control period commencing 1 July 2022, available online [https://www.aer.gov.au/system/files/AER%20-%20Powerlink%202022-27%20-%20Framework%20%26%20Approach%20-%20July%202020.pdf], accessed 18 August 2020.

Table 1: Key drivers of environmental and regulatory costs

Environmental and regulatory costs	Key drivers
LRET	2020 default renewable power percentage Large scale certificates futures market price
SRES	2021 non-binding small scale technology percentage 2020 binding small-scale technology percentage Clearing house price
VEU	2021 greenhouse reduction rate for electricity Victorian Energy Efficiency Certificates price
FiT	Total renewable exports 2019/20 Average domestic and SME customers 2019/20 Social cost of carbon
AEMO market participant fee	2020/21 and 2021/22 estimates from AEMO
Ancillary fees	Historic ancillary service payments
RERT	Historic estimates of RERT charges
ESC license fees	Average fees paid in 2019/20

5.3.2 Feedback from the market on COVID-19 impacts on cost element

Submissions received on the VDO draft decision reported the following COVID-19 impact on environmental or regulatory costs:

AGL noted that they were concerned the ESC estimate of the average price per Victorian Energy Efficiency Certificates is unlikely to fully account for the cost of the VEU scheme in 2021 due to COVID-19 restrictions impacting certificate generating activities and VEU targets remaining at 2020 levels.⁴²

5.3.3 EY analysis

5.3.3.1 Is COVID-19 likely to impact this element of the retailers' cost stack?

COVID-19 is unlikely to impact any component of the environmental and regulatory costs for the following reasons:

- ▶ LRET is calculated based on the 2020 default renewable power percentage and the large scale certificates futures market price. The 2020 default renewable power percentage is set in advance by the Minister for Energy and Emissions Reduction, based on legislated renewable electricity targets and estimated acquisitions of wholesale electricity purchases based on historical data, and is therefore unlikely to be impacted by COVID-19. The most recent forward contracted large scale certificates show prices are expected to reduce from \$28.60 for certificates created in 2020 to \$9.60 for certificates created in 2023. However, there is no evidence to suggest these reductions are due to COVID-19 impacts. Rather, the forecast decline is likely due to supply of certificates exceeding demand in 2020.
- ► SRES is calculated based on the 2021 non-binding small scale technology percentage, 2020 binding small-scale technology percentage and clearing house price. The clearing house price is fixed in legislation, and the 2020 binding percentage is set in advance, so neither are impacted by COVID-19. The non-binding STP is published by the Clean Energy

⁴² AGL, 2020, Submission to Victorian Default Offer 2021 - draft decision, pg. 3.

⁴³ Clean Energy Regulator, 2020, Quarterly Carbon Market Report - March Quarter 2020, pg. 25.

⁴⁴ Clean Energy Regulator, 2020, Quarterly Carbon Market Report - March Quarter 2020, pg. 20.

Regulator based on estimates of certificate creations, however, the non-binding STP is not accurate in years when there is a large difference between STC creations and STC estimates. The Clean Energy Regulator has considered the potential impact of COVID-19 on the SRES. It considered the supply side of the market for STCs may be sensitive to the impact of COVID-19, as small-scale solar PV is mainly a consumer product. Any supply reductions resulting from COVID-19 may be partially mitigated by demand reductions from companies applying for revised quarterly surrender requirements. However, there is limited data currently available to assess the potential impact of COVID-19 on the small-scale solar market. Overall, COVID-19 did not have a material impact on demand for STCs during the Q1 period.⁴⁵

- ▶ VEU is calculated based on the 2021 greenhouse reduction rate for electricity and the Victorian Energy Efficiency Certificates price. The 2021 reduction rate target has been announced by the Minister for Energy, Environment and Climate Change and will not be impacted by COVID-19. VEU program activities have been impacted by the Stage 4 restrictions in Melbourne, as limited business operations are allowed. This may impact prices for Victorian Energy Efficiency Certificates if there is a shortage of certificates towards the end of the year. As of 28 October 2020, restrictions have eased in Melbourne, which has allowed VEU program activities to recommence, which will reduce the likelihood of a shortage of certificates.
- ► The FiT is calculated based on total renewable exports, average domestic and small business customers in 2019/20 and the social cost of carbon. The social cost of carbon is set in legislation⁴⁷, so will not be impacted by COVID-19. Customer numbers and renewable exports are unlikely to be significantly impacted by COVID-19, although renewable exports may be slightly lower due to people working from home.
- ► AEMO market participant fees are set on a cost recovery basis to recover AEMO's operating costs. These are not expected to be impacted by COVID-19 for 2020-21.
- ► Ancillary service costs are recovered by AEMO from retailers and other Market Participants in proportion to the energy consumed/generated. This is unlikely to be impacted by COVID-19 for 2020-21, as total energy consumed has not been significantly impacted by COVID-19 to date.
- RERT costs are based on historic estimates of RERT charges. AEMO's cost of utilising RERT contracts is recovered on a state by state basis from electricity retailers as ancillary services charges in proportion to their energy usage during business hours, regardless whether the retailer had taken steps to ensure adequate generation capacity would be available to cover its load. However, these costs are not impacted by COVID, as no RERT event has happened since COVID-19 has impacted the economy, and the overall impact on demand due to COVID-19 has been for demand to reduce.
- ► ESC licence fees are set by the Minister for Energy, Environment and Climate Change on a cost recovery basis to recover the Commission's operating costs.⁴⁸ These are not expected to be impacted by COVID-19 for 2020-21.

5.3.4 Conclusion

There is no evidence to suggest that the environmental and regulatory cost elements of the retailers' cost stack will be impacted by COVID-19.

⁴⁵ Clean Energy Regulator, 2020, Quarterly Carbon Market Report - March Quarter 2020, pg. 29-30.

 $^{^{46}}$ We understand the Commission has committed to doing a true-up for the SRES, which will account for any COVID-19 impacts during 2021 should they arise.

⁴⁷ Order in Council published on 21 February 2017

⁴⁸ Electricity Industry Act 2000 (Victoria), s 22.

5.4 Retail operating costs

5.4.1 Cost drivers and how cost is calculated

Retail operating costs reflect a range of costs incurred by an electricity retailer in conducting its business, including:

- ► Costs to serve these are the operating costs retailers face in servicing their customers, including billing and revenue collection systems, information technology systems, call centre costs, corporate overheads, energy trading costs, provision for bad and doubtful debts and working capital, and regulatory compliance costs
- Customer acquisition and retention costs these include the costs of acquisition channels (for example, third party comparison websites), other marketing spend, retention teams and related costs.

In the VDO 2021 Consultation Paper, the Commission proposed to use a benchmarking approach from the Independent Competition and Regulatory Commission (of the ACT) to calculate the allowance for retail operating costs. The Commission will cross-check this benchmark against cost data collected from all retailers for the 2017-18 and 2018-19 financial years.

While the Commission does not undertake a bottom-up build of retail operating costs, it is important to understand the key drivers of each element of these costs to assess whether COVID-19 is likely to impact this element of the cost stack. The key drivers of each element are shown in the table below.

Table 2: Key drivers of elements of retail operating costs

Element of retail operating costs	Key drivers
Costs to serve	► Call centre costs (number of calls and call handling times)
	 Corporate overheads (labour and equipment costs, travel and corporate hospitality)
	 Provision for bad and doubtful debts and working capital (number of customers on hardship programs, payment plans, payment deferrals and/or paying debt, average debt of customers on hardship programs, actual bad and doubtful debt levels)
	► Changes to the regulatory regime
Customer acquisition and retention costs	 Cost of acquisition channels (e.g. third party channels or aggregators)
	► Advertising and marketing costs

Note that we have considered the expense of writing off bad debts in the retail operating cost element of the cost stack, as it is our understanding that the Commission's view is that, to the extent increases in bad debts lead to write offs, this should be allowed for within retail operating costs component of the cost stack. We have also assessed changes to the amount of working capital required as part of the retail operating costs whereas the financing cost (i.e. debt finance) of working capital has been assessed as part of the retail operating margin.

5.4.2 Feedback from the market on COVID-19 impacts on cost element

Submissions to the Commission's consultation paper and draft decision reported the following COVID-19 impacts on a number of elements of retail operation costs:

▶ Bad and doubtful debts - The most commonly cited impact of COVID-19 on retail operating cost was increasing amounts of bad and doubtful debts. In their submissions to the Commission's consultation paper, AGL and Powershop and MEA Group noted that the impact of COVID-19 on retail operating costs is directly evident in the increase in net bad debt expense. In their submissions to the VDO draft decision, several retailers provided confidential cost data, including provisions made for bad and doubtful debt. Retailers noted that these provisions had been made on the basis of current data that indicated

increased levels of bad and doubtful debt as well as macroeconomic forecasts such as unemployment rates which are likely to correlate with levels of bad and doubtful debt. Retailers also noted that the full extent of the impact may not yet be evident as many customers who may otherwise experience payment difficulty are currently receiving government COVID-19 support payments such as JobKeeper and JobSeeker.⁴⁹

- Customer service, administration and payment difficulty support Several retailers reported increased costs arising from higher volumes of customers service inquiries, longer average call handling times and overall increased costs associated with labour and administration of customer support programs.⁵⁰
- ► Regulatory compliance costs In their submissions to the VDO draft decision, some retailers expressed that there would be costs associated with implementing regulatory changes such as the Commission's *Supporting energy customers through the coronavirus pandemic 2020* final decision.⁵¹ However, most submissions on regulatory compliance costs were in relation to a broad range of non-COVID-19 regulatory changes.
- ► Costs associated with the transition to remote working Some retailers reported increases in operating costs such as the provision of office equipment and IT and telecommunication system upgrades to support staff working from home.⁵²

5.4.3 EY analysis

5.4.3.1 Is COVID-19 likely to impact this element of the retailers' cost stack?

Cost to serve

COVID-19 is likely to impact the following elements of retailers' cost to serve:

- ► Call centre costs
- ▶ Corporate overheads
- Regulatory compliance costs
- ▶ Provision for bad and doubtful debts and working capital.

Each of these component of the retail operating cost element has been considered separately below.

There is no evidence to suggest that the other elements of retailers' cost to serve will be impacted by COVID-19.

Call centre costs

The primary impact of COVID-19 on administrative costs is in terms of customer assistance and call centre costs. The increase in cost arises from two main areas:

- ► Increased number of calls as more customers seek to access financial assistance arrangements offered by their retailer; and
- ► Increased average handling time due to increased complexity of enquiries and government assistance programs.

⁴⁹ AGL, 2020, Submission to Victorian Default Offer 2021 - Consultation paper. Powershop Meridian, 2020, Submission to Victorian Default Offer to apply from 1 January 2021.

⁵⁰ Origin, 2020, Submission to Victorian Default Offer 2021 Consultation Paper.

 $^{^{51}}$ EnergyAustralia, 2020 Submission to Victorian Default Offer 2021 Draft decision

⁵² AGL, 2020, Submission to Victorian Default Offer 2021 - Consultation paper.

Overall there has been an increase in the volume of customer enquiries regarding assistance programs, concession registration and other forms of government support. The average volume of total phone calls to retailers rose considerably between April and June. Since then, total phone call volume has seen a trend of steady decrease, however volumes remain higher than pre-pandemic levels (see Figure 12).

The volume of COVID-19 assistance-related calls peaked in May, when there was a 46 per cent increase in the weekly average number of residential electricity customers who enquired about payment assistance and a 32 per cent increase in small business electricity customers compared to April. Since then, payment assistance call volumes have decreased but remain higher than pre-COVID-19 levels. At the same time, some retailers have seen decreases in the volume of other customer enquiries such as those relating to move in/move out and disconnection and reconnection.

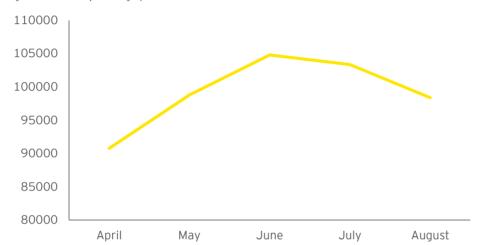


Figure 12: Weekly average phone calls to retailers

Source: ESC, Energy customers during the coronavirus pandemic, Update - observations up to week ending 30 August 2020

Retailers have reported that even if the volume of calls has not changed significantly, the average duration and level of complexity of calls has increased significantly. This is due to the complexity associated with assisting customers who have not previously experienced payment difficulties with understanding government supports available and registering for assistance programs.

Based on confidential submissions to the VDO price review draft decision, the increase in call centre costs experienced by some retailers as a proportion of overall retail operating costs is noticeable but not significant.

Corporate overheads

Corporate overheads have been impacted in two primary ways:

- Additional costs to develop COVID-19 responses (e.g. senior management time in COVID-19 working groups), establish remote working arrangements for employees such as the provision of office supplies and upgrades to IT systems, and
- ▶ A reduction in travel costs, corporate hospitality and other office costs.

Additionally, some retailers have reported increased costs in delivering wellbeing and technology support for remote working employees, as well as reduced productivity. The extent to which retailers have experienced corporate overhead impacts varies between retailers and largely

⁵³ Essential Services Commission, Energy customers during the coronavirus pandemic, 26 July 2020, available online [https://www.esc.vic.gov.au/sites/default/files/documents/Observations%20on%20energy%20customers%20during%20coro navirus%20pandemic%20-%20up%20to%2031%20May%202020_0.pdf], accessed 20 August 2020.

depends on the size of the retailer and the extent to which they had existing infrastructure to cater for remote working arrangements prior to COVID-19.

Regulatory compliance costs

The regulatory environment has been impacted by COVID-19 primarily due to reduced retailer disconnections and the *Supporting energy customers through the coronavirus pandemic 2020 Final Decision*. Retailers have incurred implementation costs associated with changing systems and processes and additional labour requirements to comply with new regulatory obligations such as supporting customers in completing utility relief grant application forms. However, as discussed in the next section, it is less clear whether these changes will have a significant ongoing impact on retailers' regulatory compliance costs into 2021. The customer supports introduced in this regulatory change are likely to prevent some customers from worsening payment hardship in the longer term, as outlined in the following section. Furthermore, many recent regulatory changes have been unrelated to COVID-19.

Provision for bad and doubtful debts and working capital

Evidence from retailers and the Australian Energy Regulator suggest that the number of customers on hardship and payment assistance programs has gone up, impacting levels of bad and doubtful debt.

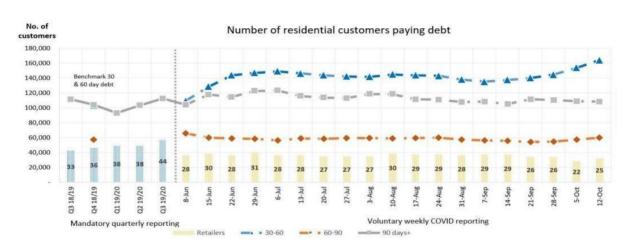


Figure 13: Number of residential customers paying debt

Source: AER, Retail market data dashboard - 12 October 2020 - COVID-19

Since June, 60 and 90+ day debt has remained at a relatively stable rate, with levels of 60 day debt decreasing slightly and now at a comparable level to pre-pandemic conditions. This is in line with ABS data which suggests many consumers have used government stimulus payments such as the Coronavirus Supplement, JobKeeper and JobSeeker to pay off previous debt.

Since June, 30 day debt has seen a significant increase. This reflects the influx of customers who have experienced COVID-19 economic impacts who previously did not experience payment hardship or risk of debt. Levels of 30 day debt originally peaked in June before slightly subsiding in July and once again rising significantly in October. This likely reflects a time-lagged response to COVID-19 restrictions in Victoria. Due to bill cycle lengths and debt accumulation timeframes, the impact of the second lockdown in Victoria has only recently affected 30 day debt levels and is likely to remain high for some time before the impact of the restrictions easing in October can be registered.

Similarly, the size of average arrears has increased. The average arrears of customers receiving payment assistance and who can pay ongoing usage has increased from \$625 in April to \$687 in August, and from \$1,402 in April to \$1,509 in August for customers receiving payment assistances

and cannot pay ongoing usage.⁵⁴ Similarly there has been an increase in small business customers on payment assistance, with 2,278 in April and 2,500 in August. Average small business arrears has increased from \$1,241 in April to \$1,528 in August.⁵⁵ Notably, arrears increased from July to August in most categories of customers, suggesting that macroeconomic impacts on debt levels continue to persist, with small levels of economic recovery having limited effect on debt levels. The total 90+ day debt from residential customers across the NEM increased from around \$100m before COVID-19 and peaked at\$130m in August. Since then total 90+ day debt has decreased slightly to just above \$120m but remains substantially higher than the pre-pandemic benchmark. Total amounts of 60 day debt have remained steady and 30 day debt has only recently begun to increase, likely reflecting time lags between economic shocks and debt accumulation (e.g. due to bill cycles).⁵⁶

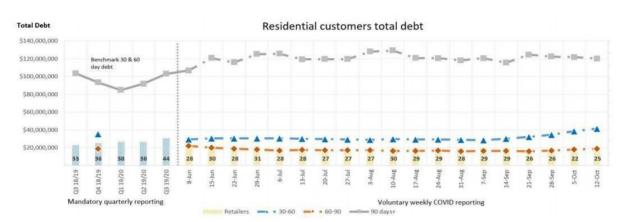


Figure 14: Total debt of residential customers

Source: AER, Retail market data dashboard - 12 October - COVID-19

The AER has also reported that some retailers are allowing customers to defer payments rather than placing these customers on formal hardship arrangements. Information on deferred debt is not readily available, however the Commission has published figures showing recent changes to deferred payments. It found the number of residential customers who deferred debt increased from 8,577 in June to 8,729 in July, while the average amount deferred by residential customers increased from \$610 in June to \$620 in July. This data on average arrears and deferrals suggests COVID-19 is increasing the number of customers that are delaying payments and that, as a result, retailers are likely to face increased short-term working capital requirements.

There is also an expectation that the number of customers that cannot pay their electricity bills at all is increasing. Retailers have provided increased allowances in the 2020 financial year for expected credit loss as a result of COVID-19. For example, AGL reported an increase of \$20 million⁵⁸ and Origin reported an increase of \$40 million in their bad and doubtful debt provisions

⁵⁴ Essential Services Commission, Energy customers during the coronavirus pandemic, August Update, available online [https://www.esc.vic.gov.au/sites/default/files/documents/energy-customers-during-covid-august-update-20200930_0_0.pdf], accessed 23 October 2020.

⁵⁵ Ibid.

⁵⁶ AER, Retail market data dashboard, available online [https://www.aer.gov.au/system/files/Retail%20market%20data%20dashboard%20-%2012%20October%202020%20-%20COVID-19.pdf] accessed 3 November 2020

⁵⁷ Essential Services Commission, Energy customers during the coronavirus pandemic, August Update, available online [https://www.esc.vic.gov.au/sites/default/files/documents/energy-customers-during-covid-august-update-20200930_0_0.pdf], accessed 23 October 2020.

⁵⁸ AGL, FY20 Results presentation, available online [https://www.agl.com.au/-/media/aglmedia/documents/about-agl/investors/results-centre/2020/agl-fy20-full-year-results-presentation-180820.pdf?la=en&hash=79283977BB3E1FA6743032DF22FD9558], accessed 21 August 2020.

from an average level of \$74 million over the past four financial years⁵⁹. These formal provisions have been made in accordance with Australian Accounting Standards that require retailers to assess changes in credit risk and make provisions accordingly. This suggests that these estimates of bad and doubtful debt are likely to be the most accurate forecasts that can be made based on current information.

In their submissions to the Commission's draft decision for the VDO price review, several retailers provided confidential cost data that suggests the impact of COVID-19 on bad and doubtful debt costs is expected to be significant. Forecasts were made based on historic bad and doubtful debt cost data and available macroeconomic forecasts for 2021. Of those that provided data, retailer forecasts for bad and doubtful debt increased by roughly 40 per cent for most retailers and up to 165 per cent in one case, as compared to pre-COVID levels.

Additionally, the Australian Energy Market Commission noted as context for their *Review of the retailer of last resort scheme* Consultation paper that COVID-19 pandemic conditions had a "sizeable impact on the retail market".⁶⁰ The Australian Energy Market Commission is reviewing the retailer of last resort scheme at least in part in light of risks to retailer failure due to a significant increase in the number of customers who are deferring or unable to pay their bills. This suggests that the extent of the increase in bad and doubtful debt may create risks to economic sustainability for some retailers.

Furthermore, this data may not reflect the full extent of the impact of COVID-19 on bad and doubtful debt due to government support programs such as JobKeeper and the coronavirus supplement (JobSeeker), as well as bill cycle lengths (e.g. quarterly bills may not have been issued frequently enough within the data period to reflect all customers who are at risk of debt).

These increased provisions for bad and doubtful debt are likely to have a notable impact on retailers' costs to serve. In their confidential submissions to the VDO price review draft decision, one retailer estimated a total increase in retail operating cost of 14 per cent, the significant majority of which is due to bad and doubtful debt.

Customer acquisition and retention costs

Customer transfers have decreased between March and May 2020, which would suggest there may be some decrease in customer retention costs (see Figure 15). However, it is not clear that this is as a result of COVID-19, as customer churn has been decreasing on a month-to-month basis since July 2018. If COVID-19 contributed to the decrease in customer transfers between March and May, it appears it was a short-term impact, as monthly customer transfers increased by July 2020 to levels similar to January 2020 prior to COVID-19 impacts.

⁵⁹ Origin, FY20 Investor presentation, available online [https://www.originenergy.com.au/content/dam/origin/about/investors-media/presentations/200820_FY20_investor_pres_final.pdf], accessed 21 August 2020.

⁶⁰ AEMC, 2020, Review of the retailer of last resort scheme consultation scheme, available online [https://www.aemc.gov.au/sites/default/files/documents/consultation_paper_0.pdf], accessed 28 October 2020

80.000 75.000 70,000 Number of Small Consumer Transfers 65,000 60.000 55,000 50.000 45.000 40.000 QLD SA 35,000 30,000 25 000 20.000 15,000 10,000 5.000

Figure 15: Monthly Small Customer Transfers

Source: AEMO, 2020, National Electricity Market Monthly Retail Transfer Statistics - September 2020, pg. 1.

There is no evidence that the key drivers of these costs, being advertising and cost of acquisition channels, are likely to have been affected by COVID-19.

5.4.3.2 Are these impacts likely to extend into 2021?

Call centre costs

Overall, increased call centre activity volume and complexity is likely to continue as long as unemployment remains high and more people remain at risk of payment difficulty. Given that the economic impact of COVID-19 is forecast to last well into 2021 and beyond, even in the best-case scenario in terms of low rates of transmission by the end of 2020, the impact on call centre costs is likely to extend into 2021. This is particularly likely to occur if major government supports such as JobKeeper and the coronavirus supplement (JobSeeker) are not extended.

However, the impact of COVID-19 on call centre costs in 2021 is likely to vary between retailers and is largely dependent on the size of the retailer, their digital customer service infrastructure and the extent to which they can redeploy resources and staff from low demand areas to high demand areas. Smaller retailers are more likely to be affected whilst larger retailers are unlikely to face material and ongoing impacts.

It is also notable that call centre volume increases tend to happen in waves and do not remain at a sustained high levels. For example, in June there was a large decrease of 26 per cent in residential electricity customers who called their retailer as compared to May. This reflects the fact that many customers who were experiencing hardship had already contacted their retailer to initiate retailer support, and that continued access to retailer support does not require sustained levels of call centre communication from each customer. Therefore, whilst the impact is likely to extend into 2021, it is likely to vary over time, with peaks expected whenever government support changes.

Corporate overheads

The extent to which corporate overhead impacts will extend into 2021 varies depending on the cost itself. The most significant cost, being the development of COVID-19 responses, and implementation costs of remote working such as the purchase of monitors and office equipment, is unlikely to extend into 2021 given that most if not all employees have already commenced remote working. However, ongoing costs and savings (e.g. reduced travel costs, increased technology support costs) associated with remote working are likely to extend into 2021, given that states that have eased restrictions have seen people continuing to work from home.

The corporate overhead cost impacts identified are not exhaustive, and there are further possible cost impacts in the medium to long term, such as changes to office leasing costs and energy consumption costs if remote working continues beyond the pandemic. However, there is currently no evidence to suggest whether this impact will eventuate, and if so, to what extent. Therefore, further cost impact on corporate overhead costs remains speculative and cannot be accounted for at this point.

Regulatory compliance costs

Overall it is unlikely that impacts on costs associated with regulatory compliance will extend into 2021, given that cost increases are usually associated with implementation and are unlikely to be ongoing, and that COVID-19-specific regulatory changes will come into effect before 2021. There remains the possibility that additional COVID-19-specific regulatory changes are introduced in 2021 however this is highly uncertain and would likely only occur if the current measures were considered inadequate.

Provision for bad and doubtful debts and working capital

COVID-19 is expected to continue increasing the number of customers delaying payment and as a result, the impact on the rate of bad and doubtful debts and working capital are likely to extend into 2021. It is highly likely that government COVID-19 support payments such as JobKeeper and JobSeeker have had a notable impact on preventing higher rates of bad and doubtful debt to date. According to a survey of Household Impacts of COVID-19 conducted by the ABS in May, 32 per cent of Australians have received a personal stimulus payment from the Government, and 42 per cent of recipients surveyed reported using payments to pay household bills. This represents the most commonly reported use of personal stimulus payments.

This suggests that customers are using government support payments to pay for debts and that at the reduction or conclusion of JobKeeper and JobSeeker support, customers are likely to experience reduced ability to pay down debt. Therefore it is likely that in 2021 there will be more customers experiencing payment difficulty and levels of bad and doubtful are likely to increase. The full extent of the impact of COVID-19 on debt and retailers' working capital may not become apparent until major government supports such as JobKeeper conclude in 2021.

Alongside government support, general macroeconomic conditions have a significant impact on household income and debt. Economic forecasts predict a relatively slow and non-linear economic recovery. Unemployment is likely to continue at high numbers well into 2021, especially when taking into account the forecasted reduction and conclusion of JobKeeper and JobSeeker support. This suggests that slow improvements in economic conditions are unlikely to be sufficient to prevent significant increases to levels of residential customer bad and doubtful debt.

If additional government support is not announced, it is highly likely that debt levels will increase, especially given that the extent of economic recovery in 2021 is unlikely to be sufficient to offset COVID-19 economic losses. In light of this expected impact, retailers have forecast and made increased provisions for increased bad and doubtful debt in 2021, beyond increases seen in 2020.

Regulatory changes proposed in the *Supporting energy customers through the coronavirus* pandemic 2020 Draft Decision may have an impact on levels of bad and doubtful debt, specifically by supporting residential customers in accessing the government's utility relief grant. Other support initiatives, such as deferral of network charges for customers suffering payment difficulties may also support residential customers manage household bills. These types of assistance programs are likely to prevent some customers from worsening payment hardship, which may offset some of the expected increase in bad and doubtful debt once government support payments end.

5.4.4 Conclusion

Retailer operating costs have been impacted by COVID-19, with increases to call centre costs, some corporate overheads and regulatory compliance costs. COVID-19 is also increasing the number of customers delaying payment resulting in retailers increasing working capital requirements and

provisions for bad and doubtful debts. These costs have been offset by small decreases in some corporate overheads such as travel costs.

While these costs may have been impacted in 2020, the purpose of our assessment is to identify impacts that extend into the 2021 VDO determination period. Of these impacts, increased call centre costs, and provisions for bad and doubtful debts are the retail operating costs most likely to continue being incurred in 2021 due to COVID-19, particularly if government support programs conclude in line with current expectations and timeframes, and if additional supports are not announced. Some corporate overhead costs decreases may extend into 2021, but are not expected to be significant.

The extent to which call centre costs will have a notable and consistent impact on retail operating costs in 2021 is uncertain and is likely to reflect changes in economic conditions. Whilst it is likely that some level of increased call volume will remain, it is unlikely to be higher than current volumes. Given that increases to call centre costs to date have been noticeable but not significant, it is unlikely that the degree of impact of COVID-19 on costs in 2021 will be significant.

On the other hand, there is reliable and consistent evidence to suggest that levels of bad and doubtful debt are likely to be significantly higher in 2021.

5.5 Retail operating margin

5.5.1 Cost drivers and how cost is calculated

The 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. The retail operating margin is expressed as a percentage of the cost stack.⁶¹

The Commission proposed to retain the benchmarking approach used in its final decision on the VDO to apply from 1 January 2020. This approach uses recent regulatory decisions by Australian regulators to set an allowance for a retail operating margin.

Importantly risks accounted for in other components of the cost stack are not included in the retail operating margin. For example, the Commission's view is that to the extent increases in bad debts lead to write offs, this should be allowed for within retail operating costs component of the cost stack. However, the cost of financing increased working capital (i.e. debt finance) would be included in the retail operating margin. We have therefore considered the amount of working capital in Chapter 5.4. Note, if the Commission were to increase the retail operating cost component of the cost stack, it would result in a corresponding increase in the dollar amount of the retail operating margin (as it is a percentage of the retail operating costs).

In addition, the Commission is not required to base retail operating margin on actual retailer operating margins, as this would shift price risk to the customer who is unable to manage this risk.

While the Commission does not undertake a bottom-up build of retail operating margin, it is important to understand the key drivers of each element to assess whether COVID-19 is likely to impact this element of the cost stack. The key drivers of each element are shown in the table below.

Essential Services Commission Impact of COVID-19 on the efficient costs for retailers to supply electricity Liability limited by a scheme approved under Professional Standards Legislation

⁶¹ The retail margin represents the return that an electricity retailer requires, over and above its costs, in order to attract the capital needed to provide a retailing service. The term margin is used as an estimate of profit (EBITDA) divided by sales. Holding the percentage EBITDA margin constant means that if energy, network and operating costs rise over time, the dollar margin will also rise, reflecting an increase in the required capital in dollar terms.

Table 3: Key drivers of elements of retail operating margin

Element of retail operating margin	Key drivers
Cost of capital	Weighted average cost of capital (WACC) ⁶²
Systematic (non-diversifiable) risk	Unavoidable risks that are typically attributable to market factors which affect all firms

We note that systematic (non-diversifiable) risk is really a part of cost of capital as it is typically measured and is effectively captured in the retail operating margin in the Commission's analysis. Given this, we have considered both drivers together as part of a discussion on how COVID-19 is impacting the cost of capital in Section 5.5.3.

5.5.2 Feedback from the market on COVID-19 impacts on cost element

Submissions to the Commission's consultation paper raised two opposing perspectives related to COVID-19 impacts on the retail operating margin.

A number of retailers raised concerns that COVID-19 had exposed retailers to additional systematic risk, such as increased rates of bad and doubtful debts, and that existing margin did not account for this risk. ⁶³ Origin Energy, and Red and Lumo Energy specifically suggested that the retail operating margin should be reassessed and increase as a result of COVID-19.⁶⁴

Globird Energy raised concerns the coronavirus had increased the cost of debt required to service the increased working capital requirements. It reported that the cost of funding for some retailers is as high as 25 per cent annualised for short term loans.⁶⁵

The Consumer Action Law Centre submitted that the Commission should not set a precedent by declaring a 'state of exception' offering retailers a special allowance to manage COVID-19 in the absence of strong evidence that costs have materially increased, and they are different from the inherent risks retailers manage already.⁶⁶

Submissions to the Commissions' draft decision noted that if additional costs due to COVID-19 are not included in the VDO because of uncertainty, the ESC should revisit the retail margin benchmark to allow for the higher regulatory risk and increased risk profile faced by electricity retailers. ⁶⁷

Submissions also commented on other aspects of the Commission's proposed methodology to calculate the retail operating margin. These have not been considered here, as they did not relate to COVID-19 impacts on the retail operating margin.

5.5.3 EY analysis

5.5.3.1 Is COVID-19 likely to impact this element of the retailers' cost stack?

Our discussion on retail operating costs in Section 5.4 highlighted COVID-19 is increasing the number of customers that are delaying payments and that this is likely to have increased retailers short-term working capital requirements.

The cost of servicing this increased short-term working capital requirement is likely to vary from retailer to retailer. We would expect larger retailers to have access to lower cost of debt due to

⁶² The WACC represents the weighted average of the minimum rates of return that equity investors and debt investors in the retailer require in order to commit equity and debt capital.

⁶³ AGL, 2020, Submission to Victorian Default Offer 2021 - Consultation paper. EnergyAustralia, 2020, Submission to Victorian Default Offer 2021 - Consultation paper. Red and Lumo Energy, 2020, Submission to Victorian Default Offer 2021 - Consultation paper. Origin Energy, 2020, Submission to Victorian Default Offer 2021 - Consultation paper.

⁶⁴ Origin Energy, 2020, Submission to Victorian Default Offer 2021 - Consultation paper. Red and Lumo Energy, 2020, Submission to Victorian Default Offer 2021 - Consultation paper.

⁶⁵ Globird Energy, 2020, Submission to Victorian Default Offer 2021 - Consultation paper, pg. 7.

⁶⁶ Consumer Action Law Centre, 2020, Submission to Victorian Default Offer 2021 - Consultation paper.

⁶⁷ AGL, 2020, Submission to the Victorian Default Offer 2021 - Draft decision, pg. 8.

stronger credit ratings and more diversified portfolios. By comparison, credit providers are likely to be less willing to fund the short-term working capital requirements of smaller retailers as they typically have lower credit ratings and are considered higher risk than larger retailers. As a result, smaller retailers may receive funding for short-term working capital but are likely to be subject to a higher cost.

Evidence provided by Globird suggests some retailers' cost of holding capital may have increased as a result of COVID-19 and that may disproportionately impact smaller retailers. However, not enough evidence has been provided by retailers to show their cost of debt to service increased working capital requirements during COVID-19 has changed and impacted their operating margin.

It is quite likely that the market has at least temporarily re-rated their risk assessment of businesses with particular exposure to consumer spending, including energy retailers. For example, AGL's share price is currently at five year lows at under \$15 a share. A key indicator that would show the formal re-rating of retail energy business' risk is a change in retailers' equity betas. However, we have not undertaken analysis of whether there is evidence to support this. Any analysis of retailers' equity betas would only demonstrate short term changes since COVID-19 began, which can be inherently volatile. This suggests it is currently too early to say whether retailers' equity betas have definitively gone up and retailers' risk has increased beyond the short term.

It is worth noting that compared to other businesses with exposure to consumer spending, electricity retailers are less likely to be affected. This is because consumers prioritise essentials such as shelter, water, power and food over other products and services. This is supported the ABS survey of Household Impacts mentioned in Section 5.4, which highlighted consumers are using stimulus payments to pay household bills. On the other hand, retailers are subject to additional government policies and regulatory changes introduced to respond to COVID-19 (such as the moratorium on disconnections for debt for certain customers) that other businesses do not face.

Overall there is a lack of information to determine whether the retail operating margin has been materially impacted by COVID-19.

5.5.4 Conclusion

The submissions provided some evidence to suggest retailers' cost of holding working capital may have increased as a result of COVID-19 and that may disproportionately impact smaller retailers.

The market is also likely to have at least temporarily re-rated their risk assessment of businesses with particular exposure to consumer spending, including energy retailers. However, electricity retailers are less likely to be affected than other businesses because consumers tend to prioritise essentials over other products and services.

Overall there is a lack of information and data at this point to determine whether the retail operating margin has been materially impacted by COVID-19.

⁶⁸ ASX, Prices and research, AGL Energy Limited, available online [https://www.asx.com.au/asx/share-priceresearch/company/AGL], accessed 28 August 2020.

⁶⁹ The equity beta measures the 'riskiness' of a firm's returns compared with that of the market. Specifically, the equity beta measures the standardised correlation between the returns on an individual risky asset or firm with that of the overall market.

6. Overall impact assessment and recommendations

6.1 Does the collective view of impacts warrant adjustments to the VDO calculation?

The analysis in the previous section indicates that:

- ▶ Elements of the VDO cost stack are currently being impacted by COVID-19
- ► Of these cost stack elements, the bad and doubtful debts component of the retail operating cost is the component that is most likely to continue to impact retailers into 2021
- ► There is some evidence to suggest retailers' cost of holding working capital may have increased as a result of COVID-19 and that may disproportionately impact smaller retailers. However overall there is a lack of information to determine whether the retail operating margin has been materially impacted by COVID-19.

There is still considerable uncertainty around the likely timing, duration and scale of COVID-19 impacts into 2021 given the complex, fast-moving nature of the pandemic, and interplay between health and economic factors. Notwithstanding this uncertainty, EY considers that COVID-19 is likely to have a significant enough impact on retailers' costs (particularly the allowance for provision for bad and doubtful debts) that the Commission should consider its options for adjusting the VDO calculation to take into account the impacts of COVID-19 on retailers' costs in 2021. We do note however that COVID-19 is one of several factors that may impact retailers' costs in 2021, and the Commission will need to consider a broader range of issues when making its final determination.

6.2 What options does the Commission have?

There are four options the Commission has in accounting for the impact of COVID-19 on retailers' costs. These options, the circumstances in which each option would be suitable, and their advantages and disadvantages are shown in the table below.

Table 3: Summary assessment of options to account for COVID-19 impact on

Table 3: Summ	ary assessment of options to acc	ount for COVID-19 impact on					
Option to	In what circumstances would it	Assessment					
account for COVID-19 impact	be suitable?	Advantages	Disadvantages				
Adjust retail operating cost element	 Impact on cost element is certain Quantitative impact on cost element can be reasonably estimated 	► Allows for more accurate incorporation of material changes to retailers' efficient costs as a result of COVID-19	 ▶ Requires a lot of information to provide certainty to the Commission of the size of the impact on an efficient retailer's costs ▶ As there are high levels of uncertainty around the likely timing, duration and scale of COVID-19 impacts on factors impacting the retail operating cost element, it will be difficult for the Commission to accurately assess and forecast the impact of COVID-19 on retail operating costs in 2021. 				
Adjust retail margin	 Impact on cost element is certain Quantitative impact on cost element is uncertain and cannot be reasonably estimated 	➤ Adjusting the retail margin allows for costs impacts as a result of COVID-19 that are certain but less able to be quantified to be incorporated into the cost stack	 Requires the Commission to make an assessment now around the likely size and scale of the impact of COVID-19 There is still significant uncertainty, particularly around the economic factors 				

Option to	In what circumstances would it	Assessment	
account for COVID-19 impact	be suitable?	Advantages	Disadvantages
			influencing impacts on retail operating costs and retail operating margin, which mean it will be difficult for the Commission to assess and forecast the impact of COVID- 19.
Adopt a 6 month regulatory period	 Impact on cost element is uncertain Timing and length of impact on cost element is uncertain Quantitative impact on cost element is uncertain and cannot be reasonably estimated 	► Provides the opportunity for the Commission to further assess COVID-19 impacts on the cost stack with the benefit of a fuller data set ahead of determining how those impacts should be addressed in the VDO from 1 July 2021.	 We understand this option may not be feasible based on the AER's timeframes for publishing final network tariffs. Impacts customers on VDO through two price changes in one year.
Variation	 Impact on cost element is uncertain Timing and length of impact on cost element is uncertain Quantitative impact on cost element is uncertain and cannot be reasonably estimated 	 ▶ Allows for adjustment to specific element/s of the cost stack for material changes in costs (for example bad debts) over and above those already factored into the relevant cost component of the VDO when there is clarity that a material impact has arisen as a result of COVID-19 ▶ Allows the Commission to monitor the impacts of COVID-19 on retailers' costs without putting the risk of increased costs due to the pandemic on customers. ▶ Well-articulated variation process with clear triggers provides clarity to retailers and customers on if and when changes to VDO may arise. 	➤ Variation can be a lengthy process and are by nature an ex post mechanism, which may result in retailer cash flows being impacted for a protracted period while the quantum of the variation is calculated. Given the sensitivity of some retailers to disruptions in cash flow, this is considered to be a notable risk to retailer sustainability.

These options are based only on matters considered in this report. We note the Commission's decision on the 2021 VDO will also take into account impacts on retailers' costs not related to COVID-19, and will have regard to the objectives of the Commission - to promote the long-term interests of Victorian consumers⁷⁰ and to provide a simple, trusted and reasonably priced electricity option that safeguards consumers.⁷¹

 $^{^{70}}$ The objective of the Commission under the ESC Act, s8.

⁷¹ The objective of the VDO, a set out in the final report from the Independent Review into the Electricity and Gas Retail Markets in Victoria. See Independent Review into the Electricity and Gas Retail Markets in Victoria: Final Report, August 2017, p. 52.

Appendix A Key government supports for COVID-19

Table 4: Key government supports for COVID

Covernment	Name	Danasinkian	Ctart Data	End data	Available to	
Government	Name	Description	Start Date	End date	Household	Busines
Victorian	Business Support Fund 1	\$10,000 grant for small businesses	21/03/2020	30/06/2020		Y
Victorian	Payroll tax refunds	Payroll tax waived for businesses with taxable wages up to \$3 million in FY19-20	21/03/2020	30/06/2020		Y
Victorian	\$500m for tenants and landlords	Land tax relief and rental assistance fund	15/04/2020	31/12/2020	Υ	Y
Victorian	Business Support Fund 2	\$10,000 or \$5,000 grant for small businesses	10/07/2020	14/09/2020		Y
Victorian	Business Support Fund 3	\$10,000, \$15,000 or \$20,000 grant for eligible businesses	18/09/2020	23/11/2020		Y
Commonwealth	\$750 Economic support payment 1	Payment to recipients of income support, pensioners and concession card holders	31/03/2020	30/06/2020	Y	
Commonwealth	Coronavirus supplement (\$550 per fortnight)	Payment to recipients of eligible income support payments	22/03/2020	24/09/2020	Y	
Commonwealth	Coronavirus supplement (\$250 per fortnight)	Payment to recipients of eligible income support payments	25/09/2020	31/12/2020	Y	
Commonwealth	\$750 Economic support payment 2	Payment to recipients of income support, pensioners and concession card holders	13/07/2020	31/12/2020	Y	
Commonwealth		Access to super of up to \$10,000 in FY19-20	22/03/2020	30/06/2020	Y	
Commonwealth	Early release of superannuation	Access to super of up to \$10,000 in FY20-21	1/07/2020	30/06/2021	Y	
Commonwealth	Boosting Cash Flow for Employers 1	\$10,000 to \$100,000 payment to businesses	22/03/2020	27/07/2020		Y
Commonwealth	Boosting Cash Flow for Employers 2	\$10,000 to \$100,000 payment to businesses	28/07/2020	31/12/2020		Y
Commonwealth	JobKeeper	\$1,500 per fortnight for each eligible employee	30/03/2020	27/09/2020	Υ	Υ
Commonwealth	JobKeeper	\$1,200 per fortnight (Full Time) or \$750 per fortnight (Part Time)	28/09/2020	3/01/2021	Y	Y
Commonwealth	JobKeeper	\$1,000 per fortnight (Full Time) or \$650 per fortnight (Part Time)	4/01/2021	28/03/2021	Y	Y
Commonwealth	Temporary relief for financially distressed businesses	Increase in threshold for statutory demand, bankruptcy proceedings, temporary relief for directors from personal liability for trading while insolvent	25/03/2020	25/09/2020		Υ

EY | Assurance | Tax | Strategy and Transactions | Consulting

About EY

EY is a global leader in assurance, tax, strategy, transaction and consulting services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation is available via ey.com/privacy. For more information about our organization, please visit ey.com.

© 2020 Ernst & Young, Australia All Rights Reserved.

Liability limited by a scheme approved under Professional Standards Legislation.

In line with EY's commitment to minimize its impact on the environment, this document has been printed on paper with a high recycled content.

Ernst & Young is a registered trademark.

Our report may be relied upon by the Essential Services Commission Victoria for the purpose of advising on the impact of COVID-19 on the efficient costs for retailers to supply electricity only pursuant to the terms of our engagement letter dated 17 August 2020. We disclaim all responsibility to any other party for any loss or liability that the other party may suffer or incur arising from or relating to or in any way connected with the contents of our report, the provision of our report to the other party or the reliance upon our report by the other party.

ey.com